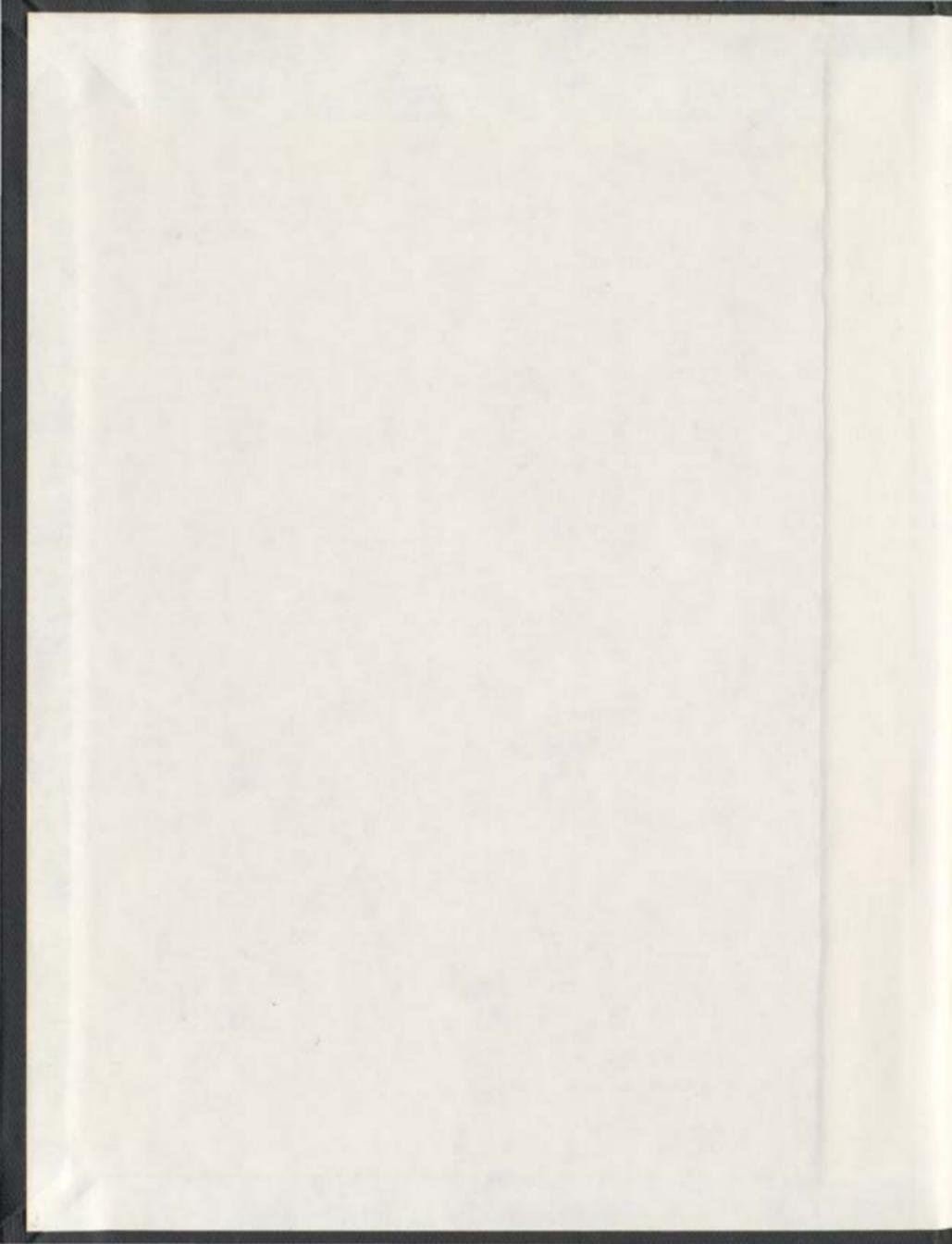
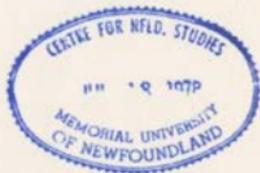


WORKING IN THE NEW ECONOMY:
CLASS AND STATUS IDENTITIES AMONG INFORMATION
TECHNOLOGY EMPLOYEES IN ST. JOHN'S
NEWFOUNDLAND AND LABRADOR

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**Working in the New Economy: Class and Status Identities among
Information Technology Employees in St John's, Newfoundland and
Labrador**

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Abstract

This thesis reports on research about the class and status identities exhibited by different levels of information technology (IT) employees in St John's Newfoundland and Labrador, Canada. One important finding of this research is that significant differences exist in the organization of work and the labour market situations experienced by the different levels of IT employees. This is especially the case when high-level professionals and call centre workers are compared. This study also revealed a strong relationship between the objective class position of interviewees and attitudes that can form the basis of a rudimentary class consciousness. However, these fundamental bases of class consciousness are not developed into a coherent class consciousness. As a result, class consciousness was found to be fragmentary among these employees. In terms of status, the majority of interviewees in each of the occupational strata believe that some people in Newfoundland and Labrador society have higher social status than others. The two most important findings were that descendants of the merchant class who controlled the fishery sector in the 19th century possess high status positions because of the fact that their family names are well known owing to the power and wealth they had accumulated over the years. Another significant finding is the issue of the status inequality between people originating from the outports compared to those from the urban areas. This research concludes that in Newfoundland and Labrador society, while objective class position is still an important factor in determining class and status identities, local factors play an equally important role in creating such identities. Thus, this research draws attention to some of the inadequacies of the grand theories of class and status which often ignore the influence of local and historical factors in the formation of class and status identities.

Chapter 1: Introduction

1.0 Introduction

This thesis explores the class and status identities exhibited by different levels of employees in the information technology (IT) industry in St John's, the capital of the province of Newfoundland and Labrador. The impact of IT will vary from one society to another depending on local circumstances like labour market conditions, the history of local class or labour politics, the extent of recent in-migration of population and variation in the density of social ties or networks of interaction in the locality. This study will throw light on how some of these factors influence the identities of IT employees in Newfoundland and Labrador, a society that has a distinct cultural heritage and is geographically isolated from the rest of Canada.

The study seeks to answer the following questions. What kind of class and status identities do the various levels of IT employees exhibit? What is the impact of class factors on the formation of these identities? Do differences in labour market position or location within the occupational structure affect class and status identities? I examine the impact of work and non-work factors on the class and status identities exhibited by these different levels of IT employees. Labour process variables such as income, labour control mechanisms, qualifications required, occupational mobility and position in the organizational hierarchy are studied. Subjective attitudes toward social inequalities, the welfare state, unions and management, and status inequality in Newfoundland are also considered. Lastly, other variables, including home ownership status, spouse's income, leisure pursuits, holiday destinations, and the kind of social groups or clubs joined, are

explored.

Erik Olin Wright's (1985) class theory and Pakulski and Waters (1996) post class theory are utilized to analyze and interpret the data. On the one hand, Wright's class theory, which is largely based on structural determinism, asserts that the position of workers in the occupational strata affects their class identities. On the other hand, Pakulski and Waters (1996) argue that the influence of structural factors on class and status identities is weak, and that there is no relationship between class and those identities. They argue that in the postmodern world, collectivities are formed based on consumption patterns and not class position. The results of this study will be used to evaluate these theoretical frameworks.

This chapter is divided into three sections. The first part discusses the nature of the IT revolution and the important role played by IT professionals in an increasingly globalized world. The second part briefly outlines some background information about the research location, St John's, Newfoundland and Labrador, while the last section lays out the organization of the thesis.

1.1 Information Technology Employees and the Politics of Class

The world is in the midst of a socio-economic revolution mainly based on information technology. The widespread adoption of computers and information technology over the past 20 to 25 years is one of the most important economic developments of our times. The utilization of personal computers and the internet is revolutionizing production and service delivery in the global economy. Consequently, the magnitude of this technological change can be compared to the industrial revolution of the eighteenth and nineteenth

centuries when the introduction of machinery in the production of goods changed the forces of production. These technological changes have spawned considerable debate among researchers, social analysts and policy analysts around what has been called the new economy, the knowledge-based economy or what Castells (1996) calls the information technology paradigm.

For example, a report completed by the Organization for Economic Co-operation and Development (OECD) observes that today's rapid advances in science and technology mean that OECD economies are increasingly based on knowledge (OECD, 1999). Neef et al. agree that there exists a new type of economy, one wherein... "traditional factors such as natural resources and raw materials are far less important ... than they were even ten years ago" (Neef et al., 1998: 5). Gera and Massé (1996) report that in this new kind of economy, science and technology are the key determinants of economic growth. Competitive advantage among countries is primarily determined by the extent to which a country can develop, obtain, and skilfully apply scientific and technological information. Thus many countries, especially those belonging to the OECD, have realized the necessity of investing in research and development as a means of boosting economic performance and remaining competitive in the face of rapid economic growth in countries such as China and India. According to the OECD, "research and development comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of human beings, culture and society, and the use of this stock of knowledge to devise new applications" (OECD, 2002a: 30). Consequently, the level of gross domestic expenditure on research and development and its ratio to the gross domestic product (GDP) are now considered

important indicators in measuring and ranking countries' performance of research and development. Knowledge is now recognized as the driver of productivity and economic growth in the economies of developed nations. As a result, there is a new and increased focus on the role of information, technology and learning in economic performance.

In discussing the knowledge-based economy, observers view the emergence of three trends as being significant departures from the past (Bell, 1999; Lipsey, 1999; May, 2002). First, there is the notion that the economies of the developed countries are becoming less centred on industrial, manufacturing production and more concentrated in services which involve high levels of knowledge and information content (Bell, 1999). May (2000) notes that the emergence of the global information economy has precipitated a change from the use of passive information to the use of active or symbolic analytical information skills in economic processes. Thus, knowledge workers are portrayed as the prime movers of the economies of developed countries. These employees can be found in diverse sectors such as business consultancy, the IT sector, and in research and development institutions.

However, some social analysts have questioned the assertion that the economies of developed countries are more dependent now on the trading of knowledge than they were a hundred years ago (Simon and Mine, 1998; May, 2002). For example, some sociologists argue that the artisan's ability to complete all aspects of the production of a commodity – from its conception to its becoming an actual, usable product – requires qualitatively superior knowledge than that of late 20th-century workers (Simon and Mine, 1998). However, despite this disagreement, there is a general recognition that the new economy is based on a higher level of knowledge than in previous economic eras.

Rosie (1999) argues that, while the observation that the current economy is based on knowledge is valid, it is also a truism. They argue that those analysts who describe the current economy as knowledge-based because of the belief that we now buy and sell knowledge rather than the refrigerators and automobiles of the industrial economy may also be mistaken. She argues that the service sector that is increasingly prevalent in the "developed" world is inherently tied up with and dependant on "old fashioned" industrial manufacturing. For example, personal computers, which are pivotal in the operations of the new economy, are produced by industrial workers in Asia. Thus, although industrial jobs are being increasingly shipped out to less developed regions of the world, they are still tightly connected to the service economy in developed countries.

The second trend in the new economy, which is seen as a departure from previous economic eras, is the view that there is a reformulation of work and other social practices underway. For example, Richard Lipsey suggests that our whole way of living and working may be changed:

Ways of life are changing with ... changing patterns of work. With electronic communication, groups of like-minded individuals are finding it easier to get together. Technologies have effectively redefined our notions of time and distance (and in some ways have created the much heralded global village) (Lipsey 1999: 58).

Observers perceive a sharp contrast between an economy involving high levels of knowledge and technology and previous economic epochs. Thus, they propose that traditional means of analysis of the economy may be rendered obsolete (Lipsey 1999; Castells, 2000).

Third, there is the notion that the global reach of the economy is a recently developed characteristic of the current era that poses special problems and possibilities

for those participating in it. However, establishing a historical timeline regarding the emergence of the global economy is difficult. It is well known that the exchange of commodities on a global scale existed by the seventeenth and eighteenth centuries (Noble, 1984). For example, Taylor and Baskerville (1994) describe the businesses and economy of British North America and Canada as products of a broader, international system. Thus, it appears that the much talked about global economy is in fact not as new as is often supposed. However, although economic transactions on a global scale occurred in the seventeenth and eighteenth centuries, businesses have developed more powerful, more sophisticated tools with which to organize the awesome complexity of production in advanced capitalism, and thus the overall process has become more globally integrated.

In the same light, Bell (1999) argues that the innovation and convergence of technology precipitate further changes that are fundamentally transforming the human landscape. One such fundamental transformation is globalization. Globalization has been a buzzword among observers and analysts from many spheres of life for the past two decades. There is no common definition of globalization because so many different people use the term in so many different contexts, and for different purposes (Kellner, 1995). However, the general interpretation is that the world is becoming more uniform through a technological, economic and cultural synchronization coming from the West (Jameson, 1991; Kellner, 1995). Globalization is re-enforcing the world capitalist economic system, increasing the power of global corporations, while weakening nation-states and supplanting local cultures with global culture (Kellner, 1995). Furthermore, under the current globalization regime, multi-national corporations are able to invest in

regions where a particular part of the production process can be completed at the lowest cost (Mehmet et al., 1999: 3-69). May (2000) also found that the information technology industry is highly competitive and possibly more subject to occupational task migration or relocation than non-information technology industries. Consequently, lower paid IT jobs are likely to be relocated to different physical locations when this can reduce costs or improve products.

Information technology is said to be the main vehicle of globalization (Kellner, 1995). Globalization has resulted in the expansion of information technology worldwide. Thus, it can be seen that globalization and information technology are two sides of the same coin. The dissemination of new technologies has a tremendous impact on the economic and cultural lives of people worldwide. The computer and software industries are thought to be among the largest global knowledge-based industries (United Nations Conference on Trade and Development, 2002). The IT industry as a whole provides the foundation for globalization by connecting the components of the world economy (Bell, 1999). Thus, the technological revolution, which has led to the creation of computerized networks of communication and exchange, forms the backbone of the globalized economy. The power and reach of trans-nationals depends on IT products, because the trans-national economy depends on a networked world. IT allows for rapid communication relating directly to the production and coordination of all of these tasks to allow the process to function as smoothly as possible (Schenk and Anderson, 1999: 8-9). Thus, IT has broken down many national boundaries, which hitherto were barriers to trade.

IT employees have become critical employees for the capitalist class (Robinson and Harris, 2000). They are frequently depicted as holders of jobs with high knowledge

content, which is a critical source of competitive advantage for organizations and employers (Marks et al., 2003; Castells, 1996; Scarborough, 1999). Consequently, IT employees are often the key to the success of their companies and the process of globalization as a whole.

However, despite the portrayal of IT jobs as elite occupations, the truth is that in addition to high-level IT jobs, there are many employees involved in low level routinized work, which pays low wages and is subject to strict labour control mechanisms (Lockyer et al., 2001). Also, some IT companies have highly hierarchical workforces, with sharp income and skill disparities between workers at the top and bottom of the job ladders (Wilson and Blain, 2001). The labour processes in IT occupations vary. They can be divided into high level creative work, which is loosely controlled, and deskilled work subject to stringent control mechanisms (Barrett, 2001; Scarborough, 1999).

Generally, IT employees also constitute an important occupational group within nations. In 2005, the Canadian software and computer services industry generated \$30.7 billion in revenues (Statistics Canada, 2007a). In 2001, the year for which the latest data are available, Canada had 387,500 IT workers, and about three quarters of them were information systems analysts, computer programmers, user support technicians, computer network operators and web technicians. The remaining workers were computer and software engineers, systems testing technicians and database analysts (Statistics Canada, 2003a). As the IT revolution changes economies around the world, it is also changing the occupational structure of whole societies (Burriss, 1993). Burriss argued that the IT revolution is producing a more polarized occupational structure, with highly skilled, well paid and autonomous workers at one end and workers who occupy low skilled, low

paid and dead end jobs at the other end, with some in between (Burris, 1993). Thus, within countries, the IT revolution has led to the emergence of a class of affluent IT professionals and low income IT workers engaged in routinized work.

Despite the stratified nature of IT work, much of the general literature and popular belief assumes that all software and other computer employees are affluent, upwardly mobile professionals who are likely to be pro-management and pro-capitalist in their orientation (Lockyer et al., 2001). However, the stratified nature of the IT industry raises questions about the objective class positions and the class and status identities of these IT employees. It also raises questions about the kind of class or status consciousness they exhibit.

There has been an ongoing debate among class theorists about the continued salience of macro-structures in determining class identities. One of the main characteristics of Marxist class theory is its postulation of a link between class location and class identity or consciousness (Marx and Engels, 1967; Marx, 1972; Wright, 1985, 1997; Pahl, 1989). This theoretical framework asserts that the interests, subjective consciousness and actions of individuals can be largely deduced from their position in the class structure. This is not specific to Marxist theorists. For example, Erikson and Goldthorpe (1988) have written about the need to study the conditions under which people who hold similar class positions do actually come to define their interests in class terms and act collectively. This reflects the linkage of structure, interest and agency. However, Erikson and Goldthorpe (1988) regard this relationship as contingent rather than inevitable.

Erik Olin Wright defines class not simply as an ownership relation, but also as one involving exploitation. Wright (1985, 1997) argues that ownership of the means of production is not the only avenue for exploitation in capitalist societies. Ownership of skill and organizational assets are important areas of exploitation too. Thus, in addition to the three main classes in society (bourgeoisie, petty bourgeoisie and the proletariat) Wright outlined nine contradictory class locations which he calls the new middle classes. These include people with different levels of organizational and skills assets and small employers. According to Wright (1985) the difference between the petty bourgeoisie and small employers lies in the fact that the former are small business owners who do not hire workers, while small employers employ a few (2-9) workers.

Wright views the 'new middle class' as being both exploited and an exploiter, in that they tend not to own the means of production, but may be able to extract surplus value from others either by simply being small employers themselves, or by owning certain skill or organization assets. This means that the middle class is defined as such because it has attributes of both the bourgeoisie and proletariat. This raises the question – how does this affect the class identities of these middle class individuals?

Marxist class theory has been criticized for its inability to explain the failure of class action (Lockwood, 1981; Pahl, 1989). However, Wright (1985), unlike classical Marxists, contends that in some circumstances the relationship between class structure, subjective consciousness and action is indeterminate (as is the case with the occupants of contradictory class locations). Wright argues that the kind of class formation that occurs depends on a range of factors that depend on the class structure itself. Thus, the class structure determines the underlying probabilities of different types of class formations or

actions (Wright, 1985:124). For example, he argues that only specific historical analysis of any given society would explain what kind of class formation would take place. However, even with this qualification, Wright emphasizes that position in the class structure is an important predictor of class consciousness (Wright, 1985, 1997).

According to Lockwood (1981), structural Marxism lacks the conceptual tools with which to analyze non-rational beliefs and actions systematically. He argues that Weberian concepts such as value orientation and status provide more effective tools for explaining action and stratification in modern capitalist societies than economic factors. In this light, theorists such as Pakulski and Waters (1996), Beck (1992), Clark and Lipset (1991), and Lash and Urry (1994) advance the thesis that Western industrialized societies are no longer class-based societies. They argue that various factors such as increasing levels of individualism, credentialism, market differentiation, the declining influence of class-based political parties and unions, and globalization have blunted the impact of social class on stratification. Thus, they argue that the relationship between class and class consciousness and action is diminishing or insignificant. They also argue that social differentiation is increasingly being exhibited in the area of lifestyle and consumption and not in class consciousness, class conflict or class-based politics.

In addition to Bourdieu (1984), Jan Pakulski and Malcolm Waters are two influential sociologists who have also identified consumption as a directing force in social differentiation. Pakulski and Waters (1996) argue that economic class was a significant factor in social stratification under early capitalism. However, under advanced capitalism, inequalities are the result of differences in status and in the lifestyle and consumption patterns favoured by status groups. Thus identity is not linked to property or organizations

(Pakulski and Waters, 1996). Consequently, membership of a class does not determine or influence the identities and actions of people. "Under conditions of advanced affluence, styles of consumption and commitment become socially salient as markers and delimiters" (Pakulski and Waters, 1996:156). Pakulski and Waters (1996) argue that this state of affairs has been brought about by increasing individualism, globalization and a change in the occupational structure of modern capitalist economies.

This is significant because one of the criticisms that can be levelled against Wright (1985, 1997) is that he ignored the impact of status and lifestyle variables in influencing class identities. Status variables may conceal objective class position and influence subjective class consciousness and behaviour. For example, a call centre worker living a lifestyle similar to that of a university lecturer may identify with the middle class despite his or her objective working class position. With these different theories in mind, I examine which perspective can account for the identities exhibited by IT employees or whether there are other factors influencing their identities.

1.2 The Research Location

The contribution of information technology to economic growth and development is seen as an important factor underlying the pace of development in many countries. Ireland's recent economic growth, which has earned it the label, *Europe's Celtic Tiger*, has drawn considerable attention from peripheral countries seeking to create vibrant economies. Ireland succeeded in creating a world-class industry in computer hardware, software and services by pursuing a policy of "industrialization by invitation." This policy entailed

selectively targeting foreign investment in high-tech industries using financial and tax-based incentives.

The research location I have chosen for this study, the Canadian province of Newfoundland and Labrador (NL), is clearly not typical of IT settings. Nevertheless, it does provide a setting in which the general questions can be explored. Moreover, NL is an example of many peripheral locations in which hopes for economic development are pinned on new economic sectors, including IT.

The province has embarked on an aggressive marketing drive to promote itself as a destination of choice for IT firms, especially those that want to outsource their software development to low cost regions. NL offers its own competitive advantages such as lower labour costs, a highly-trained and available labour force and a strategic location between the eastern seaboard of the United States and Western Europe. Thus, although the province is not yet a prime IT hub, it is positioning itself as an important destination for IT firms. Also, NL is known to have a unique cultural heritage compared with the rest of Canada; so it will be important to know how this distinct culture affects class and status identities in the province. These factors make the province a good location to study the effects of IT and globalization on the identities of IT employees.

By most traditional measures of economic well-being (e.g., gross domestic product, employment and unemployment, income and dependence on government transfers), NL's economy has long been the weakest among Canada's provinces. It continues to have the highest provincial rate of unemployment. However, like other provinces in Atlantic Canada, there is a large rural-urban variation in the unemployment rate, with rural areas experiencing a much higher jobless rate than urban areas. This

situation was further amplified in Newfoundland by the crisis in the cod fishery in the 1990s. As shown in Table 1.1, the unemployment rate in St John's, the provincial capital city, is consistently lower than the rate for the rest of the province. For example, in 2007, the unemployment rate for the rest of the province was 13.6 percent compared to 6.9% for the St John's Census Metropolitan Area (CMA).

Table 1.1: Unemployment Rate (%) 1999-2007		
Year	St John's CMA	Newfoundland and Labrador
1999	10.2	16.9
2000	9.5	16.7
2001	9.2	16.1
2002	9.2	16.7
2003	9.8	16.5
2004	9.0	15.7
2005	8.9	15.2
2006	8.1	14.8
2007	6.9	13.6
Source: Statistics Canada (2008a), Labour Force Historical Review		

According to Statistics Canada (2007b) in 2006, the population of the St John's CMA, the most easterly city in North America, was 181,113. Strong economic growth is attracting migrants from the rest of the province and elsewhere, resulting in some marginal population gains. The city has also chalked up impressive economic growth. For example, between 1997 and 2003, driven by the effects of the oil and gas industry, the economy of

the St John's CMA grew by an unprecedented average of 8.4% a year (St John's, 2005). This economic expansion has generally contributed to a downward trend in the capital's unemployment rate, as shown in Table 1.1. However, the unemployment rate in St John's remains relatively high compared to other Census Metropolitan Areas (CMAs) in Canada.

As the capital city and by far the largest urban centre in the province, St. John's is particularly important for its government, administrative, retail, wholesale, financial, education and transportation functions. For example, in 2007, people employed in Trade, Health Care and Social Assistance, and Public administration accounted for about 40 percent of the St John's labour force (Statistics Canada, 2008b). St John's also acts as the primary supply base for the offshore oil industry. This industry has boosted the economy of the city because many local companies provide support services for oil and gas companies. However, while a significant portion of St John's recent economic growth is attributable to activity related to the emergence of the province's oil and gas industry, this is by no means the only growth industry in the area. The city is also home to Memorial University, the largest in Atlantic Canada. This institution has played and continues to play an important part in the growth of marine and ocean technology, biotechnology, and IT sectors in the province.

These sectors have experienced solid growth in the past decade due to a concerted effort by the provincial government and other stakeholders to attract investments, especially to the IT industry. The first such initiative was the establishment of Operation ONLINE Inc. (Opportunities for Newfoundland and Labrador in the New Economy) in 1996. This was a not-for-profit corporation formed to provide investment and leadership in IT as an engine of economic growth. Stemming from a 1995 provincial task

force on information technology, Operation ONLINE was a partnership of industry with the federal and provincial governments whose aim was to capture emerging opportunities and enhance the province's position in the IT sector. Its primary role was to deliver Action Plan projects and to serve as a facilitating and advisory body on IT in the province (Newfoundland and Labrador, 1996). The most recent program by the government in collaboration with Aliant, to promote IT in the province, was the establishment of the "Near Shore Development Initiative" in 2004. The objectives of this task force were to increase business development and gainful employment of the province's residents in the IT sector and to increase the use of IT in the province.

Although there is no up-to-date information on the number of IT companies in NL, the most recent data available reports that there were over 200 IT companies in 2003, employing more than 4,000 professionals and generating over \$600 million a year (Newfoundland and Labrador, 2000). These companies export goods and services to over 40 countries (Newfoundland and Labrador, 2000). The real gross domestic product in the computer and related services grew by almost 13 percent annually from 1992 to 2000 (Newfoundland and Labrador, 2000). Industry employment grew by over 13 percent annually from 1993 to 1996 and by about 24 percent between 1996 and 2000 (Newfoundland and Labrador, 2000). Thus, by all accounts it is clear that the IT industry in NL is expanding at an impressive pace.

Importantly, my research on the background of the IT companies in NL and Labrador (which involved reviewing the history of the member companies listed on Newfoundland Association of Technology Industries' (NATI) website revealed that the majority of IT companies in the province are local start-up companies. These include

companies such as Triware Inc., Pathix ASP, Triton Data and Consilient Technologies Inc. This list also includes local companies that have become major players in the IT industry in North America and worldwide, for example, Guigne International, ZedIT Inc., ZEDCOMM Inc., Rutter Technologies Inc. and Stratos Global Corporation. There are also some important international IT companies such as IBM, XWAVE, IOA Software Inc. and InfoTech Canada operating in the province. Also, the biggest call centres are all companies originating from the United States.

Despite its isolation, the existence of various IT jobs in NL is an example of the reach of IT and globalization. Thus, this study also examines how globalization and the IT revolution are affecting the labour processes and the class and status structure of St John's, a peripheral economic area with a high unemployment rate.

1.3 Organization

This thesis is divided into six chapters. Following this introduction, the first part of chapter two outlines in more detail the theoretical frameworks of Erik Olin Wright and Jan Pakulski and Malcolm Waters. I utilize Erik Olin Wright's class theory to place the people interviewed into different class locations. This in turn allows me to study the effects of class and other factors in shaping identities in the various occupational strata within the IT sector. Thus, my study has enabled me to evaluate the salience of Pakulski and Waters' and Wright's theories in explaining class and status identities in advanced capitalism.

The second part of Chapter Two discusses the literature on class, status and consciousness. This part also presents a literature review of the different forms of labour control mechanisms that have evolved under capitalism and how they relate to the

different levels of IT occupations. Consequently, an outline of the literature on differences in labour control mechanisms and the degree of job autonomy in the various levels of IT jobs is presented. The second part of chapter two outlines what is known about IT work in general and what needs to be discovered.

Chapter Three provides information on the research methodology utilized in this study. It details the ontological and epistemological foundations of the research methods used in the study, the sampling methods, how many employees were interviewed in the various IT strata, and the average length of the interviews. A systematic outline of the research process as it unfolded is presented. This chapter also includes a brief description of the type of companies for which the interviewees worked and a description of how the key research variables were measured.

Chapter Four explores the different labour processes in the various levels of IT occupations in NL. It analyses variables such as the income, skills and qualifications required for the various IT jobs, labour control mechanisms, job discretion, occupational mobility, and control over work processes (work schedule and time management). This chapter highlights differences in the various levels of IT jobs with respect to these variables. A comparison of the labour processes involved in the three different levels of IT occupations sets the stage for the definition of their objective class locations. Chapter Four serves as a litmus test for Wright's class categories because it analyzes the extent of variation in the labour processes experienced by the different levels of IT employees, who have different levels of skills and qualifications. It also tests the strength and validity of my categorization of interviewees into the different strata based on their skills, qualifications, and position in their workplace. Significant differences in the labour

processes in these strata, especially between the high and low levels confirm the validity of my categories. Overall, this chapter explores work related variables that provide an insight into the objective class and occupational status of the various levels of IT employees.

Chapter Five is divided into two parts. The first explores variables measuring class identities, and the second part explores similarities and differences among interviewees with respect to status identities as measured by lifestyle factors and these interviewees' perception of status differences. The first part of Chapter Five explores subjective attitudes toward class and status inequality in NL, beginning with employees' perceptions of class differences in general and their subjective class identification. An exploration of interviewees' attitudes toward various class-related variables follows. These variables include attitudes toward unions, job action, the welfare state and worker-management relations. A scale, designed to measure the level of pro-worker sentiments expressed by the various levels of IT employees, is constructed. Based on this scale, it is possible to distinguish which of the strata are more pro-capitalist or pro-worker. Drawing on the responses of the interviewees, an analysis of the relevance of the two theoretical perspectives discussed earlier is carried out, with the intention of identifying which theory accounts better for the identities displayed by these employees. The second part of this chapter also analyses similarities and differences in lifestyle among the various levels of IT employees. It investigates the factors affecting interviewees' perception of status in NL to see whether the impact of class is evident in lifestyle activities and perception of status among these employees.

Chapter Six refers back to the research problem and some of the points made in chapters Four and Five. It outlines and emphasizes new, interesting and important findings before discussing the implications for further research, theorizing, and policy formulation. The limitations and challenges of the study are also discussed in this chapter. The chapter ends with a brief recap of the usefulness of class theories in explaining class identities and stratification in modern capitalist societies. Before this is done, however, it is important to present the theoretical framework of this study. The next chapter discusses the theoretical perspectives employed in this research.

Chapter 2: Theoretical Framework and Literature Review

2.0 Introduction

This chapter outlines the theoretical perspectives that guide the collection of data analyzed in this study. An extensive review of the literature on professional IT jobs and call centre workers is also presented. This provides the context for the study of St John's IT workers. It also affords an opportunity to identify gaps in the literature that need to be filled.

In this thesis, Wright's class schema is employed to place IT employees into objective class positions. The location of these employees in the class structure paves the way to examine the effects of class on their identities. Later, factors influencing the class and status identities of these workers are analyzed with respect to Wright's class theory and Pakulski and Water's post class analysis.

2.1 Theoretical Perspectives

Wright (1985) placed workers into classes based on the level of ownership of three kinds of assets: the means of production, organizational assets, and skills or credentials. Wright argues that the exploitation of one class by another can occur not only through control of property or the means of production, but also through ownership of skill or credential assets and control of high positions within organizations. Thus, control is portrayed as an instrumental factor in class formation.

Wright describes three primary classes within capitalist economies - the capitalist class or bourgeoisie, the working class or proletariat and the petty bourgeoisie. However, he argues that there are many secondary locations within classes (Table 2.1). Thus,

Wright outlines nine contradictory class locations - small employers (cell 2 in Table 2.1), managers and supervisors with different levels of skills/credential and managerial assets (cells 4, 5, 7 to 11 in Table 2.1), and semi-autonomous employees (cell 6 in Table 2.1). Contradictory class locations place individuals simultaneously in more than one class; e.g., managers are in the working class because they work for their salaries and in the capitalist class because they control production and the labour of workers.

Table 2.1: Erik Olin Wright's class schema

Owners	Wage Labourers			Organizational Assets
1. Bourgeoisie	4. expert Managers	7. semi-credentialed managers	10. uncredentialed managers	+
2. Small employers	5. expert Supervisor	8. semi-credentialed supervisor	11. uncredentialed supervisors	
3. Petty bourgeoisie	6. expert Non managers	9. Semi-credentialed workers	12. proletariat	-
	+		-	
	Skill/credentialed Assets			
Source: Western and Wright (1994)				

Wright (1985) argues that the actual class structure of society is characterized by complex patterns of intersecting relations of exploitation. He developed a map of the complex class locations for capitalism which is divided into two segments: one for owners of means of production and one for non-owners. On the ownership of means of production segment, Wright (1985) distinguished between proper capitalists, employers who only have a few employees, and the petty bourgeoisie (self employed people with no employees). Within the wage earners segment of the typology, locations are distinguished

by the two subordinate relations of exploitation, which are organization (management) assets and skill or credential assets. This makes it possible to distinguish a number of class locations that are distinct from the polarized classes Marx depicted in capitalist societies. The research for this thesis focuses mainly on the wage earner section of Wright's analysis. The two subordinate relations of exploitation - organizational assets and skills or credential assets - are discussed next.

a. Organizational Assets

According to Wright "the technical division of labour among producers is a source of productivity (1985: 79)." This means that "organization - the conditions of coordinated cooperation among producers in a complex division of labour - is a productive resource in its own right (1985: 79)." He argues that the assets of an organization are generally controlled by the managers of the organization, who are hired for this purpose. Wright notes that organizational assets are intimately tied to authority and hierarchy, so that those who control these organizational assets are those who exercise overall control because they occupy a high position in a hierarchy of authority. Wright identifies (1985) a broad range of types of managerial position - senior managers, middle level managers and lower level supervisors. Senior or top-level managers are often tied directly to ownership if their remuneration includes stocks or stock options as part of their benefit package. They are said to possess the means of production in the sense that they own stocks, give orders that are obeyed, and generally manage and superintend the process of production. Senior managers may have skills and organizational assets (control over means of administration) and also share in the profits of the organization. As a result,

these managers are likely to develop an ideology or consciousness that ties them to owners and the bourgeoisie. Nevertheless, according to Wright, they are in a contradictory class location because they are also employees and wage or salary earners.

Wright (1985) notes that middle-level managers are in a more contradictory position. They may or may not be similar in many ways to the proletariat. Their objective position may depend on their position in the hierarchy, the degree of control they have, the income they gain from this, and their chances for upward mobility. Yet their position within the chain of command in an organization likely ties them ideologically to the employer and high level management.

Wright (1985) also asserts that lower level supervisors and foremen are close to being workers themselves, and usually began as workers. In that sense, their objective situation is not really different from most workers. In allocating positions to class locations, Wright (1985) considers specific issues such as the type and extent of decision-making power, authority in terms of sanctions that the incumbent can exercise over others, formal position in a hierarchy, and extent of supervisory power. From this he develops a three-fold classification of wage labourers: (1) managers (in positions with effective authority over subordinates) (2) supervisors (in positions which have effective authority over subordinates, but are not involved in organizational decision-making), and (3) those without any organizational assets in terms of being managers or supervisors (see Table 2.1, p. 28).

b. Skills and Credential Assets

Wright argues that experts own or control their expertise, which they can use "to appropriate some of the surplus from production" (Wright, 1985: 85). Wright does not consider this necessarily to form a basis for a class relationship, since those with such expertise or knowledge may work alongside or with less skilled workers, and, generally, do not have the power to exploit the latter directly. They may have little supervisory or hierarchical authority over the less skilled and generally do not control them. Rather, these experts are hired to carry out specific tasks, and they are usually well paid to perform these tasks. Wright argues that at the same time, some of these skilled professionals may share in the production surplus and may be better paid because less qualified workers are underpaid. Also, these experts are likely to have some autonomy in the work situation because they have special skills or technical training. While employers and managers may attempt to limit the autonomy of these skilled professionals, the technical expertise of the latter gives them a degree of bargaining power.

In order to distinguish various levels of employees, Wright measured skills and credential assets by combining occupational titles, formal credentials and job traits to distinguish people in jobs where credentials are mandatory. Wright also argued that "the degree of conceptual autonomy in the job is likely to be a good indicator of the skill asset attached to the job" (1985: 314). Using these criteria, Wright (1985) developed a three-fold classification into (1) experts such as professionals, technicians, and managers with university or college degrees; (2) skilled employees such as craft workers, managers and

technicians and clerical workers who have some job autonomy; and (3) non skilled workers – other clerical and sales, and non-craft manual and service occupations.

Wright (1985) focuses on positions within society, which he linked to the organization of production. These positions form the basis for predicting the social relationships across positions. Wright also assumes that these relationships are part of a social structure that is reasonably stable over time. He argues that individual consciousness and the attitudes and behaviour of individuals are linked to the positions that they occupy within the division of labour and to the sometimes contradictory locations that exist in capitalism. He also argues that members of each class tend to have a shared awareness of their class conditions. This consciousness may not be expressed in the language of 'class', but it will involve a comprehension of the inequalities that divide one class from another and of the social positions that they hold relative to each other. Thus, in order to study class and status identities among the various levels of IT employees, it is important to identify their structural locations within the IT industry. This paves the way for situating these employees in the class structure of society.

Using Wright's classification of skill and credential assets, IT positions can be broadly divided into three strata (Marks and Lockyer, 2005):

1. conceptualizers (software engineers and systems architects);
2. developers and modifiers (programmers and database administrators);
3. support workers or tenderers (customer service agents and help desk agents).

Conceptualizers and developers are the most skilled and qualified of the three strata and they possess the highest degree of job autonomy among IT employees. On the other hand, support workers are the least qualified and are subject to more control at

work than all the other categories. It is critical to know how the labour processes in the jobs in the different strata affect the class and status identities of these IT employees. For example, how do the identities of conceptualizers differ from those of support workers or tenderers? Wright's theory provides a good theoretical framework for categorizing our different IT strata and analyzing the identities exhibited by these employees.

Wright's class analysis adds some aspects of Weberian theory to Marxist class theory. Weber proposed a multidimensional approach to social stratification. Consequently, he viewed class, together with power and status as the main determinants of social inequality. According to Weber, class is significant in the sense that it reflects a market situation where various assets possessed by individuals are recognized as resources that influence their life chances. These resources include education, skills and private property. In this light, Weber outlined four categories of classes: the working class; the petty bourgeoisie; technicians, specialists and lower management; and the classes privileged through property and education (Weber, 1978).

Wright's class model draws upon some aspects of the Weberian conception of stratification as well as from a Marxist conception of class. His model of social stratification can be described as a Marxist class theory with occasional Weberian leanings.

However, one criticism that can be levelled at Wright is that his class theory ignores the other dimensions of Weber's stratification theory, namely power and status groups. Status is an alternative principle of social stratification along which identities may be formed that cut across class boundaries. Status is founded on styles of life, formal education and claims to high ranking descent (Weber, 1978). Empirically, there are fairly

high correlations between standings in the class and status orders. Especially in capitalist society, the economically ascendant class will, in the course of time, also acquire high status; yet, in principle, propertied and property-less people may belong to the same status group. Also, a status group can exist only to the extent that others accord its members prestige or degrade them, which distinguishes them from other social actors and establishes the necessary social distance between "them" and "us" (Weber, 1978). According to Weber, status groups are groups that are founded upon relations of consumption rather than production and take the form of styles of life that separate one group from another. Thus, a specific style of life is expected from all those belonging to the same status group.

Wright ignores the possibility that status and lifestyle factors can influence class and status identities. For example, Marks et al. (2002) report that software professionals form an elite group of employees, who are now associated with the high status previously afforded to the traditional professions (law and medicine). In this light, it is conceivable that some IT employees, especially those in contradictory class positions, might not perceive themselves as belonging to any particular class, but might instead identify themselves more with high status groups. Also, many call centre workers might feel "looked down upon" by other employees and also their employers. They might feel that their skills, which are essential in any customer service industry, such as interpersonal communication skills, are neither appreciated nor acknowledged by people outside the industry (URCOT, 2000). This feeling of being "looked down on" might influence some workers' status identities. Thus, status identities among different levels of IT workers might vary widely. On the other hand, it is also possible that the status identities among

different levels of IT workers might be similar due to the influence of non-work factors. Occupational variables such as differences in skills, in responsibility, in authority and power over others (control mechanisms), in level of education and in income are major determinants of personal status. However, non-work factors such as family background, lifestyle, sex, age and race can also affect status identities in society.

It is my argument that because economic conditions, mechanisms of control and labour processes vary greatly within the IT industry, class and status identities of employees in the various IT occupations are also likely to vary. The IT workforce is made up of people performing jobs at varied skill, education, experience and pay levels. Any one of these factors can significantly affect a worker's status and attitude toward unions, the welfare state, or his or her inclination to get involved with class-based movements and politics. For these reasons, any sweeping generalizations about IT employees are likely to be invalid.

Contemporary post class theorists argue that, in the 21st century, class or economic differences do not have a significant influence on political behaviour or social identities anymore. Two of the most renowned post-class theorists in contemporary times are Jan Pakulski and Malcolm Waters. Their work titled "The death of class" (1996) is credited with raising the profile of post class theory and it has drawn a wide range of responses from analysts of all theoretical stripes.

Post Class Analysis of Jan Pakulski and Malcolm Waters

The debate about the relevance or otherwise of class in explaining social stratification in advanced societies has stimulated many empirical and theoretical contributions from a wide array of theorists including post class theorists. Post class theory began with Nisbet's seminal paper, "The decline and fall of social classes (1959)." Nisbet argued that the term social class is only useful for historical purposes in comparing the stratification system of earlier societies, but it is nearly valueless for the explanation of inequality in wealth, power and social status in much of contemporary Western society (Nisbet, 1959). Nisbet argued that a shift in employment from manufacturing to the service sector, and increasing levels of education had destroyed class-based politics and identities in all but peripheral societies.

Likewise, Lipset and Clark argue that stratification in the industrialized West is becoming pluralistic, multidimensional and shaped by factors located outside the workplace (Clark and Lipset, 1991; Clark et al., 1993). They claim that old class divisions are decomposing due to the impact of the welfare state, occupational differentiation, rising affluence and consumption, changing political party dynamics, and market fragmentation. Thus, non-class divisions and issues have taken on greater salience and this is reflected in the stratification and political spheres too. Others theorists like Beck (1992) and Lash and Urry (1994) have also propounded similar theses regarding stratification in Western societies.

Pakulski and Waters (1996) point out that the pattern of stratification in a society depends on the relative salience of the sources of inequality and the relative strength of social formations. For example, if class relations are overshadowed by socio-political

structures then the dominant principle of social stratification is of a non-class nature. They argue that the impact of class on stratification varies from one historical period to another. Consequently, in the contemporary era, class is not the primary determinant of social inequality in society and the social articulation of distinctive classes and strata is weak or does not exist at all. According to Pakulski and Waters (1996) the demise of class in Western societies has occurred in three stages corresponding to the nineteenth century, the first three quarters of the twentieth century and the contemporary period. These stages are labelled: 1) The economic-class society (liberal capitalism); 2) organized class society (organized capitalism); and 3) status conventional society (disorganized capitalism). Pakulski and Waters (1996) assert that class in the Marxist property-based relational sense was closely approximated by West European societies in the late nineteenth century and early twentieth century. They argue that this era witnessed the coincidence of the spatial concentration of factories in industrial cities and political leadership by activists who were successful in galvanizing class consciousness among workers. Thus, social classes formed around class inequalities and class relations. Generally, social lifestyles corresponded to primary class divisions in society. Classes persisted through the war years and were reproduced by socio-political mechanisms facilitated by liberal corporatism. Pakulski and Waters (1996) argue that even when occupational and lifestyle differentiation eroded commonalities of working condition, class awareness and unity were maintained through political organization and ideology. According to Pakulski and Waters (1996), under organized capitalism the growth of the state during the twentieth century had implications for the distribution of property and the structuring of classes. Class conflicts took the form of state-backed rituals of collective

negotiations and bargaining. The state played an influential role in brokering corporatist deals involving the government, labour and capital. High levels of state intervention, state regulation and state production had the net effect of substantially downgrading the impact of class on society in this era.

However, Pakulski and Waters (1996) argue that with the welfare system in crisis, increasing occupational differentiation, market fragmentation, unravelling of corporatist deals, declining state regulation, weakening of class elites due to globalization, declining power of unions and changes in the politics of class, the impact of class on social stratification in contemporary times has diminished. They argue that under organized capitalism, classes were unstable because of the increased importance of education in the socio-economic stratification process. However, progressive occupational differentiation, credentialism and market segmentation in contemporary times have led to the development of the middle classes. These middle classes have created problems for class theorists, because they are highly differentiated, making it difficult to place them in class locations. Pakulski and Waters (1996) also note that even the working class has become diversified, based on the unequal possession of marketable skills and the sector of employment. There has also been a decline in the number of manual jobs and an increase in routine non-manual white-collar jobs. They argue that these routinized jobs form the occupational ghettos of women, unskilled workers, and racial and ethnic minorities. Thus labour market segmentation along the lines of race, ethnicity and gender have made it possible for real inequalities to be depicted in terms of race, ethnicity and gender rather than in class terms. The underclass in society is not the proletariat but social assistance recipients, the unemployed and marginal workers.

Pakulski and Waters (1996) also identify globalization mechanisms such as the decline of state power, post-Fordism and the opening of the borders of advanced countries to immigrants from the third world as factors influencing social class mechanisms in advanced countries. For example, under post-Fordist flexible specialization, the restructuring of labour processes is blurring occupational differentiation, creating multiple labour market fragmentations, making the concept of occupational hierarchy problematic and also rendering the lines of status demarcation unclear. Also, the new international division of labour is facilitating the transfer of manufacturing jobs to newly industrializing countries while the advanced societies are keeping high level scientific and managerial jobs. These high level jobs are supported by a proletariat that has a significant percentage of migrants from the third world. Thus globalization has opened the borders of Western societies to postcolonial immigrants who have formed an underclass in these societies.

According to Pakulski and Waters (1996) this kind of social differentiation ushers in the transition from class stratification to forms of hybrid stratification in which no single system of inequality dominates. To the extent that social formation does occur, strata form around a complex combination of characteristics including gender, skill level, race and ethnicity. Social identities such as black female white-collar worker or immigrant factory worker have more significant effects on social stratification than does objective class position.

Pakulski and Waters (1996) criticize Wright's class schema for its continuing insistence on the reality of the class structure in determining class experience. Pakulski and Waters (1996) reject the assumption of an overlap between patterns of social

inequality, class division and class conflict. In contrast, they argue that the behaviour and subjective orientation of an individual or group is difficult to predict by virtue of their class location in society because there is no central cleavage or single dimension along which social attributes and political preferences divide.

Unlike Wright, Pakulski and Waters (1996), Bourdieu (1984) and Lash and Urry (1987) discuss the importance of status in social stratification. They argue that in advanced societies, stratification emerges from the cultural sphere, and can form around differentiated patterns of value commitment, identity, taste or consumption. Thus consumption becomes symbolic and implicated in the process of social ordering. Pakulski and Waters (1996) argue that in contemporary advanced societies, when the full range of cultural practices is considered, classes appear less distinctive in their consumption parts. Increasing level of affluence and globalization are leading to the erosion of class-based lifestyle distinctions as lifestyles diversify. Thus, with this thesis in mind, we should not expect any significant differences in the lifestyle of the different levels of IT employees. However, if we do find differences in lifestyle due to class factors, this would indicate that Pakulski and Waters' (1996) thesis that class is dead is not borne out in this research. Likewise, if interviewees' perceptions of status inequality in NL are shaped by class factors then we can also point to that as a contrary finding to Pakulski and Waters' thesis. If there are no differences among the different levels of employees with regard to their lifestyles and perceptions of class, then we can examine the results to see whether they are as a result of factors outlined in Pakulski and Waters' thesis or other socio-economic factors. Despite the differences between Wright's theory and the post-class theory of Pakulski and Waters, there are also similarities. First, both theoretical perspectives

recognize the continuing salience of authority relations established in organizational contexts in social stratification. Secondly, both theories acknowledge the stratifying capacity of educational qualifications, professional knowledge and skills, and the growing complexity of occupational divisions. However, it is clear that the two perspectives have opposing views on the salience of class to stratification in advanced societies. In order to know which of these theories best explains class and status identities in NL, it is important to measure these identities using certain variables as indicators of the presence or absence of particular identities. The next section details the key variables measured to ascertain the class and status identities of the employees. In light of the differences between Pakulski and Waters' post class theory and Wright's class theory, this research seeks to answer the following questions: What factors influence the identities of IT employees? The class and status identities exhibited by IT employees are evaluated with reference to Wright's class theory and the post class theory of Pakulski and Waters (1996).

2.2 Class Identities and Class Consciousness

Sociologists have long been interested in the political attitudes, ideology and behaviour of professionals. It has been argued that economic class differences are associated with sharp differences in attitudes towards class related variables (Wright, 1985, 1997). In order to explore the subjective class consciousness of these IT employees, this study focuses on their attitudes toward income inequality, management, unions, the welfare state and corporate power.

Zingraff and Schulman (1984) have identified four aspects of subjective class consciousness: class identity (whether one considers oneself a member of the working class) class conflict verbalization (that ownership class interests are at odds with the interests of workers) attitudes toward class action, and attitudes toward egalitarian change (redistribution). The variables measured in this study touch on all of these aspects of subjective consciousness. While the variables measured as indicators of class identity cannot be said to constitute what Giddens (1980) or Mann (1973) considered variables that indicate "revolutionary class consciousness,"¹ they help determine how perceptions and attitudes held by these interviewees might promote or hinder the pursuit of class interests.

Individuals who benefit economically from the stratification system in comparison with others are more likely to judge its inequalities to be just. Conversely, people who are less well off are more likely to judge the stratification system to be unfair (Robinson and Bell, 1978:128). Thus, people's position in the class structure will shape their attitudes to certain issues and people. For example, Form (1985) and Kluegel and Smith (1981) found a relationship between beliefs about occupational pay equity and other class-based attitudes. More people in higher level than in lower level occupations tend to believe that everybody gets what they deserve in terms of pay. In this study, two questions measured employees' attitudes toward income inequality and their perceptions of who benefits most from the operations of companies (workers and consumers or owners?). The thesis here

¹ According to Giddens (1980) revolutionary class consciousness: "involves a recognition of the possibility of an overall reorganization in the institutional mediation of power and a belief that such a reorganization can be brought about through class action " (Giddens, 1980: 164).

is that high- and middle-level IT professionals are more likely than low-level IT workers to consider the current income distribution mechanisms as fair. Also, high- and middle-level professionals who own stocks or are part of management are more likely than low-level workers to disagree that companies benefit their owners at the expense of workers and consumers.

Collective organizations like unions are important mechanisms for creating class consciousness and organizing class actions. Unions are an important source of class consciousness and union members are consistently more class conscious than non-union members (Form, 1985; Leggett, 1968; Freeman and Medoff, 1984). Also, union membership has been found to be a major source of differentiation among classes (Form, 1985). Often unionism is said to be irrelevant to high tech employees because these employees possess a significant amount of individual economic power, a high degree of individualism, high levels of mobility and satisfactory working conditions (Robinson and McIlwee, 1989; Hossfeld, 1995). This combination of workforce characteristics has helped to produce a low level of unionism among high tech workers (Hossfeld, 1995).

However, many low-level IT workers are exposed to non-standard employment arrangements. Issues like job security and pay rates are of great significance to their work situation (Kanter, 1995). Consequently, low-level IT workers are more likely to be in favour of unionizing (Hossfeld, 1995; Kanter, 1995). Thus, it is my thesis that high-level professionals are more likely than low-level IT workers to be anti-union. Compared to high-level professionals, low-level IT workers are more likely to organize to promote their class interests. This is mainly because the objective conditions for a broad-based organizing campaign are much more likely found among low-level IT workers with fewer

employment options. This study explores union membership and the relevance of unions to respondents' jobs in particular and to workers or professionals in general.

Another variable measured is attitude toward the welfare state. The welfare state acts as a safeguard against market dependency, and through the financing and delivery of public welfare services, it changes the relation between class, resources and risks (Svallfors, 2004). Thus, classes which are exposed to greater risks and have only a marginal attachment to the market tend to be more in favour of a comprehensive, collectively financed and publicly organized welfare state than classes with a more privileged market position (Svallfors, 2004). Thus, it is expected that lower level IT workers will display stronger support for welfare policies than higher level professionals.

The welfare state includes free public health care, public childcare, income support programs and public care for the elderly. However, in order to minimize respondent burden, this study only explored attitudes toward the income support programs (Employment Insurance and Social Assistance) of the welfare state. The study measured support for income support programs like Social Assistance and Employment Insurance, employees' perception of the reasons why some people are social assistance recipients and whether major changes are needed to these programs. Employees' perception of the degree of influence of corporations on the political and economic decision-making process in the province was also measured. Different occupational groups have varying relationships with economic capital. It is likely that position in the stratification system is a factor in influencing attitudes towards corporate capital. Higher class/status individuals will tend to have positive feelings towards big business (Kamieniecki and O'Brien, 1984). Thus, it is expected that different levels of IT employees

will have different perceptions of the extent of corporate influence on politicians in society. High-level professionals are more likely to downplay the influence that corporations have on politicians than low-level IT employees. Another important aspect of class consciousness is worker relations with management, specifically the extent to which workers perceive themselves in opposition to managers. Vallas (1987) stated that class consciousness is affected by perceived class opposition between workers and managers. Thus, it is expected that high-level IT professionals will feel more in common with management than low-level IT workers.

2.3 Status Identities and Perception of Status

One of the measures of status identity is lifestyle. A review of the current sociological literature on social stratification and cultural taste and consumption indicates that there are three main perspectives on this issue. These can be broadly referred to as 1) the homology perspective; 2) the individualization perspective; and 3) the omnivore-univore perspective (Chan and Goldthorpe, 2007a).

The homology argument, originally developed by Bourdieu (1984), suggests that different classes exhibit different lifestyles that reflect their class positions. The development of particular lifestyles is entangled with class position. Consequently, the occupational class of individuals has some bearing on their consumption habits. While Bourdieu (1984) accepts that the economic is only one form of social exchange, and that other forms of capital - social and cultural - can be separated from one another in capitalist societies, he argues that the cultural dimension is directly related to, reinforces,

and is reinforced in turn by class inequalities. Habitus, which he defines as modes of thought, comprehension, and behaviour is differentiated by social class and constitutes cultural capital that affects the chances of attaining desirable rewards in processes of social stratification. In this light, the uneven distribution of cultural capital perpetuates the class structure. For Bourdieu, the existence of cultural capital reveals the efforts of the dominant classes to control culture for their own interests as effectively as they control the circulation of wealth. There is only an illusion of equal availability of cultural consumption. However, cultural capital is actually confined to those with class power and this restriction of access contributes to the continued stratification of classes. In other words, culture becomes a mechanism of class differentiation and determines the kinds of consumption a person can engage in. Thus, different structural positions generate commonalities that generate common preferences and lifestyles that can be considered class culture.

Like Bourdieu, other theorists have also asserted that people in different classes undertake lifestyle pursuits that distinguish them from people in other classes. Giddens (1973) and Dimaggio and Useem (1978) argue that the distinctiveness of class specific lifestyles is one indication of the extent to which classes are identifiable social groupings. Katz-Gerro and Shavit (1998) and Ostrower (2002) also argue that there are important differences in participation in high culture due to economic differences between the classes as indicated by their material lifestyles. For example, they point out that some upper-class (high status) individuals join private groups or clubs (social, health, and fitness) that systematically exclude people from lower and middle classes. Similarly, Rojek (1985) and Featherstone (1991) have found a strong relationship between income

and lifestyle. Specifically, some researchers have suggested that the choice of vacation destination is influenced by social class (Urry, 1990; Toivonen, 1994).

The individualization argument, which has gained currency in the past two decades, has advanced the hypothesis that in advanced societies, differences in cultural taste and consumption are losing their grounding in social stratification and are becoming more a matter of individual self-realization. Individuals are free to form their lifestyles independently of their social locations and primarily through their patterns of consumption (Beck, 1992). Some researchers have also argued that in the post industrial age, the vast majority of individuals share a common standard of living, and lifestyle disparities between classes are small. Thus social classes do not have distinct cultural lifestyles anymore (Goldthorpe and Chan, 2007a) and the processes of the diversification and individualization of lifestyles are advancing (Munters, 1977; Wilson, 1980; Sobel, 1983; Barbalet, 1986; Beck, 1992). Individuals are reflexive and can decide between alternative lifestyles. They argue that lifestyle reflects the individuality of taste and distinctive lifestyles of different groups of people.

The issue of consumption and class is a major theme in Ulrich Beck's (1992) book on *The Risk Society*. Beck insists that contemporary individualized cultures break from ascribed class culture. "It is no longer social classes that take the place of status groups. The individual himself or herself becomes the reproduction unit for the social in the lifeworld" (Beck, 1992:130). According to Beck, class also loses its subcultural basis and is no longer experienced (1992:98). Beck (1992) like Giddens (1991) argues that the culture of individualization is premised on the way large-scale contemporary social

change forces individuals to be reflexive and not on a weakening of the social structural forces. Beck (1992) notes that people's sense of individuality is constructed not with respect to social groups but as a reaction to the loss of security inherent in a detraditionalized globalized world system.

The last perspective, the omnivore-univore argument, states that rather than cultural stratification being closely linked to social stratification, the cultural consumption of individuals in higher social strata differs from individuals in lower strata in that it is greater and much wider – incorporating more of "high brow," "middle brow" and "low brow" cultures. Thus, individuals in higher social strata are more cultural omnivores compared to those in lower social strata who are cultural univores (Peterson and Simkus, 1992; Peterson and Kern, 1996). Thus, the omnivore-univore argument might be seen as reflecting a compromise between the homology argument and the individualization argument.

2.4 Labour Process Theory

Theorists such as Wright (1985) and Burawoy (1979) have assumed that work content plays an important role in the development of class consciousness. These analysts point out that the social relationships involved in the labour process have significant influence on class politics. Studies of office workers, for example, often find that the routinization of work gives rise to an oppositional consciousness among white-collar groups (Wright, 1985, 1997; Crompton and Jones, 1984; Oppenheimer, 1985). Thus employee discretion is increasingly seen as both a manifestation of class position and a determinant of the

experience of work. However, other research appears to suggest that the labour process is far less significant for the development of class consciousness than has been presumed (Kimeldorf, 1985; Low Beer, 1978). Given such limited and contradictory evidence, this study explores the labour process in IT occupations and how the organization of work affects class and status identities.

Labour process theory (LPT) is instrumental in showing how the rationality of techniques in industrial workplaces is related to class domination (Giddens, 1982). A growing number of commentators claim that LPT has been rendered outdated by real changes in production and work organization or has been marginalized by the particular direction the analysis has taken. LPT is most closely associated with Harry Braverman's *Labor and Monopoly Capital* (1974), which confronted industrial sociology with an important but unforeseen challenge. Braverman identified Frederick Taylor's principles of scientific management as an important management method in the history of US capitalism. According to Braverman, the main aim of Taylorism is to directly influence the effort of workers, while maintaining control over the intended purpose of their activities. He noted that the guiding principle of Taylorism was that of finding ways to separate conception from execution of the task, thereby transferring knowledge and power to management. Actions like the introduction of new technology, new work rules, changes in wage formulas as well as the level of direct supervision result from management's recurring attempts to control the physical and mental effort of employees (Wardell, 1999). According to Braverman's perspective, labour processes have changed over time and this has led to the degradation of work, with the average job reduced to mindless physical activities and the overall worth of the average worker being devalued.

Conversely, more recent developments in the labour process literature by post Fordist theorists argue that Braverman's analysis, which took on the ambitious task of updating Marx, now needs to be updated. Consequently, the 1980s brought the rise of new paradigms - flexible specialization, regulation theory, and lean production (Aglietta, 1979, Piore and Sabel, 1984; and Kern and Schumann, 1989). These theories are different, but they all herald a new era in the workplace where new technology has made the possession of skills important. Still other analysts have abandoned the search for general theory concerning changes in labour processes in favour of contextualist approaches that explore the micro-dynamics of workplace changes (Adler, 1992; Barley, 1986; Cornfield, 1987; Kelley, 1990). They argue that trying to find general patterns on the impact of technologies on the labour process is an exercise in futility (Wood, 1989:4; and Vallas and Beck, 1996). While I do agree that in some cases work place changes should be studied in the context of workplace dynamics, the post Fordist theories provide a better framework for discussing changes in the labour process in many workplaces, including the IT industry.

Though distinctive in their concepts and claims, supporters of new paradigms (post Fordism) are all optimistic about the link between advanced manufacturing systems and the utilization of skilled labour. Some variants of this post Fordist perspective emphasize new forms of craft labour. This is particularly the case with flexible specialization theory (Piore and Sabel, 1984), which argues that a division of labour based on fragmented skills and repetitive work is incompatible with new technological market conditions. These require intellectual participation from workers with upgraded skills and greater autonomy. Similar themes emerged in the influential work of Kern and Schumann (1989) on the new

production concepts. They propounded the re-professionalization of work through the reintegration of mental and manual work and a high degree of autonomy at work. Thus, these theorists observe changes in two areas closely related to labour processes, skills and control.

Post Fordist theorists link the changes in management techniques in firms to different forms of organizational control (Edwards, 1979; Burris, 1993). According to Burris (1993), technocracy is currently the most apparent form of control in workplaces centred around computerized technology: high tech research and development corporations and service corporations. Analysts argue that although features of Taylorism are of ongoing importance, for instance the ideology of the one best way to solving any problem (Burris, 1999; Tuckman, 1994), Tayloristic principles have been superseded by technocratic control (Burris, 1993). A prominent feature of technocracy involves polarization into expert and non-expert sectors, with the former composed of managers and technical experts, and the latter of clerical or production workers. There is also an acknowledgement that under technocracy, the gap between conception and execution has widened. Professionals engage in mainly conceptual work. Workers in the execution sector must acquire new skills for monitoring, inference and diagnosis. At the expert level, rigid bureaucratic rules and commands are downplayed in favour of more flexible and collegial types of work organization. Tasks tend to be organized around ad hoc projects with the formal hierarchy of command and communication channels routinely bypassed, leading to decentralized authority among experts in these work teams.

At the non-expert levels, the tendency has been for tasks to become routinized and stringently monitored via computerized technology. The nature of working conditions at

this level depends on social factors like management strategies and market conditions and is constrained but not determined by technology. Advanced technology can also be implemented so as to enhance work in the non-expert sector; that is, to enhance employee learning and self-management (Burris, 1993). However, Burris concludes that empirical evidence indicates that this kind of organization in the non-expert sector is the exception rather than the rule. Technocracy has resulted in some level of skill restructuring and new types of alienation, stress and occupational hazards.

Lastly, analysts such as Kanter (1983:55) and Burris (1993) note that under technocracy, credentials, high level skills and expertise can become an important source of authority, sometimes even superceding rank or position in a hierarchy. Thus a substantial sector of the population, the expert sector, is exempted from Tayloristic control. This exemption depends on the relative status of the profession and the professional within a given profession (Kunda, 1992; Shaiken, 1984). On the other hand, non-expert sector workers are generally subject to Tayloristic control.

Wright has reflected on these uneven changes in the workplace (Wright, 1985). He asserts that there has been deskilling of many jobs, with new skills of other types being created. Job enrichment is allowing some workers to gain control over many aspects of their work, leading to an expansion in jobs associated with high levels of skills and technology at the same time as more manual jobs are created. According to Wright (1985), this results in an increase in the gap between mental and manual work, leading to the creation of semi-autonomous employees (a new class location).

Overall, it can be argued that the reorganization of work has not been uniform across all sectors of the economy. For example, advanced technology can be utilized in

the workplace to enhance job autonomy or increase management control. The direction of management's actions is dependent on many factors including the service being provided, management strategies, and the skills required for the performance of the work. The labour processes in professional IT jobs and call centres, for example, reflect the uneven nature of the changes in workplaces. The organization of work in these occupations is discussed next.

2.5 Professional IT Jobs and Call Centre Work

Information technology employees perform computer-related tasks ranging from designing or customizing software or computer systems to trouble shooting hardware, technical support, and servicing computer networks. For example, the core tasks of software work are systems analysis, software design, programming, testing and installation. The work may also involve negotiations with users, maintenance or support and problem-solving following implementation of a system. All of these tasks require different levels of skills and qualifications. Consequently, the people performing them can be placed in a skills hierarchy, with designers at the top and operators or customer service personnel at the bottom.

A pattern of work organization and management is associated with IT professionals, especially software engineers and systems architects, which identifies their work as knowledge intensive (Lockyer et al., 2001; Marks et al., 2003). Generally, IT employees tend to be portrayed as having 'high tech' lifestyles, earning high salaries and benefits, working in modern workplaces in collegial teams and having highly flexible work arrangements (Barrett, 2001). They are seen to be engaged in open-ended work,

conducted in less bureaucratic workplaces. One key quality in IT jobs is flexibility. It is apparent in everything from compensation to business structure to career development. For example, some IT firms give professionals a menu of benefit options so they can create the compensation package that best suits their situation (Watson, 2002). Many IT firms are flexible about when and where IT professionals work, permitting them leeway in setting their own schedules and giving them the option of working at home (Kunda, 1992).

Some analysts argue that many IT workplaces emphasize flat, non-hierarchical organizational structures to encourage the exchange of ideas within and outside of IT departments. Watson (2002) even cites examples of some firms where there are no business titles on employee business cards and where newly hired professionals are free to lead veteran project teams. However, the view that portrays all IT employees as affluent, upwardly mobile professionals, who earn high wages and work in enlightened and non-hierarchical workplaces has been challenged by some researchers. Wilson and Blain (2001) and Marks et al. (2002) argue that the nature of IT work varies. They argue that many IT companies have workforces that are highly stratified and hierarchical, with extreme income disparities between workers at the top and bottom of the job ladders. Wilson and Blain (2001) report that in some companies the skill hierarchy is so steep that it produces a virtual caste system.

Wilson and Blain (2001) and Papp (1998) report that at the top of the IT job hierarchy are employees doing conceptual and technical jobs that require the most training, experience or education, including positions such as high-level software engineers, systems architects, and systems analysts. At the next level are workers who extend or modify programs. Such professionals are proficient in complex programming

languages and spend most of their time modifying or extending existing programs. This group might include database developers and administrators, programmer analysts, programmers and system analysts. Down the ladder, there are employees like web designers, technical editors, digital media artists, and higher level software testers. Near the bottom, in terms of skills, qualifications, pay and prestige are workers doing basic software testing, technical support, and basic web page production. Thus, any portrayal of the IT worker as a member of the new professions has to take into consideration the actual work that the individual is performing. Similarly, Marks et al., (2002) distinguishes between primary and secondary products to separate cutting edge and routinized work. Primary work is driven by new technology and secondary software work involves coding, using tried and tested techniques.

Mosheni (1993) and Tarallo (1987) also emphasize that work in the IT industry is not a uniformly developed process, creating highly skilled and autonomous career occupations on one level and dead end, highly monitored jobs at another level, with few occupations between these polar opposites. They argue that occupational stratification and job changes are related to the interaction of non-technical conditions found outside and inside the workplace. Mosheni (1993) argues that what exists in the computer industry is a combination of two forms of control, Tayloristic processes and some form of post Fordism. When a product is yet to be conceptualized, as with the creation of a new special purpose microchip, the control of the scientist's work is more open ended and the pressure to create is more indirect. However, when the product is mass produced, the work of lower level IT workers is routinized and systematized to increase their productivity. For example, the automation of programming, manifested in the introduction

of structured programs like third and fourth generation programming languages, the ORACLE, the Computer Aided Software Engineering (CASE) and more recently, popular visual programming, has led to the introduction of management processes aimed at achieving rationalization in production (Beirne et al., 1998:146). The standardization of operating systems and software itself (the dominance of standardized applications that can easily be cloned) and the replacement of mainframes with networks have led to some deskilling and degradation of program work (Kraft and Dubnoff, 1986; Greenbaum, 1995). However, this process has not been uniform across the board, because programming work is segmented. Routine adaptation of generic programs is mainly undertaken by lower paid programmers and more strategic work is done by employees who combine programming knowledge with analysis and management functions (Greenbaum, 1995:92; Beirne et al. 1998:143-144).

In this light, it is likely that some degree of standardization has taken place in the computer industry, especially among lower level IT workers. There appears to be a polarization into expert and non-expert strata with some jobs located between these polar positions. Thus the location of a job along this continuum will determine the kind of labour control mechanism in place. It is reasonable to assume that high-level professionals are subject to looser management control, experience flatter management structures and enjoy job mobility opportunities based on their credentials. These jobs are also functionally decentralized to promote efficiency and a flexible taskforce orientation. On the other hand, there is more stringent management control and routinized work at lower levels of the industry. The control mechanisms employed in the various levels of IT work are dependent on the labour processes in operation in these workplaces.

A - Control Mechanisms in Professional IT Jobs

Some researchers (O'Riain, 1999; Wilson and Blain, 2001) have argued that IT professionals are generally employed in work environments that are less bureaucratic than most. This raises the question of how managers control these IT professionals. The primary forms of organization of work in professional IT occupations are flexible and creative teams (including virtual teams interacting through cyber technologies) that move easily from project to project (O'Riain, 1999). Project teams usually have broad technical and functional efficiency (Rasch and Tosi, 1992). Team members are usually experts in the various aspects of IT (e.g., software production, database management and hardware maintenance). Decision-making authority in relation to the project is vested in team members. Decentralization and horizontal communication are emphasized (Burriss 1993).

Friedman's (1977) concept of responsible autonomy has been used to describe the labour process in IT work. This autonomy is given to high-level employees with high level skills, specialist knowledge and power in their workplace. IT project management and control of IT workers are based on a looser management structure grounded in responsibility, personal control and creation of management trust (Alvesson, 1995; Kunda, 1992). Control is also exercised with mechanisms such as incentives, norms, values and commendations used to motivate and guide individuals (Kunda, 1992). Formal and informal modes of labour control are employed depending on the skills and credentials required for the job.

The formal modes of control involve performance evaluation strategies that specify desirable behaviour and outcomes (O'Riain, 1999). However, this strategy is dependent on the extent to which management can observe the behaviour of the employees and on

management's knowledge of the systems development process. The more observable the behaviour of the employee and the more knowledge management has about the development process, the greater the degree of behavioural and outcome control exerted.

One formal control method employed by firms is project planning and monitoring. Project planning involves articulating tasks to achieve project objectives, estimating the time and costs required to accomplish a project, and allocating resources to the tasks required (O'Riain, 1999). Monitoring involves comparing actual progress to planned progress. This requires collecting information about costs, schedules and technical output such as code, designs, documentation and test plans. Information can be gathered via meetings and interviews (Sommerville, 2004, Boehm, 1984; Boehm and Papaccio, 1988). In this type of control, the project deadline becomes the focus of management and team efforts. All of the team's action is measured against its impact on meeting the deadline. It is an attractive mechanism of control because the esoteric skills and expertise of the workers and the need for rapid communication and cooperation make direct control over the work processes ineffective and undesirable (O'Riain, 1999).

Measuring the performance of software development teams demands multiple measures to capture the total picture of production (Banker and Kemerer, 1989; Delone and McLean, 1992; Guinan et al., 1997). Many contemporary standards (defect rates, function points, line of code, elapsed time and resource consumption) are utilized to monitor or control the work of software teams (Sawyer and Guinan, 1998). Other formal measures such as perceived product quality, user satisfaction, peer and self-evaluation methods are also adopted (Bayer and Malone, 1989; Henderson and Lee, 1992; Boehm, 1984; Boehm and Papaccio, 1988).

However, many researchers have concluded that IT teams are, in the main, subject to informal methods of control (Kunda, 1992, Wilson and Blain, 2001). Management relies on informal modes of control when they want to establish collegial relations with their employees or when they lack knowledge of the development process (Ouchi, 1980; Kirsch, 1996). Informal modes of control are based on social relationships. The two modes of informal control frequently utilized are self-control and clan or team control (Ouchi, 1980). An individual exercises self-control when he or she sets goals for himself or herself, monitors whether he or she meets those goals, and rewards or sanctions himself or herself accordingly (Ouchi, 1980). Meikins and Whalley (2001) also argued that professional attributes act as an important source of control. For example, strong professional attitudes motivate professionals to work hard, complete work promptly and be responsive to customers. On the other hand, a team institutes clan control; a group of individuals whose goals are similar and who depend on each other to accomplish specific objectives at work. Thus, the team acts as a control mechanism. Everybody's work is dependent on the performance of other team members. This motivates everyone to work hard to meet deadlines. Usually, clan or team control is implemented when it is difficult to observe individual behaviour or measure individual outcomes, and also when management wants to build trusting and collegial relationships (Ouchi, 1980).

The emergence of IT workers in alternative work environments has also raised important questions with regard to the labour processes in these occupations. Can the control mechanisms used in other sectors of employment be implemented in software production where workers are organized into virtual teams? Traditional methods of control

may not work with these teams. Also, how does management secure the commitment of IT professionals who are consultants and do not form part of their companies' internal career ladders? This is especially important in the wake of the proliferation of non-standard employment practices in the IT industry. Rather than eliminate the question of control, this trend only shifts it. Also, part-timers present a dilemma to the team. Can individuals working part time keep up with those working fulltime, or will part time hours delay the completion of their portion of the projects?

Effective methods of control have developed to monitor the labour of these new kinds of workers. For example, Meiksins and Whalley (2001) outline the following measures:

1. Reputational networks can be resorted to as the basis for hiring such staff. This will ensure some degree of confidence in the employees' output.
2. Market pressures and contractual arrangements are important in controlling independent consultants. The market coerces contractors, who know that their survival as contractors depends on their ability to find clients (Meiksins and Whalley, 2001; O'Riain, 1999). Formal contractual agreements dictating when, where and how contractors work also help outline clear expectations for such employees.
3. Teams that are geographically dispersed can be connected through the use of information technology.
4. The introduction of flexible work arrangements may help build loyalty.

O'Riain (1999) also noted that as the relationship between the employees and the firm is changed to that of contract, through outsourcing, capital can apply new control methods.

For example, management can withhold payment from a supplier or use various forms of litigation, including breach of contract, to control these workers. In the case of part-timers, O'Riain (1999) also noted that the disciplining effect of teams continues to work on part-timers, even though they work scaled down hours.

As noted earlier, the labour processes vary within the computer industry and it is reasonable to expect different control methods for diverse labour processes. Factors that influence the kind of labour processes faced at work include the level of skills needed for the job, the degree of observability of behaviour at work and management's knowledge of the production process. Thus, lower-level IT jobs that are highly standardized experience more formal control methods. These formal control methods may include meeting specific targets (including quantitative requirements) within certain time frames. IT companies can combine various control mechanisms in order to meet their specific needs. Control strategies also largely depend on socio-technical issues and managerial policies in place in these organizations. The labour processes in call centres clearly manifest the diversity of labour control mechanisms.

B. Call Centres

Despite their use of similar information communication technologies, labour processes and work organization in call centres vary. It is pertinent to take into account differences in relation to a number of important variables: size, industrial sector, market conditions, complexity and call cycle times, the nature of operations (outbound and inbound), the precise manner of technological integration, the effectiveness of representative organizations and management styles, priorities and human resource practices (Taylor

and Bain, 1999).

In outlining the organization of work in call centres, some researchers have stressed the importance of distinguishing between inbound and outbound operations (Taylor and Bain, 1999; Buchanan and Koch-Schulte, 2000). Call centres utilize VDU (Voice/ Data Unit) and telephone technologies in different ways and have different expectations of employees. In inbound operations, the Automated Call Dialling (ACD) system receives incoming calls and automatically channels them to waiting operators or agents according to pre-set instructions. If all agents are busy on other calls, the calls are queued and then allocated to agents as they are freed up. Agents or customer service representatives sit in front of VDUs and keyboards and take calls through a headset comprising an earpiece and a small microphone (Taylor and Bain, 1999; Buchanan and Koch-Schulte, 2000). Communication between agent and customers involves varying combinations of inquiry and answer, but in all cases requires the operator to make reference to the computer screen as he or she retrieves, adds or manipulates data. Calls may involve simple requests for a credit card balance or booking a plane ticket. Others may require complex or detailed responses concerning, for example, the diagnosis of a faulty PC (Personal Computer) or assembling a laptop (Taylor and Bain, 1999; Buchanan and Koch-Schulte, 2000). Therefore, even though the labour process consists of common defining characteristics, important variations exist along a continuum of complexity.

Outbound operations are concerned largely with telesales or telemarketing and largely utilize predictive dialling systems. These systems scan through databases of customers phone numbers and, in pre-set mode, automatically dial the number,

connecting the agents to customers. In order to facilitate the communication, the relevant customer details appear on the agent's screen (Taylor and Bain, 1999; Buchanan and Koch-Schulte, 2000). In outbound operations, the responsibility is placed upon the agent to either sell, or create interest in, a particular product or service. It is important to note that the simple inbound/outbound dichotomy is not valid for the totality of the call centre landscape because, in a growing number, inbound agents are also required to attempt to sell from a menu of products (Taylor and Bain, 1999; Frenkel et al., 1999).

Nevertheless, commentators and academics like Buchanan and Koch-Schulte (2000) and Bibby (2000) have noted differences in working conditions in the two kinds of operations. They state that the kind of call centre appears to have a significant impact on everything from salary to office ergonomics among call centre workers. Workers in inbound centres are better paid and their jobs are considered easier. In contrast, workers in outbound centres, particularly in telemarketing, work harder for less pay and employers rely mostly on part-time or casual employees. Jobs in outbound centres are considered inferior because they involve high quantitative targets (high pressure sales environments) and job security is minimal (Buchanan and Koch-Schulte, 2000; Bibby, 2000). Buchanan and Koch-Schulte (2000) report that these jobs offer little training and opportunities for career mobility are few. All of these factors contribute to high turnover rates. In fact, some researchers like Taylor and Bain (1999) and Buchanan and Scholte (2000) have charged that call centres, especially outbound ones, combine non-standard employment practices (employing part time, temporary workers) with difficult-to-meet standards in order to enhance the flexibility of their workforce. Outbound firms depend on high turnover of employees to keep their productivity rates high by keeping the stations filled with eager,

energetic newcomers.

Inbound call centres offer more intensive training of agents and employees are encouraged to undertake skills upgrading. Many employees are full-time workers and are thus expected to remain in the firm for a considerable time. Compared to outbound centres, there are opportunities for advancement to positions beyond the telephone (Taylor and Bain, 1999; Buchanan and Scholte, 2000). In many cases, inbound work is less stressful compared to outbound work because of the different dynamic of customer contact in the calls. However, inbound customers can also be rude and create stressful situations for agents. Thus encounters with angry customers may be something that both outbound and inbound workers encounter (Taylor and Bain, 1999).

It is also argued that, although the inbound/outbound distinction does seem to make a difference in terms of pay and employment contract, the good jobs/ bad jobs thesis is not always valid. While outbound jobs offer more part-time, lower paid, quota driven work, many employees in inbound centres do not earn good pay and are subject to stringent monitoring (Buchanan and Koch-Schulte, 2000; Taylor and Bain, 1999). Although the distinction between inbound and outbound jobs is untidy, it provides a useful mechanism for demonstrating the impact of the dynamics of labour market segmentation on the organization of work.

Both inbound and outbound call centres may be in-house divisions of larger organizations or third-party companies that manage calls for a number of different organizations. Organizations that deal with complex products, or that require highly specialized knowledge, tend to keep their call centres in-house. In-house call centres often have more full-time positions, and are more likely to provide skill-based training.

Alternatively, some organizations contract out their inbound or outbound calling work to outside companies. This is mainly done to cut costs. However, for workers, outsourced call centres may be more difficult workplaces. Because of the need for third party service providers to be competitive and win contracts, they have to make low bids. Thus, there is a high degree of pressure on them to decrease operating costs and increase worker productivity. In order to keep the contract, these companies must provide good service. This increases the tension between providing good service and cutting operational costs to increase profits for the company (Mason et. al., 2001:12). Also, because of the temporal nature of some contracts, these organizations often require a more 'flexible' workforce, resulting in increased use of part-time and non-standard employment arrangements, including hiring temporary workers through employment agencies. Wages are often lower than those paid to full time workers in in-house call centres and may be partially performance-based (Buchanan & Koch-Schulte, 2001).

Researchers have concluded that call centres mostly exhibit flat organizational structures because there is a high ratio of operators or agents to supervisors and managers. This imposes constraints on career advancement and promotional opportunities (Taylor and Bain 1999; Bibby, 2000). Bibby (2000) noted the existence of an informal work culture and management style, which does not emphasize differences of status or work hierarchy. Taylor and Bain (1999) argue that because the organizational structure of call centres is flat and management rarely pay the necessary attention to training, retention or the career development of agents, call centres jobs are viewed as transitory jobs occupied by people who do not intend to make it their career or people who do not have marketable skills.

2.6 Models of the Labour Process in Call Centres

Call centres feature a labour process in which certain practices are uniform across all workplaces. For example, operators read and interpret information on video display screens, manipulate computer keyboards to enter or retrieve data, and at the same time talk with phone-based customers. This labour process is configured by the integration of telephone and computer technology and consequently produces the high levels of control that are often manifest (Taylor and Bain, 1999; 2001). However, there is no agreement on the mode of organization of work in call centres. Some researchers (Taylor and Bain, 1999; Bain et al., 2001) describe call centres as "sweatshops," with workers requiring an "assembly line in the head" to undertake this work. They locate the rise of call centres in the context of the development of Tayloristic methods in office work in general. At the heart of this labour process is management's desire to set targets to measure quantitative aspects of employees' tasks (such as number of calls taken and average handling time), and to control and monitor those qualitative areas of employee-customer interaction like tone, helpfulness, and enthusiasm (Taylor et al. 2002). Others have argued that call centres use both standardization and flexible practices in dealing with workers, offering workers some degree of job discretion while maintaining some level of control over aspects of their work. Batt (2000) notes that call centre organizations are quite capable of distinguishing between 'high-road' and 'low-road' paths to rationalization with respect to different groups of customers. This involves implementing more liberal control methods in the high-road paths, which deal with high value customers, and strict control methods in low-road paths dealing with low value customers. However, these paths were described

as ideal types to which particular examples approximate more or less. Thus many organizations may be hybrids of both ideal types.

Arzbacher et al. (2002) report that some call centres implement a flexible regime of employee selection and quality management that ensures that employees can move easily and effectively between strictly controlled work and customer empathy. For example, quality circles and round tables with both management and workers are organized in some centres. This type of control in call centres has been described as "info-normative"² (Frenkel et al., 1999). Arzbacher et al. (2002: 31) report that this "is achieved both through 'hard' measurements and 'soft' cultural normative controls, a careful cultivation of informal work cultures." However, they caution that this distinction is fluid in itself. "The figures of capacity and performance are often a matter of interpretation as management places them in context and assesses their relevance" (2002:31).

Researchers like Arzbacher et al. (2002) and Collin-Jacques and Smith (2005) generally represent a new generation of call centre researchers who recognize the diversity of work arrangements. Factors such as the customer segment served, management strategies (for example, whether they emphasize quantity or quality) and the nature of work (inbound versus outbound, outsourced versus in-house) play important roles in determining work arrangements (Deery and Kinnie, 2004; Kinnie et al., 2008; Taylor et al., 2002). Collin-Jacques and Smith (2005) also concluded from their study of Telenursing in Quebec and England that the socially constructed occupational role of particular occupational groups also influences the labour processes faced by workers in

² A form of control based on data objectification along a wide variety of dimensions such as agents' ability to read and interpret computer screens, ability to deal with the stress of impatient customers and employee commitment to high performance standards.

call centres. For example, nurses in Quebec have more input than nurses in England into the design of the technology used in telenursing centres. This gives the nurses in Quebec more job autonomy than those in England. This debate over the organization of work in call centres may also be related to the question of the level of skill utilization in call centres.

2.7 Skill Utilization in Call Centres

The debate over the skill content of call centre work has mirrored the polarization of views between researchers who argue that call centres are Tayloristic in nature and those who emphasize that call centres are organized around flexible work practices. Researchers who view the Tayloristic model as most applicable argue that call centre workers are deskilled and perform repetitive tasks because these jobs do not require complex skills and knowledge. On the other hand, researchers who emphasize the hybrid or flexible models point out that call centre workers are skilled because their jobs require technical, cognitive and communication skills.

D'Alessio and Oberbeck (2002) and Taylor and Bain (1999) interpret call centres as a return to Taylorism and deskilled service work. Management standardizes the interaction between customers and agents by the use of scripts. The job description of agents does not mention any analytical or problem-solving skills (Yeuk-Mui, 2001; Taylor and Bain 2001). Yeuk-Mui reported that many agents reported a high percentage of their work tasks as repetitive. However, other researchers, notable among them Holtgrewe and Kerst (2002) and Frenkel et al. (1999), argue that call centre agents are not an unskilled and regimented workforce. Frenkel et al. (1999) Taylor and Tyler (2001) and

Thompson and Callaghan (2002) argue that the demands of the work require considerable skill with diverse types of knowledge. Kerst and Holtgrewe (2001) note three different kinds of call centres that utilize varying amounts of skill. One group is called the "skilled expert services centres," which employ mostly full-time workers with high qualifications like specialist doctors and investment advisors. They are experts because their services require high level skills and knowledge. The second is "simple information services." These are the basic inbound and outbound call centres. They usually prefer people with some business or sales experience, but if such skills are not available, sales orientation and attitudes are considered important. Finally, the third kind is "banking call centres," which include simple information services as well as expert services. These centres require skilled workers to carry on complex tasks. This categorization by Kerst and Holtgrewe (2001) exemplifies the fact that call centres are diversely organized and that skill requirements vary from one centre to another.

Buchanan and Scholte (2000) concede that call centres make demands on interpersonal and communication skills. These skills are categorized as personal talents for which some people, usually women, are said to have natural aptitudes. They conclude that this is one mechanism through which women's work is undervalued. Also, the fact that call centre jobs are filled primarily by women plays a role in how the work itself is socially constructed. That is, gender stereotypes and assumptions are embedded within and play a role in structuring the interactions between workers and customers.

The variety of services, functions and tasks carried out in call centres makes it obvious that some jobs require high level skills, knowledge and experience, but a significant percentage of jobs fall in Kerst and Holtgrewe's (2001) "simple information

services category." These jobs do not require complex skills based on a high level of formal technical or educational qualifications. On the other hand, while there is no doubt that some call centre jobs are repetitive and standardized, especially the outbound operations, standardization only works to a certain level, and additional skills are needed to deal with unforeseen questions. However, most call centres in the simple information category require mainly communicative and cognitive skills. Yet, the expert service centres require not only communicative skills, but other professional qualifications related to the services being provided. Thus, in general, the skill requirements of call centre jobs depend on the kind of services offered in the centre.

It can be concluded that a high level of routinization and tightly controlled labour processes are dominant, although not universal, features of work organization in the call centre industry. The implementation of Taylorist practices, target-setting and, in some cases, flexible practices like team working and temporal flexibility characterize many call centre work settings. The mechanisms of labour control employed in call centres depend on different factors, including the level of skill and qualifications required for the work performed. It also appears that call centres require different kinds of skills depending on the services provided.

2.8 Conclusion

After reviewing the existing literature on the labour process and control mechanisms in IT professional and call centre jobs, it is clear that the IT employment structure is hierarchical with extreme skill and income disparities between workers at the top and bottom. IT professionals at the top of the hierarchy (software engineers, and systems

architects) are experts in their field and enjoy good remuneration packages. They are also mainly organized into flexible teams, which are basically free of direct management control. They are subject to control measures that are mainly informal, like self control and team control mechanisms. Professionals have the flexibility to work in alternative environments, taking advantage of the high demand for their skills to work in non-standard employment arrangements, in order to satisfy their diverse needs. In a nutshell, these professional jobs almost perfectly fit the expert model outlined by Burris (1993) and Piore and Sabel (1984).

The literature does not distinguish between high- and middle-level IT professionals. However, based on the general analyses, it is likely that IT professionals in the middle segment of the industry (entry-level web designers, database developers and programmers) who are not as highly skilled and qualified as high-level IT personnel, do not enjoy the same flexible labour practices. It is likely that some elements of these jobs have been routinized and so these employees are probably subject to a higher degree of formal management control than that experienced by high-level IT professionals.

Despite variation in the labour processes in call centres, it is clear that, unlike professional IT jobs, most call centres implement stringent labour control processes and many of the jobs do not require high levels of skills and qualifications. The difference between the organization of work in professional IT jobs and call centres demonstrates the uneven effects of technological developments. Technology has made it easier for management to exert considerable control over workers and routinize their work, leading to job dissatisfaction in call centres. The same technology has been used to facilitate the work of a small group of workers, empowering them and subjecting them to less stringent

control methods. Thus, it would be wrong to claim that computerized technology alone has led to new forms of work organization emphasizing flexibility. It is obvious that employers can deploy the new technology in forms that lead to either Tayloristic or flexible organization of work practices or even a combination of both. The different labour processes implemented in the various IT strata illustrate that computer technology can be employed to either stringently control and monitor the work processes of workers, or empower them and implement flexible practices. Whether technology can be used to empower or stringently control workers depends on, among other things, social, technical and economic considerations in the workplace.

While it is clear that the labour processes in the various IT job strata differ, especially between the high- and the low-level IT employees, the effects of these variations on the class and status consciousness of these employees are unclear. This is mainly due to the influence of other factors external to labour process variables. The main thrust of this thesis is to ascertain whether differences in the organization of work in these IT strata influence the class and status identities of employees. The next chapter describes the research methodology.

Chapter 3: Research Methodology

3.0 Introduction

This chapter sets out the research methodology that guided the study, including discussion of the methods and also an outline of the philosophical foundation on which the research is built. The researcher's philosophical beliefs about "what can be known" (ontology) and "how it can be known" (epistemology) influence the research process by impacting the selection and use of different methods.

This chapter has four sub-sections. The first outlines the different ontological and epistemological orientations in the social research literature. Although this study used both qualitative and quantitative interview questions, the main emphasis in this chapter is on qualitative research because semi-structured and unstructured questions formed the major part of the data collection process. The next section details how the organizations and the respondents were selected. It also provides brief background information on the companies from which respondents were drawn. The third section outlines the research process. It describes the interview (the primary method of research), document analysis and passive or non-participant observation. It also outlines some of the characteristics of the respondents. The final section specifies how the key variables of interest were measured.

3.1 Research Paradigms and their Philosophical Foundations

Beliefs about how knowledge can be acquired influence the methodology of every research study (Bryman, 2001; Denzin and Lincoln, 1998) and this makes it pertinent to

consider the different ontological and epistemological standpoints influencing researchers' work. Quantitative and qualitative research are the two main ontological and epistemological paradigms commonly used by researchers (Bryman, 2001; Palys, 2003).

The quantitative research paradigm emphasizes objectivity and detailed measurement (Bryman, 2001). Researchers utilizing this paradigm believe that social reality can be grasped and researched by studying the universal and natural laws that they believe govern human behaviour (Bryman, 2001; Glesne and Peshkin, 1992; Lincoln and Guba, 1985). Positivists test theory deductively from existing knowledge, through developing hypotheses regarding relationships among variables (Hoepfl, 1997; Cormack, 1991). Positivist researchers, especially those in the natural sciences, may undertake experimental research for the purposes of isolating causes and effects (Denzin and Lincoln, 1998). This type of research involves "operationalizing theoretical relations and measuring and quantifying phenomena which allows for the generalization of findings" (Flick 2002:3). Research influenced by the quantitative paradigm also involves the "use of standardized measures so that the varying perspectives and experiences of people can be fit into a limited number of predetermined response categories to which numbers are assigned" (Patton, 2002:4). The positivist perspective assumes that research results can be generalized to a larger population as long as the study is conducted using random samples (Winter, 2000; Bryman, 2001). Positivists emphasize the importance of value-free research. The researcher should separate his or her personal beliefs from the results of the research.

The quantitative perspective is influenced greatly by the methodology of research in the natural sciences. Some of the techniques used by quantitative researchers include

questionnaire surveys and interviews with closed-ended questions, experiments and content analysis. They frequently present their findings with the help of mathematical models, statistical tables and graphs (Bogdan and Biklen, 1998).

Qualitative researchers, on the other hand, emphasize the importance of context and a naturalist approach in conducting research (Patton, 2002). They study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them (Becker, 1986). Qualitative researchers argue that human actions are meaningful. In order to grasp the full meaning of people's actions, it is important to get closer to the individuals' perspectives through detailed interviewing and observation (Denzin and Lincoln, 1998). Thus, they argue that treating the social world as objective and absolute does not allow for the examination of context. So qualitative researchers reject the proposition that human behaviour is governed by laws that can be studied objectively.

Unlike quantitative researchers, qualitative researchers argue that it is impossible for the social researcher to be value free, and so the values of both the researcher and the research subjects form part of the research process (Holloway, 1997). In general, the methods utilized by qualitative researchers emphasize exploration of the issues under study. Qualitative researchers enter the research setting with fewer pre-conceived ideas and perspectives regarding the subject to be investigated and develop theory inductively from their interaction with research subjects (Cormack, 1991). Qualitative researchers generally use a variety of methods such as case studies, unstructured or semi-structured interviews, participation, observation and secondary analysis. They prefer to present their

findings in ethnographic prose, historical narratives, first person accounts, and (auto) biographical formats (Denzin and Lincoln, 1998).

Given the differences between qualitative and quantitative approaches to research, there has been an intense debate between the two camps about which paradigm is "correct" (Bonta and Gendreau, 1990; Roberts and Jackson, 1991). However, some researchers have advocated a combination of the two approaches, arguing that both can make valid contributions to understanding social phenomena (McGuire, 1973; Becker, 1996). Becker (1996) also emphasizes the complementarity of the two approaches:

The two styles also imply one another. Every analysis of a case rests, explicitly or implicitly, on some general laws, and every general law supposes that the investigation of particular cases would show that law at work. Despite the differing emphases, it all ends up with the same sort of understanding, doesn't it? (Becker, 1966: 54).

A study exploring the kinds of class and status identities exhibited by IT employees requires examination of the context in which these identities are formed. Also, the subjective nature of the topic requires the researcher to understand the multiple social constructions of meaning concerning the issues of class and status. The qualitative approach is best suited to tackle this topic. Qualitative interviews allow for a thorough exploration of the subject matter, capturing the individual's point of view and securing rich descriptions of the factors impacting upon their class and status identities.

However, the qualitative research process is a subjective process in which understanding is developed through the interaction of the researcher and the research subjects. Due to the fact that the results of this methodology depend on the researcher interpreting others' interpretations (Bryman, 2001), there are concerns about the validity of qualitative research. As a social science researcher, I tried my utmost to adhere strictly

to the criteria of reliability and validity as much as possible. A thorough literature review of the topic informed the construction of the interview schedule. Also, to enhance the credibility of the data collected, I endeavoured to triangulate as much of the information collected as possible. I stayed neutral on all topics discussed in the interviews and allowed interviewees to express their own views. The next section describes the respondent selection process.

3.2 Respondent Selection

Critical to obtaining sufficient and accurate data was gaining access to one or more organizations whose members would be willing to participate in in-depth interviews. In order to find potential respondents, I accessed the website of the Newfoundland and Labrador Association of Technology Industries (www.nati.nf.ca) and compiled a list of 22 IT companies in the province. I then wrote all presidents or CEOs to request permission to conduct the study. Members of my supervisory committee also drafted a letter of introduction detailing my status in the department and the nature of the research, and solicited any kind of help that could be extended to me in the course of my research.

My target was to interview a total of 75 IT employees (25 employees from each of the three different IT strata). I decided to interview the high- and middle-level IT employees first. I allowed a week to pass before contacting the companies for their responses.

The initial goal was to limit the interviews to respondents in a few of the large IT companies in the province. This would have eliminated the possibility of interviewees' responses being biased by different management practices and organizational factors.

However, all the large organizations that could have provided sufficient respondents declined my request to interview their employees. Thus, I had to resort to interviewing employees of smaller companies.

My first interviews were conducted in a utility company called "Newpart."³ The information systems (IS) manager provided me with a list containing the names of 22 volunteers from a total of 42 employees in his department (16 women and 26 men). I set out immediately to schedule interviews and was successful with all 22 volunteers (14 men and 8 women). There were four respondents from the low-level of the IT strata, ten from the middle level and eight from the high level.

Many employees in "Newpart" were enthusiastic to participate in the research. It took approximately five weeks to finish interviewing all the respondents in this organization. Also, this company agreed to allow me to observe the labour process in its workplace for two days. I used the intervals between scheduled interviews in "Newpart" to contact other companies.

Buoyed by this success, I contacted "Orangex," a boutique-size IT company specializing in Internet connectivity. It was also known for advertising, marketing, promotions, and new media. After an initial meeting with the president, I was presented with the names of two middle-level employees who were willing to take part in the research. The company had five full-time employees and usually contracted out some work to other professionals. All the interviews were held in the office of a manager who was absent for the day.

³ Please note that all the names of companies used in this thesis are fictional.

Having completed the interviews in "Orangex", I then contacted another company, "Primex." I phoned the company and spoke to someone who turned out to be the owner and its only employee. He showed much enthusiasm and was interviewed a week later. One of the world's leading remote communication solutions providers, "Placoris" offered customers operating in remote locations a variety of wireless, IP, data, and voice solutions, and served an array of diverse markets including government, military, media, aeronautical, industrial, recreational and maritime users anywhere in the world. The information systems manager furnished me with a list containing the names of eight IT employees (from a total of 20) who had volunteered to take part. All of the interviews were conducted in the two premises belonging to the company. Three of the eight people interviewed were high-level IT professionals, three were from the middle level and two from the low level.

I was hoping to get more interviewees from this company, but after conducting the interview with the IT manager, he complained that the interviews were too intrusive because they touched on some sensitive issues like management-worker relations and unions. I was concerned that the IT manager might block the rest of the interviews by asking the remaining potential respondents not to take part in the study. Thankfully, he did not do that. However, he was uncooperative when it came to providing other information about the company.

After the experience in "Placoris," I approached "Quantis," an internationally renowned scientific company that develops and commercializes products in the space and marine sectors, oil and gas, and environmental services. It is a multidisciplinary company with over 70 employees, including engineers and scientists plus technical and

administrative support. It is a well-known scientific organization worldwide. With seven of the eight employees in the IT department volunteering, I set out to conduct interviews in this organization.

Halfway through the interviews, the only remaining employee in the IT department who did not volunteer came to me complaining that he was not informed of the study. I briefed him on the study's aims and methods and he agreed to participate. The interviews were done as scheduled and the employees were enthusiastic. I was surprised at the ease with which this private company granted me access to its employees. It raises the question of why management and employees of this company were so willing to take part in the study as compared to the difficulties I experienced with several others.

Another example of a company that was enthusiastic to take part in the study was "Simca," one of NL's largest full-service IT providers. It offers a full range of services and has 20 employees including administrative workers. "Simca" provides businesses with top quality brand-name hardware and software products, supplies, systems integration and installation, maintenance and support. It also specializes in network management, web and eBusiness, and custom application development. This company provides on-site and in-shop technical service. It has more hands-on technicians than programmers.

Five employees including the president of the company were interviewed. The interviews were conducted in two days. The company had a total of seven technicians. Two of the employees interviewed were high-level professionals. The remaining three were middle-level professionals. There were no female technicians employed in this company. I was happy with the response rate in this company because technicians do about 70 percent of the work outside of the workplace and it was difficult getting them to

even schedule the interviews. Also, the president agreed to allow me to observe the labour process on the company's premises for a day.

Even after the interviews in "SIMCA," I still had not interviewed the number of respondents needed for the high- and middle-level IT professionals. At the start of the research, I had pilot tested the research questionnaire on people from the IT department of a well-known educational institution in St John's, "Serenade Academy." The IT department of this college provides IT infrastructure and services to the institution. During that pre-test, I had requested a list of all IT personnel in the educational institution. In the absence of any more private companies willing to take part in the study, I telephoned some individuals on the list to make sure that at least the minimum number of respondents could be interviewed. Sixteen IT professionals at this educational institution were interviewed. These included six high-level, five middle-level and five low-level employees.

The interviews at "Serenade" college marked the end of visits to eight company locations to interview respondents. The snowball sampling technique employed later, and the fact that some respondents preferred to be interviewed outside of the work setting, meant that some interviews with call centre workers were conducted in respondents' homes and the researcher's office. However, the majority of the interviews took place in office settings.

While I was interviewing IT professionals from the two higher strata, I simultaneously tried to get the quota for the call centre workers. However, all the large call centres in St John's proved reluctant to take part in the study. There was not a single

positive response from any call centre employing over one hundred people. This meant that only the medium and smaller size centres were left.

Next on my list was a mid-size outbound call centre named "Marconi," specializing in raising funds for well-known charities. This centre employed about 50 people, who worked in two shifts scheduled to coincide with the hours that people in all the time zones in North America were available to answer their phones. After numerous calls in the space of two weeks, the supervisor provided me with a list containing eight names and the home telephone numbers of people who had agreed to take part in the study. However, only three out of eight volunteers could be interviewed because the others could not be reached. After the first three interviews, when I tried to contact the other five potential interviewees, I discovered that they had changed their telephone numbers. It must be stated that during the first three interviews, the respondents were less than forthcoming in their responses to union-related questions. One of the respondents intimated that the owner had threatened to close the centre if a union was formed. He also told me that someone trying to form a union was fired without warning a few weeks earlier. Thus, it is possible that one or more of the first three interviewees told management about the content of the interviews and management asked the rest of the volunteers to change their phone numbers. I called the workplace to talk to the five potential respondents, but was never able to get to them. I was also never able to discuss the issue with the supervisor who furnished me with the list of potential respondents. This is a mystery that left me guessing that the company might have warned the five workers not to take part in the study.

Determined to complete interviews with call-centre workers, I contacted another well-known utility company, "Unity." I received the names of three volunteers from their call centre wing, which employs 100 agents. Interviews were conducted with two people; the third person refused when she found out it was going to be a face- to- face interview. This was not the first time someone withdrew because they did not have time to participate in a face-to -face interview.

After a few more futile attempts to get respondents through official channels, I decided to use a snowball sampling technique. I asked friends who knew people who worked in the call centre industry to recruit respondents for the study. Initially four interviews were conducted and these interviewees provided me with the names of 12 more volunteers. Thus, 16 call centre workers were interviewed through the snowball sampling technique. All of the respondents acquired through the snowball sampling technique came from companies that had refused to grant me permission to interview their employees.

3.3 Sample Characteristics

The study revealed some demographic differences among the different levels of IT employees. For example, relatively few high-level IT professionals are elderly or youths under 25 years old. In 2002, 91percent of computer engineers in Canada were between the ages of 25 and 54. Only 6% were between the ages of 15 and 24 (HRDC, 2004). Although the official statistics do not differentiate between the various levels of IT professionals, this statistical age distribution was also replicated in this study. As shown in Table 3.1, all the high- and middle-level professionals interviewed fall in the 25-54 years

age category. Also, 14.8 percent of high-level professionals and 57.3 percent of middle-level professionals were in the 25-34 years age group.

Researchers suggest that many call centre workers are young. In the UK, one study found that 69 percent of the workforce was under 35 years old (Bain & Taylor, 1999), while Buchanan and Koch-Schulte (2000) found that in Canada a significant proportion of call centre workers (45 percent of fulltime employees) were under 29 years of age. This pattern was roughly reflected in this study, in which 40.7 percent of the call centre workers interviewed were between 25 and 34 years. Also, another 25.9 percent were under 25 years of age.

In terms of gender distribution, compared to the proportion of women in other professions such as general practitioners (34.4 percent), health specialists (31.5 percent), and university educators (30 percent), in 2001, the IT profession was more male-dominated (Statistics Canada, 2007c, Statistics Canada, 2003a).

Age group	IT Strata		
	High	Middle	Low
Under 25 years	0.0	0.0	25.9
25-34	14.8	57.3	40.7
35-44	63.0	32.1	11.1
45-54	22.2	10.7	18.5
55-64	0.0	0.0	3.7
Number	27	28	27
Sex			
Male	85.2	60.7	59.3
Female	14.8	39.3	40.7
Number	27	28	27

According to Statistics Canada (2003b), in 2001, occupations in information technology were dominated by men (73 percent), while over a quarter of IT workers in 2001 were

women. Men also dominated the software engineering jobs, one of the highest levels in the IT job hierarchy (Statistics Canada, 2003b). The problem with these statistics is that they do not explore further and thoroughly distinguish between the various levels of IT occupations. Thus, it is difficult to compare the gender makeup of the different strata of IT occupations in this study to official statistics. It seems that, as stated in the literature, men dominate in high-level IT occupations. This study confirms this thesis.

The gender composition of the respondents in the high-level IT stratum in this study is overwhelmingly male (85 percent). Female presence in the higher levels of the IT field is marginal. In addition, it was noted that most of the female interviewees in the high stratum performed more managerial work, such as overseeing client or customer service departments, than highly technical work. This state of affairs reflects the general marginalization of women in the higher levels of the IT sector to positions that require skills that traditionally were considered female and that are not technically sophisticated. Men, on the other hand, are more involved in high-level, cutting-edge, technical and conceptual work. Women's representation in the IT industry does increase in the middle- and low-IT strata, with roughly forty per-cent of the interviewees in these levels being female. The majority of women in the middle stratum are mainly programmers or programmer analysts.

The gender composition of the call centre workforce appears to be consistent within and among countries. For example, research from the UK, Canada, Australia, the USA, and Germany has all produced similar results. In Canada, HRDC (2004) found that women made up 65 percent of agents. In the UK, Bain and Taylor (1999) noted that around two-thirds of call centre agents are female. However, as Table 3.1 shows, 60

percent of call centre workers in this study are male. Obviously, this finding is contrary to results of research in other jurisdictions which have found that the call centre industry is female-dominated. This aberration could be due to the sampling methods used in this study, as almost half of the respondents were sampled using the snowball sampling technique. Also, it is unclear whether my gender had a part to play in this gender bias. Since most of my initial contacts for the snowball sample were male and their friends were male, my sample may be reflecting this bias. With no available data on the gender composition of the call centre industry, it is possible that this finding is an accurate representation of the gender breakdown of employees in the industry in St John's, since it is likely that with the depressed labour market in St John's during the period of this study, more males than females were taking up employment in call centres.

Also, several authors point out that the gender breakdown between different types of call centre varies. Buchanan and Schulte (2000) and Belt et al. (2000) conclude that the gender composition of workers between industry sectors varies somewhat, with financial services call centres employing the most women and computer services the least. In this study, 44.8 percent of call centre workers are employed at computer helpdesks. These helpdesks usually require high levels of technical and formal skills and qualifications, and are male-dominated. This fact combined with the snowball sampling may have contributed to the unusual gender distribution in the sample.

3.4 The Research Process

a. The interview

The interviews in this study were geared toward answering questions relating to labour processes, the skill requirements for certain jobs, occupational mobility, and conditions affecting issues such as power, authority and status in the workplace. In addition, they dealt with issues related to the class and status identities of the various levels of IT employees as well as non-work factors such as lifestyle and consumption. The steps prior to beginning the interviews involved:

1. developing an interview guide;
2. conducting pilot interviews to refine the questions (the pilot interviews involved the administration of the initial interview schedule to some IT workers); and
3. reviewing the final instrument.

The interviews were then scheduled and conducted with participants who fitted the background requirements.

The study was based on the freely given informed consent of those studied. The researcher explained as fully as possible, and in terms meaningful to participants, what the research was about, who was undertaking and financing it, and why it was being done. Research participants were made aware of their right to refuse participation whenever and for whatever reason they wished. Research participants were also informed about the use of data-gathering devices such as the tape recorder and that they could refuse to have the interview taped. A consent form explaining the research and outlining the rights of the participants was presented to each interviewee for their

signature. I guarded against consequences for research participants that might be harmful by providing anonymity and confidentiality for participants. Confidentiality and anonymity were protected by:

1. not using real names in reports or publications;
2. avoiding precise reference to organizational positions held; and
3. checking with the subjects for permission to publish on any occasion that a quotation or reference might identify the respondent. This is in addition to the general proviso that the subject must give informed, voluntary consent to the interview as a whole.

Interviews were assigned an interview number and the master list matching numbers with names was stored separately from the transcripts. The interviews were audio-taped in cases where permission was granted and key passages were transcribed verbatim from the audiotapes. Otherwise, only hand-written notes were taken. Typically, these interviews were conducted in the work environment of the interviewee. However, about a fifth were conducted in my office and in some cases in the respondents' homes.

b. Document analysis

Document analysis facilitated my understanding of the occupational hierarchy and the qualitative and quantitative measurements of job performance in some IT organizations. This confirmed the inferences or insights gained from the interview process. The documents reviewed included organizational and performance charts from help desks and call centres. I also reviewed documents relating to the mission statements of companies, job advertisements placed by companies for new employees, and companies'

rules and regulations. These documents included written, printed or electronic information about the company and its operations. In some cases, I made a written request for these documents. Documentation was collected during and after the interview process and interviewees were questioned about specific documents.

c. Non-participant observation

Another source of data for this study was passive observation. This methodology was appropriate because it permits one to understand and describe when and where things happen, and how and why they occur. My role as an observer was passive during this study. Additional data were collected mainly through casual conversations and observation of work processes, relationships and meetings. Non-participant observation was carried out in only two of the IT companies, "Simca" and "Newpart." I was allowed to observe the labour process, ergonomics, and technology for a day in "Simca" and two days in "Newpart." On these days, I went into the company premises at 9.00am and left at 5.00 pm. I observed the work processes and asked questions when I wanted information.

Although three days of observation taken alone are insufficient to reach conclusions, they provide a means of confirming certain points that cropped up in the interviews and documents. Also, given the earlier problems of access to research settings, observation was useful for gaining more insight into the companies studied.

3.5 Measurement of variables of primary interest

As the main research goal was to study the class and status identities of the IT employees and their perceptions of status inequality, the variables measuring these

concepts were of primary interest. As discussed in chapter 2, class consciousness and identity were measured by exploring the attitudes of these IT employees toward income inequality, management, unions, the welfare state and corporate power. A total of 15 closed-and open-ended questions on the interview schedule were tailored to explore and measure the class identities or consciousness of the interviewees (see questions 41-55 in Appendix A). The assumption here is that positive answers to these questions express the notion that there is a class (capitalist class) that is at odds with the interests of workers (an expression of pro-worker attitudes). On the other hand, negative responses reflect the pro-capitalist position. The responses to these variables were measured and aggregated on a scale measuring pro-worker class consciousness.

In terms of work, labour process variables, such as skills and qualifications required for the job, flexibility to determine one's work schedule and hours of work, the level of job discretion, and job monitoring in the workplace, were explored. Other variables explored include the managerial or supervisory authority wielded by these employees, interviewees' incomes, spouses' occupations and incomes, and employee-management relations. These variables were explored and measured using questions that both open- and closed-ended (see questions 16-40 in Appendix A).

In terms of non-work factors, I explored interviewees' homeownership status, daily leisure pursuits, vacation destinations and the kinds of social groups and clubs to which these IT employees belonged. These variables were all explored using a combination of closed and open-ended questions (see questions 11-15 in Appendix A).

Interviewees' geographical regions of origin and their perceptions of status are also measured by two open-ended questions on the interview schedule (see questions 2 and

43 respectively in Appendix A). Knowing the area of origin of respondents is important because it gives an indication of the extent of in-migration into St John's and the reasons why people move. In-migration also affects people's class and status identities. This is especially significant given that one important reason for in-migration into St John's is the desire by many people from the outports to take advantage of the relatively stronger local economy and increased job opportunities that the capital city offers. The next chapter outlines the different levels of IT jobs and discusses differences in the organization of work in these jobs.

Chapter 4: The Organization of Work and Labour Processes

4.0 Introduction

Wright (1985; 1997) argues that it is the privileged position of experts with respect to the labour process, and the labour market in general, that makes them middle class professionals. It is the lack of these assets on the part of other semi-skilled or unskilled workers that places them in proletarian class locations and makes them more likely than experts to develop working-class consciousness. Thus, the labour process is important in studying class and status identities among IT employees.

Studying the labour processes in various IT jobs is not easy because the industry is a diverse occupational field which is highly stratified in terms of skills, credentials, and income levels (Wilson and Blain, 2001). In order to accomplish this task, an operational definition of the different levels of IT employees will be outlined. This definition includes the skills and qualifications required for these jobs. Next, the labour processes and organization of work in these occupations will also be explored, including teamwork, job discretion, job monitoring, performance appraisals, the managerial or supervisory authority wielded by these IT employees, and their occupational mobility.

It is expected that, because IT jobs require different levels of skills and credentials, there will be significant differences in the labour processes and the organization of work among IT workers. For example, high-and middle-level IT employees are expected to face less regimented or restrictive labour processes than call-centre workers. This is

mainly due to the privileged labour-market position of the higher level professionals, which results largely from the skill assets that they possess.

4.1 Occupational Tasks, Skills and Qualifications

Four kinds of tasks can be delineated in IT work. These are designing, implementation, maintenance, and operating (Tarallo, 1987; US Department of Labour, 2002). Designing involves taking information problems (usually ill-defined) and a set of criteria for satisfactory solutions to these problems (often equally ill-defined) and devising a computer-based procedure that can be used to solve them (US Department of Labour, 2002). Implementation, or construction, requires translating these design plans into usable form, writing the programs, installing hardware, and training users of the new system. It may also involve defining business problems, developing alternative solutions, providing appropriate feedback, and developing and executing system test plans (US Department of Labour, 2002). Maintenance includes fixing the errors that appear to accompany all design efforts and adapting the system to meet evolving needs. Operation involves using the system to solve problems, with the major task being operating the required equipment (U.S. Department of Labour, 2002).

All four tasks seem to involve mental rather than manual work. The systems-development tasks of design and implementation appear to be analogous to Braverman's (1974) work of conception, while the systems-use tasks of maintenance and operation are analogous to the work involved in execution. It can be argued that the rank ordering on this conception-execution continuum is design — implementation – maintenance - operation (Tarallo, 1987). The tasks performed in the different IT occupations require

different levels of skill and credentials, with designers requiring the highest level and operators the lowest (Tarallo, 1987).

Generally, tasks performed by employees are concentrated in one of these areas or spread among several. Smaller firms tend to combine many tasks and allocate them to one job position (Tarallo, 1987). Larger companies usually segment the tasks with titles, pay scales, and prestige distributed accordingly. Organizational needs interact with individual backgrounds and motivation to determine what actually will constitute the current job content of an IT employee. Indeed, it is possible that an individual may be involved in all of the four tasks described earlier. For example, there are cases in which an applications developer may perform all the functions in the development cycle of an application (design, code and document). However, this is not the norm.

After reviewing their job tasks and associated credentials and skills, the interviewees in this study were classified into three strata based on whether they were associated with design, implementation, or maintenance and operation of computer technology. Employees were classified according to the tasks that form the largest component of their jobs. Those who did mainly designing, development, and a combination of the other tasks were categorized as high-level professionals. Many jobs in the IT field are pre-managerial (Wright, 1989), and some IT employees usually combine their technical work with managerial duties. Many of these managers exercise a technical supervisory role rather than a traditional managerial one. This study places such professionals in the high-level IT stratum. Professionals whose tasks mainly involve implementation and high-level maintenance are classified as middle-level professionals. This stratum also includes those professionals engaged in some lower level design and

development tasks. Interviewees whose tasks involve client support or customer service are classified as low-level IT workers.

a. High-level professionals

In this study, those classified as high-level IT employees reported varying job titles, such as director of infrastructure services, supervisor of desktop and network services, project leader, technical director, senior team leader, systems architect, and infrastructure specialist. Regardless of the titles attached to their positions, these interviewees generally provide technical and leadership knowledge and skills for teams developing, implementing, and supporting software applications and information systems. In the case of project managers and team leaders, in addition to the above-mentioned duties, they define business problems, develop alternative solutions, and provide appropriate feedback in the development process (US Department of Labour, 2002). For example, in response to the question asking about his duties and responsibilities at work, James (a supervisor) remarks: "I monitor progress on various projects, deal with specific issues and challenges. I would also discuss upcoming projects ... various administrative responsibilities, performance management, and financial management with peers." Richard (information services manager) reports: "I do project managing, motivation, financial tracking, and reporting. I also undertake relationship management internally and externally, (and) contract management."

Given the variety of work performed by the high-level professionals, the skills and qualifications required for their jobs also vary. However, all of the high-level interviewees

reported that their jobs required at least a university or college IT/business degree/diploma and /or equivalent technical experience (Table 4.1).

Table 4.1: Skills and Qualifications Required for IT Job Levels as Reported by Interviewees (%)			
Highest Skills and Qualifications	IT Job Level		
	High	Middle	Low
High School Graduation /Customer Service Experience	0.0	3.6	63.0
University/College IT or Business Degree or Diploma or equivalent experience, Industry Certifications	100.0	96.4	37.0
Number	27	28	27

Some also reported that a broad knowledge of IT, business acumen, and computer-related experience were considered important. The number of years of experience and the type of experience required for these jobs varied from one position to another and from one organization to another. However, most of the interviewees reported that four to five years of experience in their relevant areas of expertise were expected.

Significantly, while a university/college IT or Business degree or diploma or equivalent experience and industry certifications were the minimum qualifications for all these high-level IT positions, many professionals had also acquired their masters' degrees or were working toward that goal. Many had also completed other courses related to their jobs. Interviewees reported that vendor certification and knowledge of some specialized programming languages were considered valuable assets in the industry. Even when employers do not require prospective employees to possess specific

certifications, such credentials are viewed favourably as one means of gauging the qualifications of job applicants.

Certification programs that target specific types of software, programming language, computer networking, and Internet facet have become extremely important avenues for credentialing computer professionals. Vendors have developed more than 150 vendor-specific certification programs, with Microsoft, CISCO and Novell certifications among the most popular (US Department of Labour, 2002). Unfortunately, no national data exist in Canada to ascertain the prevalence of vendor and non-vendor computer certifications.

Many high-level professionals reported having taken professional courses including Microsoft Exchange, Microsoft Transmission Control Protocol/Internet Protocols (TCP/IP), Security Training, CISCO courses for routers and switches, Oracle, ITIL Software courses, Novell management courses, Excel, Power Builder, Visual Basic.net, Citrix Certified Administrator (CCA), Microsoft Certified Professional (MCP) Plus I, CISCO Certified Network Associate (CCNA) and Cisco Certified Internet Engineer (CCIE), and Cisco Certified Design Associate (CCDA). Interviewees also mentioned that they had undertaken project management and other general managerial or supervisory courses.

b. Middle-level professionals

Like the high-level professionals, middle-level IT employees reported a diverse number of occupational titles including programmer, programmer analyst, systems analyst, application analyst, web developer, multimedia specialist, network technician, control room operator and database administrator. However, the title designations may not tell

the complete story of what they do. For example, two professionals doing the same tasks in two companies may have different occupational titles. Thus, occupational titles depend on organizational strategies and preferences.

Middle-level professionals are mainly involved in implementation or construction and maintenance tasks. Implementation involves translating the plans of the designers into usable form, writing the programs, installing hardware, and training those who will use the system (US Department of Labour, 2002). While these interviewees conduct mainly implementation and maintenance-related tasks, they may also undertake other activities, such as designing and technical-support tasks.

The combination of tasks performed by these middle-level professionals depends on organizational needs as well as the skills and qualifications that they possess. For example, Mark remarked: "I am involved with production support (about 80 percent) and development of applications. And when users use applications, then we have to support them." Samuel also reports:

I look after adult education, the distance educational system. I do developments for them, day-to-day running of programs. I make sure everything is working, ... systems-related work. Then it is analytic work, tracking business systems and applying them to the system to improve it. Mostly it is programming. I am also training another person. I sit on the phone. I program all day, answer calls. A lot of it is development. I sit there all day and make things work.

The higher end of this stratum overlaps with the high-level IT professionals, while the lower end includes maintenance technicians who provide vital support to customers during system implementation and maintenance periods.

Table 4.1 shows that 96.4 percent of the middle-level interviewees stated that a university degree or College IT diploma, industry certification, and equivalent experience were needed for their jobs. All of the interviewees possess either a university degree or

college IT diploma. Most have university degrees in areas such as computer science, electrical engineering and mathematics. Some interviewees also hold a master's degree or are pursuing a master's degree on a part-time basis. Depending on their particular jobs, knowledge of programming languages, writing skills, team skills, business background, and experience in computer programs like Oracle are considered essential. Also, a number of the middle-level interviewees possess some of the industry-related certifications that high-level professionals reported having completed.

Table 4.1 shows the qualifications required for the various levels of IT jobs as reported by the interviewees, while Table 4.2 reports the actual qualifications of the interviewees.

Table 4.2: Actual Skills and Qualifications of Interviewees by IT Job Level (%)			
	IT Job Level		
	High	Middle	Low
Highest Skills and Qualifications			
University/College IT or Business Degree or Diploma	100	100	92.6
Other lower level Qualifications	0	0	7.4
Number	27	28	27

Thus, the high- and middle-level professionals generally share many characteristics with regard to the skills and qualifications required for their jobs. However, high-level employees are engaged in more strategic planning and conceptual and managerial work. They are more involved in setting goals for their companies and directing the work of other IT employees, including the middle-level professionals. Middle-level professionals by contrast, mainly undertake implementation and maintenance tasks.

They may also be involved in lower level designing tasks related to simple tasks at work. For example, while a systems architect may be involved with high-skill design work on a wider scale (industry level), a programmer may be tasked with lower level or smaller-scale design at the work- place level.

C. Call-centre Workers

Call-centre or customer-service operations run under many different names, such as contact centre, help desk, and customer care network. Thus, the interviewees in this occupational category also have a diverse range of occupational titles. These include helpdesk analyst, internal support specialist, customer service associate and IT consultant. Irrespective of their occupational titles, they all utilize the technology provided by call-centres to serve customers (in the case of inbound centres) or to contact customers to sell a product or service, or to solicit for donations to charities, in the case of outbound centres.

Occupational tasks in call-centres vary depending on functional segmentation and the type of product or service being offered. For example, when asked what her responsibilities were at work, Marian reports:

Typically, we answer the phones, deal with set of questions from customers dealing with cancellation issues (medical insurance policies), or ... we transfer the calls to other departments like payroll, status changes, general enquiries. I do the mailbox; so whatever messages come in when we are closed, I transcribe. I also do information research to update issues and make follow ups... It is very involving.

Peter reports: "I do telephone calls. They are pre-selected telephone calls through computer systems to people across Canada, from Newfoundland to British Columbia, soliciting support for a variety of charities such as *MADD*, and *Feed the Children*." Corey

states: "Gathering information from clients, who are co-workers, trying to identify the problems they are encountering, and solving the problems. We are the first-response people; if we can't solve it, we give it to secondary-source people." Thus, these interviewees are generally customer- or client-support workers.

While there was a debate on the skill content of call-centre jobs in the 1990s (Frenkel, 1999; Taylor and Bain, 1999), there is now a consensus that the skill requirements of call-centres depend on the kind of services provided (Stanworth, 1997; Kerst and Holtgrewe, 2001 and Belt et al., 2000). This variation in skill and qualification requirements among call centres is mirrored in this study.

As shown in Table 4.1, 63 percent of call centre agents reported that, in terms of formal educational qualifications, only a high school diploma is required for their jobs. However, they also mentioned that computer-related skills and customer service skills and experience are also required. When asked what kinds of skills and qualifications are necessary for their jobs, Gerry remarks: "The minimum qualification is six months (of) customer- service experience and (at least) a high school certificate. That is the minimum qualification, but everyone there has a degree or diploma or years of experience." Bob answers the same question as follows:

Oh my goodness, I don't think there are any besides a little bit of flexibility when they need you to come in. I don't think they do look for skills. There are many people who have been there for years.... There are university students here. There is a young fella who just finished high school. I don't know what they look for to hire someone like me, but, as far as I know it is not a skillful job. (There is) no emphasis on skills, but previous experience will help.

At this level, the majority of the workers do not need any specialized formal technical or non-technical qualifications to carry out their work because the type of calls are highly

routinized and repetitive. They answer routine questions and queries from customers and are expected to follow certain procedures in their interaction with them.

However, 37 percent of the interviewees reported that a university or college IT degree/diploma and equivalent experience in computers were needed for their jobs. This includes knowledge of various computer hardware and software programs. In some cases, customer service experience is also essential. These interviewees are mainly technical support workers, who provide support to end-users in helpdesks of larger organizations. They are the first responders to problems related to the computer network and other computer-related problems in their organizations. The problems vary but include helping build laptops, resolving software problems, terminating and creating accounts, doing research on technical problems, and helping people retrieve forgotten passwords.

Thus, it is clear that skill and qualifications requirements vary among call-centres. Call-centres dealing with technical-support issues mostly require more formal technical-educational qualifications than others. The nature of work in these centres means that the employees utilize more specialized technical skills than the rest of the call-centre workers interviewed. Thus, the skill requirements of call-centre jobs depend on the service, product, or customer segment, as well as the degree of functional fragmentation. However, it is clear that many call-centres do not place much emphasis on formal qualifications. They seem to be interested mostly in people with communicative, cognitive, and social abilities. However, it should be made clear that these skill requirements do not carry high social status or high financial rewards. This may have to do with the belief that these are gender-specific skills mainly possessed by women.

Although the formal qualifications required for many of these jobs are relatively low, as shown in Table 4.2, 92.6 percent of the low-level interviewees hold at least a university degree or college diploma. This finding suggests a high degree of underemployment among the call-centre workers. However, it is difficult to make general conclusions based on these findings due to the sampling technique (snowball sampling) used for this study. Also, general conclusions could only be made if there were information available on the qualifications of call-centre workers in other jurisdictions. This information is not currently available for Canada. Nevertheless, evidence gathered from conversations with managers in the largest call centres in the province support the conclusion that a significant percentage of call-centre workers in St John's hold at least an undergraduate degree. This is no doubt related to the high rate of unemployment in the city at the time of the study.

Overall, in comparison, it is clear that high- and middle-level professionals are more skilled and qualified than call-centre agents. They are engaged in more highly skilled and varied tasks than low-level workers. In this light, it is expected that they will be better paid than call-centre workers.

4.2 Salary and Other Income-related Differences

IT employees are often portrayed as professionals earning high salaries and lucrative benefits (Wilson and Blain, 2001). Wright (1997:16) states that "The strategic position of professionals within the organization of production enables them to make a claim on the portion of the social surplus, in the form of relatively high earnings." Wright (1987) also

argues that many professionals earn more income, either through "moonlighting" (usually consulting) or through other capitalist investments.

The numerous occupational titles reported in this study have made it difficult to relate the salaries of these IT employees to official national statistics. The available statistics give information on different IT jobs, not IT occupational strata. However, many of the respondents in the high-level occupational stratum in this study can be broadly classified as software engineers. In 2000, 31.5 percent of software engineers earned over \$75,000 (Statistics Canada, 2003b). As shown in Table 4.3, 37 percent of the high-level respondents reported that they earn over \$80,000 dollars a year. This suggests that, on average, the high-level professionals in NL are paid at at least the national average. Also, 75 percent of middle-level professionals earn within the range of \$40,000-59,999. An additional 17.9 percent of them earn between \$60,000 and \$79,999. Thus, it is clear that these professionals are relatively well compensated for their jobs.

Table 4.3: Income Levels of IT Employees (%)			
Income categories	High level	Middle level	Low level
Under \$19,999	3.7	-	22.2
\$19,999-39,999	-	7.1	66.7
\$40,000-59,999	22.3	75.0	11.1
\$60,000-79,999	37.0	17.9	-
\$80,000 & above	37.0	-	-
Number	27	28	27
Symmetric Measure for Occupation Category of IT employees and Income Bracket they fall in. Cramer's V = 0.762 Number of Valid Cases = 82			

Income levels appear to be influenced by respondents' length of employment, the company in which they are employed, and their field of specialization. Professionals with more years of service and experience and those employed in well-established and larger organizations earn higher salaries than those employed in smaller and less-established ones. Also, the IT industry has cycles in which certain fields of specialization are highly rewarded. Currently, systems-networking is lucrative. Therefore, professionals with networking-related qualifications are in high demand and get higher compensation than others.

With respect to call centre workers, Table 4.3 shows that 66.7 percent of the interviewees earn salaries within the range of \$19,999-39,999 per year. An additional 11.1 percent earn between \$40,000 and \$59,999. Almost all of the respondents reporting the latter income range are employed in in-house support positions, which offer more pay and benefits than other call centres.

Significantly, there is a strong association between occupational categories and incomes earned. The Cramers V value is 0.762. Consequently, the amount of income interviewees receive is a function of their objective position in the occupational hierarchy.

Table 4.4: Income of Spouses of IT employees by IT Strata Level (%)

Income in thousands of dollars	High-level	Middle level	Low Level
	Spouse	Spouse	Spouse
Under 19,999	9.1	15.8	40.0
19,999-39,999	27.2	36.8	53.3
40,000-59,999	27.2	42.1	6.7
60,000-79,999	27.2	5.3	-
80,000 & above	9.1	-	-
Number	22	19	15

Another significant factor in determining household income is the contribution of respondents' spouses. As shown in Table 4.4, 27.2 percent of the spouses of high-level professionals reported earning between \$60,000 and \$79,999 a year. Another 27.2 percent earned between \$40,000 and \$59,000. In many cases, the spouses of these high-level professionals do not earn as much as the professionals themselves (because the spouses are likely to be women, given male domination of the high-level IT jobs). Nevertheless, these spouses still earn a substantial amount of money. This pattern of correlated earnings between spouses is also reflected among the middle-level professionals and call-centre workers. This pattern of associative mating exacerbates inequality in society by increasing income inequality between households.

Salaries are not the only form of compensation for many IT professionals. Other perks such as stocks, stock options, and paid vacations are incentives used by

management to compensate these professionals, who may also have the opportunity for consultancy or other self-employed work. IT companies continue to use these benefits to lure hard-to-find professionals into their organizations.

In this study, 70 percent of the high-level professionals reported that they owned stocks. Most owned stocks belonging to the companies for which they worked. However, a few intimated that they also owned stocks of other companies. Although the study did not include any question that enquired whether some or all of the stocks owned by these professionals were part of their compensation packages, such is probably the case, because most who reported owning stocks were employed in companies that included stocks in their benefit packages to high-level professionals.

This issue of stock ownership has raised a heated debate as to whether or not these high-level professionals objectively belong to the middle class or the capitalist class. This is because they have significant holdings of stocks, which actually tie them closely to the capitalist class. This debate will not be repeated here, but the high percentage of stock ownership among these high-level professionals raises questions about the nature of their subjective class interests. In contrast with high-level professionals, only 25 percent and 22.8 percent of the middle-and low-level interviewees respectively reported owning stocks. However, one significant difference between middle-and low-level IT employees is that the majority of middle-level professionals (like the majority of high-level professionals) reported that they also undertook "moonlighting" in the form of running private consultancy firms.

These findings support Wright's thesis that professionals with skill assets earn more money because of their qualifications and because they can engage in other

activities like consulting and investing in capitalist ventures. The questions now remaining concern the relationship between skills and qualifications and job autonomy, and how position in the labour process impacts class consciousness. The issue of job autonomy is addressed in the next section.

4.3 Organization of Work and Labour Processes

It is well documented that work in the higher strata of the IT industry is mainly based on the functional division of labour within project teams (Kunda, 1992; Kanter, 1995; Saxenian, 1994). As discussed in chapter 2, these teams tend to be autonomous, and members are usually experts in various aspects of IT production. Decision-making responsibilities rest with the team members (O'Riain, 2004). These teams also usually move from one project to another (Kanter, 1995; Saxenian, 1994; Kunda, 1992).

As expected, teamwork was the primary mode of organization of work for the interviewees in the high- and middle-IT strata. The majority of high-level respondents (66.6 percent) and middle-level interviewees (82.2 percent) reported that they performed their work as part of a team. Teams vary in size, but usually involve a functional division of labour. The duration of the projects varies, but they generally last between 6 months and one and one-half years. Professionals could be involved in more than one project at any particular point in time. However, depending on their managerial and/or technical responsibilities, some high- and middle-level professionals reported that they also undertook some work alone.

Some researchers are skeptical about the use of teams in call centres. Belt et al. (2000) report that "team-working" has a rather narrow meaning in these workplaces. Belt

et al. (2000) state "It tends to refer to employees working in physical proximity to other members of their "team" carrying out similar tasks, with shared productivity targets and rewards, and a shared supervisor." Other researchers, such as Houlihan (2000), Bain and Taylor (1999) and Brændengen_(1999), also point out that the nature of call centre work tends to be solitary. Callaghan and Thompson (2001) argue that teams are used to decrease "individualism through some elements of sociability, and to introduce competitive mechanisms for boosting productivity" (Callaghan and Thompson, 2001:28).

Surprisingly, 63 percent of the call centre interviewees in this study reported that they performed their work as part of a team. When these interviewees were probed further on the nature of the operations of these teams, it emerged that many of them were organized into teams for management, motivational, and social purposes, and not necessarily in correspondence with the functional division of labour. Thus, it appears that high- and middle-level professionals requiring high levels of skill for their jobs are more likely to be organized into autonomous and functionally differentiated teams than call centre workers. The issue of job autonomy is closely related to the use of occupational teams.

a. Job Autonomy and the Flexibility of Work Processes

Professional IT occupations are generally perceived as autonomous jobs because management uses less stringent formal and informal methods of job monitoring and control (Kunda, 1992; Kirsch, 1996). Professionals are expected to work autonomously towards the completion of project goals, mostly without specific instructions from

managers. Wright (1985), and Burris (1996) argue that this job discretion is related to the skilled nature of IT occupations.

A number of variables related to job autonomy were measured in this study, including job discretion, time management, job monitoring, and job-appraisal methods. Responses to these questions give a good indication of the level of managerial control in these occupations.

Level of Discretion at work	High	Middle	Low
No Discretion	0.0	0.0	14.8
Limited Discretion	0.0	7.1	55.6
Almost Total Discretion	100.0	92.9	29.6
Total	27	28	27
Cramer's V = 0.593			
No. of Valid Cases = 82			

Overall, Table 4.5 shows that there is a strong relationship between job discretion and occupational strata (Cramer's V is 0.593). Thus, whether respondents have no discretion, limited discretion or total discretion depends on the occupational strata to which they belong. While 100 percent and 92.9 percent of high- and middle-level professionals respectively reported that they have almost total discretion in doing their work, only 29.6 percent of low-level employees reported the same (see Table 4.5). These call centre workers are employed in in-house centres, which are in the top-tier of the call centre hierarchy. They perform computer technical support for their fellow workers and are amongst the most highly skilled and qualified in the industry, which explains their relatively high degree of job discretion.

In the case of high- and middle-level professionals, job discretion appears to be the norm in these strata. For example, here is how Martin (a Director of IT) responds to the question about job discretion:

Typically, there is very little guidance in terms of regulation and documentation itself as guidance. The bulk of the work is data communication. When I started, it was to create a data network; there was little guidance on how to create the data network because there was no network in the first place. A lot of people did not use the internet then, so a lot of the things we deal with are relatively recent. Many were not in existence even 10 years ago, so, as a consequence the framework and the regulatory environment to make things has not caught up. Part of what we do is to create the regulatory environment and guidelines that come out from whatever was built in the first place. IT is a relatively recent development, so the regulatory environment has not caught up with it yet.

Mathew (a programmer analyst) also reports:

I have a considerable degree of discretion. The tasks themselves are large enough that I don't produce a result at the end of the day. I might produce a result at the end of three months or a year. So my day-to-day activities are not scrutinized to a great extent.... But where I am judged is where a particular project succeeds and you are offered half a year or a year to do that. There is discretion on a day-to-day basis on how I get those tasks done. If a project succeeds, then my work is done.

However, some of these employees (mainly middle-level professionals) reported that although some of their tasks (such as programming) offered a high degree of autonomy, there were some industry regulations they had to follow. For example, Martha remarks: "(I have) a fair bit (of discretion). You are independent and you use your own discretion guided by user needs. You can have a lot of say on how things are done; style I guess." Mark also reports: "There is a fair bit. If I am putting something together, it is dictated by what the system can or can't do. If I write a code, I stylize it to what I usually do. There are business rules. I can't just put anything (together). It is guided by principles. There is some leeway, but generally within a framework." Thus, although there is some

discretion in these jobs, there are general user/client and industry guidelines that these professionals follow.

However, high- and middle-level professionals have the freedom to decide what to do in their work, and this appears to be an important resource for productivity in high- and middle-level IT jobs. The conceptual nature of many jobs, especially high-level jobs, makes it impossible, in many cases, to apply rules and regulations on how to proceed with the work. While the overall goals of high- and middle-level professionals are driven by the business motives of the higher level managers, it is up to these professionals to determine the particular route to achieve such goals. In many cases, these professionals are venturing into unexplored areas, so they have a high degree of discretion in how they carry out their work.

The general thesis in most of the IT literature is that computer professionals are highly skilled and in high demand, but also difficult to attract and retain. In this light, these professionals are able to demand and command highly desirable terms of work (Lockyer et al., 2005), such as flexibility to manage their time. In this study, a majority of high and middle-level interviewees report that, even though they have set hours of work, they can determine their hours within reason. In some of the companies studied, there are core hours (usually between 10 a.m. and 3 p.m.), during which the services of professionals are likely to be in high demand for operational issues. Thus, employees schedule their work hours to fit these core hours and to attend staff meetings.

Interviewees in the high- and middle-strata reported that their workplaces encourage workers to take what is called "flextime." This involves professionals' asking for a customized work schedule. Thus, workers can ask for varying hours of work, varying

days of work, and even the option of working from home. Overall, high- and middle-level employees enjoy informal flexibility based on trust between the employee and management. For example, managers in these companies do not monitor whether professionals work the number of hours that they take off during regular office hours. They assume that these professionals work those hours, and, also, because sometimes they work extra hours without pay or work during odd hours, management does not keep a strict account of their hours of work.

Overall, the evidence suggests that high- and middle-level professionals exercise a great deal of discretion over their work processes. This confirms Wright's thesis that experts and professionals (whose work is highly conceptual and skilled) enjoy a high-level of job autonomy and control over their work processes.

How different is the situation of call centre workers? The literature emphasizes that the level of routinization and discretion varies from one call centre to another (Buchanan and Koch-Schulte, 2000; McPhail, 2002; Taylor et. al., 2002). Thus, the level of routinization and discretion within call centre jobs depends on managerial strategies, the product or service being offered, the customer segment being served (high-revenue customers or low-revenue customers), and functional differentiation (inbound or outbound). Nevertheless, the majority of call centre agents have to follow certain behavioural standards set by management.

Table 4.5 shows that 70.4 percent of the low-level employees stated that they have limited or no discretion in performing their work. Their work tasks range from reading precise scripts regarding greeting and closing statements to following clearly outlined steps on how to deal with customer queries. For example, Paul remarks:

No (I) don't have much discretion. We follow regulations that are laid out for the job. For example, if I think something could be done in a lot less time in a certain way, I can't do it because that is not the policy that has been set down. Where I am now, they are very strict about the policies that have been set down. If you break a policy, you might be reprimanded.

Maria responds:

It (my work) is 100 percent determined by company rules and regulations. There is a rule for everything because what we are doing deals with people's lives basically. There are set rules and regulations from the IRS, the federal government, and the company that we are working for that need to be followed, and, if they are not followed properly, can lead to some problems.

Peter reports on having somewhat more discretion than Maria;

The work is basically uniform. When a customer calls in, you say the same opening lines and the same closing lines pretty much. You have to deal with everything the same way, but if you find a different way of solving a problem they are o.k. with it. You have to solve the problems in the way you were trained to do it. If you find another way of solving it, they don't care about it. All they care about is whether the customer is satisfied. They don't care much how you solve it as long as it is solved.

Interviewees performing public-opinion surveys report that their work is highly scripted.

Every call has to be made in a particular way. They have to follow the scripts relating to the opening and closing statements and the survey contents. However, many interviewees stated that even though they were required to follow these scripts, they sometimes modified the words. Overall, work appears to be highly regimented in these centres. This is confirmed in the following responses by interviewees. Danielle remarks:

It is all scripted.... The way you interact with the customer is 99 percent scripted. You do put your bit of edge on it (but) the introduction is relatively scripted.... The opening line is scripted. Hi my name is Danielle. I am calling from Damon Research centre. We are calling with regard to a survey on XXXX. Can I speak to someone over the age of 18 in this household? Will you be interested in completing the survey?

Similarly, Marilyn remarks:

We have to adhere to the facts of the charity, charities that are doing something specific... We have to adhere totally to the facts and we are presented with scripts from each company detailing what they are about and what they are doing... There is no way we can lie to people. If somebody makes a mistake, well that is it, but we have to adhere to the scripts.

In many call centres, management practices ensure that work is standardized to control the pace of worker-customer interaction. This practice owes its success to the fact that management can design steps for workers to follow in solving customers' problems. However, in certain cases, such as computer support, where problems vary (and involve high-level technical expertise) and management may not necessarily be able to control the pace of the work, job discretion is usually greater. Thus, the skill and qualifications required for a job and the service provided influence the degree of job discretion.

However, the majority of the call centre workers cannot determine their hours of work, which management predetermines because customers have to be served at particular times of the day. In most cases, seniority in the workplace is used to determine who works what shift. Consequently, people who have been in the centres for a longer period get what are considered good shifts, while relatively new workers get the shifts that run during odd hours or the "graveyard" shifts.

Based on my placement of these employees in objective occupational or class strata, these findings appear to confirm Wright's (1985) thesis that while experts possess a high degree of job autonomy because of the privileged position they occupy in the labour market, employees whose jobs do not require high-levels of skills and qualifications (for example most call centre workers whose work is easy to monitor) do not have much job discretion. It also reveals that Wright's (1985; 1997) theoretical framework for categorizing employees based on their skill and credential levels makes sense in

explaining differences in labour processes among IT employees. Given the varying levels of job autonomy wielded by these different levels of IT employees, how does management measure the job performance of these employees? How does management ensure that high- and middle-level professionals, who enjoy so much flexibility, perform the tasks they were hired to do and do them well?

b. Job Monitoring and Performance Appraisals

Job monitoring refers to short-term (daily or weekly) procedures that management uses to monitor or control the work of these IT employees. Performance appraisal refers to a longer term approach by management over a set period of time to evaluate the work of these employees.

Over the years, the rapid increase in demand for IT professionals made for a sellers' labour market (Marks and Scholarios, 2007; Perolle, 1986). IT employees became renowned for eccentricity and disinclination to submit to formal authority. They enjoyed a high level of control over their work. However, as computer work lost some of its mystique (culminating in the spread of structured programming), and as the IT industry experienced a slump, controls over some computer workers were often tightened (Kraft, 1977; Beirne et. al., 1998), and issues of supervision and work standards became a major concern for the industry.

Table 4.6 shows that there is a strong relationship between occupational categories and the type of monitoring and appraisal techniques that they are subjected to. The Cramer's V value is 0.438. Thus call centre agents are more likely than other IT employees to be subject to strict technological monitoring. On the other hand, high-level IT professionals are the least likely to be subject to such type of monitoring.

Table 4.6: Job Monitoring in various IT job Strata (%)

Job Monitoring Mechanisms	IT Strata		
	High	Middle	Low
Formal Technical Control	7.4	28.6	77.8
Formal Non-Technical Monitoring (i.e. project deadlines)	33.3	25.0	0.0
Not Monitored at All	59.3	46.4	22.2
Number	27	28	27
Cramer's V = 0.438 No. of Valid Cases = 82			

As Table 4.6 shows, 59.3 percent of high-level professionals reported that they were not monitored at all in their workplace. These professionals engage in tasks that are imprecise and conceptual in nature, and rely on their ability to finish project goals autonomously rather than as dictated by specific steps. Most of the time, management does not have the expertise to monitor what these employees are doing. Indeed, only 7.4 percent of high-level professionals report formal monitoring by technological means.

The most widely reported formal monitoring technique is the requirement that a weekly status report be presented to management. As O'Riain (1999) noted, a professional's every act is assessed with regard to the set project deadline. Thus, weekly status reports allow management to assess the overall stage of the projects, taking the deadline into consideration.

Job monitoring of the middle level stratum is greater compared to the high level stratum. A majority of middle-level employees reported that they were monitored at work (53.6 percent). Monitoring was almost equally split between formal technological-control mechanisms (28.6 percent) and non-technical monitoring (25.0 percent). Many

interviewees report that the help desk or remedy system, which logs problem tickets when clients report them, is the most common form of control. The trouble tickets logged in the system are to be resolved within a particular time frame. Otherwise, they escalate further up the chain to management. Many interviewees report that the records from the remedy system are only examined when there is an unresolved problem that comes to the attention of management. Despite the fact that the remedy system records the number of cases resolved, it is not always a good indicator of job performance, because some problem tickets take longer than others to resolve. Nevertheless, this form of monitoring can be used as a subtle mechanism to exert pressure on employees to complete their work on time.

Also, some interviewees, mainly computer technicians employed in two small IT firms, reported that their performance was measured by the amount of productive time they logged in a week. Company regulations stipulate that at least 60 percent of their weekly work hours should be billable. These technicians are required to specify tasks and time spent on each task during the week on their time slips. Although many interviewees insisted that this practice was mainly for billing purposes, they conceded that the same information could be used to monitor their performance. Some other middle-level interviewees also report that they are subjected mainly to formal, non-technological monitoring techniques such as meeting project deadlines, and team performance in meeting project goals. Informal means of control such as self-and team-control mechanisms were also reported (Kirsh, 1996).

While the fact that the majority of high-level professionals are not monitored at work is not surprising, the percentage of middle-level professionals subject to formal and

informal monitoring is significant. Although the monitoring mechanisms are not overbearing, this finding brings into question Wright's thesis that, because these professionals possess scarce skills, they are not monitored by management. One explanation for this could be that many of these middle-level professionals are programmers, and programming has undergone much routinization. Thus, it is easier for management to monitor the work of some programmers.

Also, the monitoring mechanisms that middle-level professionals are subject to depend on the nature of their work and the clients they serve. For example, operations technicians or hardware specialists working in companies that serve external clients appear to be subject to more formal control mechanisms, such as monitoring the total number of billable hours they work and how many trouble tickets they resolve. This stems from the need for these companies to monitor productivity and ensure that they make profits. The pressure on those technicians working with in-house clients to complete tasks is less intense because they are dealing with fellow workers.

In terms of longer-term performance appraisal, the overwhelming majority of high- and middle-level professionals reported that their overall performance was evaluated on the basis of how they met the objectives they had set out at the beginning of the year. These objectives usually include both project and non-project work. Thus, they reported having quarterly and/or yearly performance reviews to assess how many of their objectives had been met.

Peer evaluation by other team members is also an integral part of performance appraisal. Thus, benchmarks like professionals' communication skills, team-working skills,

and technical competency are evaluated by fellow workers. Some interviewees also stated that client feedback and self-evaluation were important appraisal methods. Significantly, a third of high-level professionals reported not having to undergo any formal performance-review process because they did not have any job-appraisal mechanisms in their companies. In many cases, these professionals are the creators and enforcers of regulations governing lower-level employees. This is reflected in Jim's (a technical manager and project leader) remarks:

I am trying to interpret the rules for my team members. I help create the rules on what standards to enforce. There is a policy manual on job performance that we try to update always and I am part of that team. We have not introduced appraisal for management teams as we have done for other regular workers. I have not had one in my 20 years here.

Bob also states:

I don't know because I am new to the position, so I don't know. I am working with my boss so he knows my output. Maybe the feedbacks I give to emails are used. They are not looking over my shoulder but a lot of the things I am working on I work on with my boss so he knows what I am doing.

The IT industry is rapidly evolving and this constantly creates the need for more highly skilled positions, but it takes some time for companies to create job appraisal mechanisms for the new positions emerging in the industry. Thus, many high-level professionals are not subject to any job monitoring or appraisal measures.

Overall, it appears that, although high- and middle-level professionals face similar control mechanisms, it is evident that middle-level professionals are subject to more formal controls than high-level professionals. However, low-level IT workers are much more likely to be subject to formal control methods (77.8 percent) and they also operate in a more disciplined work environment than high- and middle-level professionals.

4.4 Monitoring and Measurement in Call centres

Unlike higher level IT jobs, call centre jobs are such that the workers can be heavily monitored and their performance evaluations can be based on technological tools. Many researchers have reported that call centres employ integrated systems of technical, bureaucratic, and normative controls (Callaghan and Thompson, 2001; Taylor and Bain, 1999; and Bain et. al., 2002). Extensive monitoring, including scripting, and assessments of operators' quality are utilized in many call centres (Bain and Taylor, 2000; Taylor and Bain, 1999, Bain et. al., 2002; Batt and Moynihan, 2004; Houlihan, 2002; and Taylor et. al., 2002). Clearly, the evidence of extensive control mechanisms in call centres is vast and persuasive.

Table 4.6 (p. 117) indicates that 77.8 percent of call centre workers reported that they were monitored at work through some formal technological means. This involves the use of technologies like ACD and Support Magic to measure various statistics related to agents' work. There is also qualitative monitoring, based on supervisors' ability to listen in or record and evaluate calls based on certain criteria. However, the call centre industry is composed of different kinds of centres, and the labour control mechanisms in place are greatly dependent on functional segmentation strategies (inbound and outbound centres), the product or service being provided, and the customer segment served (Buchanan & Koch-Schulte, 2000). Consequently, the focus of monitoring and surveillance differs from one call centre to another. The largest differences are found between inbound and outbound centres, with outbound centres often more quantitatively-focused (Buchanan & Koch-Schulte, 2000).

a. Inbound

Two of the four inbound centres from which respondents were drawn are companies with various external clients, and the other two are in-house helpdesks attached to larger organizations. The study revealed differences in the focus and degree of monitoring depending on whether or not the inbound centres were outsourced or in-house.

Work in one of the outsourced centres, "DEXT," largely consists of managing enquiries and issues related to wireless and cable accounts, employee health insurance plans, mortgages, and credit-card activation. The other inbound centre, "Altimax," employs hundreds of agents working in various projects, such as the administration of health and life insurance plans and the management of the accounts of subscribers of various cable and high speed internet companies in the United States. The two in-house centres are both dedicated to providing technical support to employees in larger organizations. One is a technical-support helpdesk attached to a private utility company, and the other is a helpdesk for an educational institution. The helpdesk workers at the utility company are the first-line responders to IT problems in their organization.

Interviewees in the two external inbound centres revealed that a high degree of surveillance was used to monitor their work. Agents reported that they were required to meet certain quantitative and qualitative parameters. There are set targets with reference to the amount of time allowable in each type of activity. For example, some interviewees reported that they were allowed an average call-handling time of up to 3 minutes and 30 seconds. They were also monitored on their average notation time, or after call work. This is the length of time it takes to enter all the details of a call in the customer's account after

a call has been completed. After-call work could involve updating an account or placing an outbound call. The length of after call work is measured by how long it takes from the end of one call to the time agents are on ready status for another. Another important quantitative parameter is the hold time. This is the length of time that agents can put customers on hold. Interviewees reported that the hold time was usually 60 seconds, after which the agent must go back and refresh the customer. However, it is important to emphasize that the amount of time allowable for each of these activities varies depending on the nature of the services offered, the customers being served, and management strategies.

There are technological tools, like ACD and Helpdesk Magic, that track all these statistics on a daily, weekly and monthly basis. In response to the question on how his work is monitored, Mark remarks:

It (employee performance) is measured by the length of your calls. It is measured by how long an employee is placed on hold, the resolution to the call. There are four or five different clients in the building. So depending on who you work for, you will get different answers to that question because each client sets down their own rule and management has to make sure that these rules are enforced. We do have statistics that we have to follow, that a call should last so many seconds. Hold time I think is 60 seconds and then you have to go back and tell the client "ok I am working on this do you mind holding for some time while I solve the problem?"

Patricia reports: "They monitor your calls and run reports on your call time and after call time, which is how long you take to put the data into the system after taking your call. When they monitor your calls, they grade them for professionalism, effectiveness and your call time."

In some companies, supervisors have to monitor each person for quality twice per week. Management listens to taped calls, or plugs into live calls, to ensure good-quality

service. There is a grading system that management uses to monitor calls based on professionalism, agents' tone, proper notation of files, and whether they say the proper greetings and closing statements. Agents must attain 85 percent on quality assurance. The scores for these recorded conversations are communicated to agents on a scorecard. If the agents' quality-assurance marks fall below 85 percent three consecutive times, they are retrained. Conversations are also taped, so that if anything goes wrong during the interaction, the tapes can be listened to in order to clarify the situation. The client companies also monitor some of the calls in the outsourced call centres for quality control purposes.

Every associate has to adhere to the quantitative and qualitative targets discussed above; otherwise they are subject to disciplinary actions. In the two centres, these actions are called C.A.P. (Corrective Action Plans). This might include retraining and coaching. However, if an agent gets three CAPS, they are sacked. Respondents stated that, unless agents' performance is really bad, it could take months for this process to end. Several respondents provide evidence of the importance of these measures. Peter remarks:

All our conversations are taped. All calls are taped so if there is anything they can just go and take the tape and listen to it. The supervisors can also dial into conversations and things like that. They have to do two monitors per person per week. When they are done, you get your scores based on the statistics on a scorecard. There are a lot of rules and regulations about how things need to be done, that is why many people don't like call centres and there is a high turnover because they are strict.

And Mabel notes that:

When you work in a call centre environment, not only this one but others too that I have worked (in), you are recorded from the time you clock in - each break you take (and) you have one minute to get in and out of your phone to the computer. If your statistics don't match, you are in trouble because you are judged on a points system.

Agents reported feeling torn between two forces: the client company and the company that they worked for. Consequently, workers reported experiencing role conflict - a situation in which role requirements are incompatible (Schafer and Smith, 2004). They stated that the client company is usually more interested in providing first-class customer service to its employees or customers. The call centre companies, on the other hand, want agents to take a large number of calls because their payment from the client is based on the volume of calls. They are also interested in service quality, because the clients monitor the quality of calls. Thus, call centres have to emphasize both qualitative and quantitative targets in their monitoring mechanisms. Interviewees reported that they found it hard to satisfy both forces and provide good quality customer service. As Maxime remarked: "I feel stressed out because I cannot empathize with people who call with problems because of the time limit on calls." Joanna provides a cogent illustration, stating:

You are hired by Altimax... A lot of the client companies (organizations that outsourced their work to Altimax) want customer satisfaction but you get two ends keep pulling on you... The clients want satisfaction... they don't care if you are spending 30 minutes. We do life insurance (so) if someone phones me and she has lost her husband, and they are crying on the phone, you have to sympathize with them, but then you have Altimax on the other side saying you can only be on the phone for three and half minutes. So you are stressed at your work. I am torn between what I want to do and what Altimax wants me to do.

The enforcement of quantitative and qualitative measurements within a call centre may vary depending on the customer segment served. Interviewees in these outsourced centres work for different clients and each company has its own monitoring and measurement rules. For example, some agents who reported that they served high-end customers or employees of the client companies reported that they were subjected to mainly qualitative measurements. Quantitative targets are downplayed and the priority is

to provide good quality services to clients. This difference in monitoring regimes among agents is similar to that between in-house centres and outsourced centres.

McPhail (2002) suggests that in-house centres are less strictly monitored compared to centres that are organized by third party organizations. Unlike third party organizations that have to make sure they provide good quality service to customers of their client and are also under pressure to have their employees take many calls because their profit is based on the quantity of calls taken, in-house centres are more focused on good quality customer service to fellow workers (McPhail, 2002).

Agents in both in-house centres stated that they did not have to meet any of the daily statistics or targets that agents in outsourced centres reported. They have no time constraints when dealing with calls. However, in one of the centres, 80 percent of the problem tickets that are reported weekly must be solved. This statistic is for the team as a whole; there are no individual goals to meet. If the weekly target rate is not achieved consistently, management discusses this with the agents. Agents also intimated that they were supposed to take an equal number of calls per day, but admitted that this does not always happen. Thus, even these relatively soft targets are not strictly enforced.

The number of "trouble tickets" recorded and resolved is tallied at the end of the week using Support Magic. The interviewees insist that the collation of the statistics is not meant to measure or appraise their performance, but to enable management to know how many problems are resolved and how many are passed on to the second tier of professionals. It is meant to keep track of the progress of problem tickets and ensure that they are not lost. However, it was observed that management posts the monthly call resolution statistics of the Helpdesk on the company notice board. It can be argued that

this is a motivational tool, in so far as it makes employees strive harder to beat the targets reached in the previous months, and thus a subtle control mechanism exists to ensure that service levels are kept at a certain level.

Interviewees conceded that management places more emphasis on effective problem-solving than on the quantitative aspects that other centres emphasize. Agents in in-house call centres are more likely to be subject to qualitative measures such as customer surveys. Two main factors could account for the relatively liberal monitoring regimes in these centres. Firstly, these agents deal mainly with internal clients and the emphasis here is on good quality customer service rather than the quantity of calls taken. Secondly, the technical nature of their jobs makes it hard to impose a time frame around each and every call. Therefore, caution should be exercised in making any generalization that in-house centres employ liberal control mechanisms. The labour process depends on a combination of factors such as the nature of the services being provided, the skills required for the job, and management strategies. This result shows that whether an inbound call centre is outsourced or in-house can have a significant effect on the labour control mechanisms implemented in the work place. Nevertheless, it is clear that monitoring mechanisms in the inbound centres are quite different from those that obtain in outbound centres.

b. Outbound centres

As in inbound centres, the organization of work in outbound centres varies depending on the services being provided. Generally, the sales-oriented nature of outbound centres

has led to the implementation of stricter monitoring and measurement techniques (Taylor and Bain, 1999). Outbound centres are more goal-oriented and emphasize more quantitative targets (Buchanan and Koch-Schulte, 2000).

One of the centres, "Charlie," canvasses for donations on behalf of charities. It is reported that a high level of employee turnover is prevalent in this centre. The other centre, "Damon," conducts marketing surveys on behalf of private companies. However, due to differences in the services provided by these centres, there are obvious differences in the kinds of targets to be met.

In the case of the centre that solicits for donations on behalf of charities, performance appraisal is based on a formula that takes into account the total amount of money collected and the number of presentations made per day. Agents reported that they are required to collect an average of \$125 per hour. The required average number of presentations per hour ranges from 12 to 20, depending on the charity. Also, 80 percent of the amount of money pledged in a day has to be paid via credit card. The reason for this is that it is easier to get the money from credit card companies than from other forms of payment, such as cheques. The use of credit cards also minimizes administrative costs on each pledge, and it is a safer method, in that it eliminates cases of missing pledge forms. Interviewees report vivid accounts of the kinds of monitoring regimens they face at work. For example, Leah reports:

(I am monitored) based on the return rates, pledges that are accepted over the phone, (except for credit cards because it is automatic anyway). But if someone says send me the form in the mail and I will send you a cheque, if those things don't come back that is how your work is measured. It is called the return rate. When we send out the pledge forms, if it does not come back it reflects on our evaluation. We get a statistics report monthly, for six months and for a year. So it is your return rate, what you get back, how you act to your fellow workers, and how

you handle yourself on the phone. If you get stressed because of a rude customer and you get upset and tormented you wont last too long.

Richard remarks:

You are monitored by the amount of money you are collecting, your maintaining the work schedule, things like absenteeism, attitude and support of management in the work place. There is a formula used, the number of presentations made, the amount of money collected by the number of presentations, and another one is the average money collected per hour and proportion or amount of money collected via credit card.

According to interviewees, these statistics are collected and reviewed by management on a regular basis. Every two days, printouts of agents' activities are provided to them. This allows agents to monitor their own progress during the two-week pay period. Bonuses are also paid to agents who are able to secure pledges over the minimum amount of \$125 an hour. Thus, the statistics also influence agents' pay.

Interviewees from the centre that conducts surveys also reported that on average the maximum allowable time to complete a survey was 12 minutes. They do not have a minimum number of surveys that they should complete in a day. This could be due to the fact that calling people to participate in surveys involves much uncertainty. For example Mary remarks: "We get many rejects. People don't want to do it. One day, I did 275 calls in 6 hours and only got 2 surveys completed. The rest of the calls got the busy signal, or I was rejected."

However, the lack of a target number of completed surveys per day is balanced by the greater emphasis placed on the idle time. Agents reported that the idle time (the time between calls that agents make) is the most important statistic that management examines. Centre regulations stipulate that agents should not be idle for more than three

minutes without making a call. The importance of this benchmark is reflected in the following remarks. Marilyn reports:

The computer tracks us and tells management when we are idle. It knows when we are on the phone and when we are not. Management can track us. They do know how much time we spend on the phone but they are not sure. The idle time is the most important statistic they look for. There is no particular number of calls to make in a day.

Mary remarks: "I guess we are monitored by the amount of surveys we complete, but we don't have a minimum to do a night. In this centre, if you stay on track and do it, that is fine with them. You don't sit down three minutes without calling anyone." Interviewees reported that failure to meet the targets could lead to dismissal from the workplace. Indeed, these two outbound centres are notorious for their high level of employee turnover due to the heavy emphasis on quantitative parameters and the high level of stress related to the work.

In addition to quantitative measures, quality control measures are also utilized. Qualitative factors, such as adherence to scripts for opening and closing statements and questions on the surveys, are also considered important, as is the agent's tone. However, interviewees conceded that these measures are not strongly emphasized. In general, the target-oriented nature of the work sets out clear expectations, and this makes the agents' work easily quantifiable and measurable. Another indication of differences in control mechanisms in these jobs is the degree of freedom of movement that these employees possess. This is explored next.

4.5 Freedom of movement

The degree of freedom of movement at work is useful in gauging the level of monitoring in one's job and it gives an insight into the labour process as a whole. The level of freedom (or lack of it) is influenced by the type of job control mechanisms. Employees subject to more managerial control are much more likely to have restrictions placed on their movements at work than those who are subject to less control.

Table 4.7: Freedom of Movement in IT Strata (%)			
Freedom of Movement	IT Strata		
	High	Middle	Low
Limited	0.0	7.1	92.6
Complete	100	92.9	7.4
Number	27	28	27
Cramer's V = 0.631			
Number of valid cases =82			

Table 4.7 shows that 92.6 percent of the call centre interviewees reported that they have limited freedom of movement. They are required to be seated in their cubicles, except when they leave for lunch or to use the washroom. Some interviewees reported that management records the time people clock in and the breaks people take. As a result, management knows how many times people go to the washroom and for how long they are there. They also know when people are late in coming back to their desks after breaks. This tightly controlled environment creates pressure for the agents to be at the cubicle all the time. Thus, a picture of a very disciplined environment emerges. As Mary states:

When you go to the washroom you log out. They (management) know how many times you went to the washroom and how long you spent in the washroom and they also know when you are one minute late after lunch...It is very disciplined...Only during your break can you leave your cubicle.

Martin reports:

We are required to be in our cubicles. We have a cubicle but sometimes it is like a prison cell. Sometimes we get up to ask people questions. We have two breaks and a lunch. Altimax is strict and if you get up and go to the washroom someone will come and look for you.

Interviewees employed in in-house technical support centres reported that, while, formally, they are required to be seated behind their desks, they could move around freely within their workplace without being queried. They noted that as long as someone was available to cover the phones, they could move about at work freely. Also, because they wear headphones, they can be anywhere in the building and receive incoming calls. It was observed that these interviewees moved about within their workplace without limitations. The atmosphere in these centres seems more relaxed than that reported by interviewees in outsourced centres. I witnessed a scene in which two secretaries from another department came into the helpdesk section to share some muffins and converse about non-work related issues in the presence of a supervisor. Helpdesk employees are free to socialize after the core hours (11am -12.30 pm), during which most of the calls come in. After those hours, it is informally accepted that workers can move freely and engage in conversations with fellow workers in the organization.

Evidently, despite similarities among call centres in the use of technologies and functional similarities across sectoral boundaries, differences exist in the focus and intensity of monitoring, depending on whether the centre is inbound or outbound and in-house or outsourced, as well as the customer segment served and the kind of product dealt with in the centre. Inbound call centres employ a mixture of quantitative and qualitative measurement. However, there are important differences between in-house and outsourced centres in terms of the kinds of monitoring regimes employed by

management. These differences need to be examined from the perspective that the rationale for outsourcing customer-service work is to cut down cost. Consequently, both the clients who contract out the work, and the call centres that manage the contracts, are primarily interested in cutting costs. This leads to a heavy emphasis on quantitative controls. Thus, outsourced call centres are more measurement-oriented than in-house ones. On the other hand, outbound call centres enforce stricter rules than inbound call centres, and are more target-oriented.

As Wright (1985) argues, it is clear that, compared to employees who are highly skilled professionals, workers whose jobs do not require many skills or qualifications are subject to stricter methods of job monitoring and control, mainly involving the use of technological tools like the ACD or Support Magic. This is mainly due to their jobs being highly standardized, but how do call centre workers perceive their opportunities for upward career mobility in their workplace?

4.6 Upward Occupational Mobility

Table 4.8: Perception of Opportunities for Upward Occupational Mobility (%)			
Occupational Mobility	IT Strata		
	High	Middle	Low
Opportunities exist	66.7	82.1	59.3
No opportunities	33.3	17.9	40.7
Number	27	28	27
Cramer's V = 0.208			
Number of valid cases =82			

In this study, upward occupational mobility is defined as movement into jobs that improve the pay and responsibility of the workers. IT professionals who possess the highly sought

after skills that fit the demand of the IT industry can experience rapid mobility. Otherwise, they face downward or blocked mobility. Table 4.8 examines interviewees' perception of the availability of opportunities for upward occupational mobility in their workplaces. This table indicates that the majority of IT employees in all of the IT occupations reported that they had opportunities for advancement in their jobs. For the high- and middle-level interviewees, this outcome is not surprising, and was expected. Wright (1989) also reports that experts and professionals are usually employed in pre-managerial jobs and move on to become supervisors and managers. However, Wright (1989) reports that unskilled or semi-skilled workers do not have such career trajectories. He argues that this difference in opportunities for upward mobility (between experts and unskilled workers) is one of the reasons why experts or professionals are in the middle class location, and unskilled workers are in the proletariat-class location.

However, in a striking finding, 59.3 percent of the call centre interviewees reported that they had opportunities for vertical mobility in their companies. For example, the technical support workers from in-house call centres studied consider their current positions as entry-level positions. They are confident that they will move up the organizational hierarchy after "paying their dues" in the lower positions. They expressed the hope that the acquisition of more experience and credentials would help them move up the occupational hierarchy in their organizations. Also, some employees of outsourced inbound centres reported that there were opportunities for them to advance into team leader, supervisory, and managerial positions. However, many conceded that mobility tends to be slow because supervisors and managers are often recruited from outside these call centres.

This result shows that the perception of the call centre workers may contradict the findings of researchers like Richardson, Belt & Marshall (2000), Fernie & Metcalf (1997), and Buchanan & Koch-Schulte (2000) who reported that call centres did not offer concrete opportunities for upward occupational mobility. The finding also goes against Wright's thesis about career trajectories of unskilled workers. While this outcome is important, it is pertinent to point out that the workers' perception and reality of upward mobility in these centres may differ. Thus, one must exercise caution in making hasty conclusions based on the perceptions of these employees.

Indeed, it appears that the specific definition of upward occupational mobility is important. It is likely that the majority of call centre workers have a different and wider perception of upward occupational mobility than the one presented above. For example, many of these workers perceive spending more time doing offline duties as a floor coach (helping or training other agents) or performing other administrative tasks, as a form of upward occupational advancement. For these tasks, management often selects agents who have spent a longer time in the centre than most other agents and are thus deemed efficient and hardworking. However, the position of a floor support agent is not a formal one because these agents are paid the same wages and benefits as the others. Nevertheless, some agents consider this position an occupational advancement.

Another significant finding is that some interviewees consider lateral movement to work in other departments in the call centres as a form of occupational mobility. This is because some projects pay slightly more and lay more emphasis on qualitative than quantitative targets. Thus, the work is deemed to be less stressful and more financially rewarding. Nevertheless, despite their responses, it is clear that, given the flat

organizational structure in call centres, the majority of workers in these organizations face blocked mobility.

It is also important to state that, although the majority of high- and middle-level professionals (66.7 percent and 82.1 percent respectively) reported that they could move up their organizational ladder, middle-level professionals are more likely than high-level professionals to move up their workplace ladder. This is because middle-level professionals have more higher level positions still to achieve.

Many high-level professionals concede that the opportunity to move up is limited because they are in the advanced stages of their career and there are not many higher positions. For example, Gregory remarks: "There are not many positions to move up to until the director retires. There are only two positions above me. My career is winding down. I am eligible for retirement in four years." Germaine states: "There are more opportunities below my position. I can become the director of IT, if the company expands. I can move up but there are not very many positions for me to move up to."

Some high-level professionals also reported that the higher positions in their organizations required a shift from a technical role to a managerial or supervisory role. This switch is sometimes undesirable to some interviewees. Thus it is fair to say that, even though opportunities exist, they are relatively limited, and, when they do occur, professionals tend to be thrust into managerial and business-oriented positions.

4.7 Conclusion

It is clear that the IT industry is hierarchical with respect to skills, credentials, and the nature of the labour processes at work. The organization of work in these occupations

varies with the level of skill and qualifications required for the jobs. Thus, IT occupations requiring high levels of skills and qualifications are generally subject to less stringent formal control mechanisms and enjoy a high degree of job discretion. In the main, call centre workers are faced with proletarianized experiences in their workplaces with regard to their positions within the social relations of production. Their experience is one of being employed in low pay, deskilled, and mainly low autonomy jobs. These jobs lack concrete and realistic career trajectories, and the occupants lack opportunities to acquire capitalist investments. On the other hand, the experience of high- and middle-level professionals is non-proletarianised. First, by virtue of their relatively high salaries, stock and stock options (in the case of high-level professionals) and self-employment alternatives, these professionals are in a favourable position in the labour market compared to call centre workers. Also, within employment relations, professionals and experts exert much more control over their own work.

These findings are in line with Goldthorpe's (1982, 2007) conclusion that the relationship between upper class white-collar workers and their employers is based on trust rather than a labour contract, which grants them greater job autonomy and discretion. This creates a class that is independent from lower level white-collar workers. The same analogy can be drawn between the high- and middle-level professionals on the one hand and call centre workers on the other.

The revelation of important differences in the labour processes among the different levels of IT work indicates that Wright's class typology (1985; 1997) is helpful for explaining the detailed organization of work and variations in labour processes among IT

employees. It also shows that my occupational categories are associated with clear differences in labour processes.

The differences in labour processes and the organization of work could have a significant impact on the class and status identities of the various levels of IT employees. Chapter Five examines the class and status consciousness exhibited by the different levels of IT professionals. Wright (1989) contends that, although objective class location does not single-handedly determine class consciousness and class action, it plays a significant role in affecting the propensity to engage in class action. Thus, it would be expected that call centre workers would identify more with issues related to the working class than high- and middle-level professionals. They would be expected to exhibit some attitudes that display awareness of their interests and class conflicts.

Adherents to the post-class theoretical perspective of Pakulski and Walters (1996), however, would not expect any pattern of attitudes or behaviour based on class position or position in the occupational hierarchy. There would be no differences in the attitudes and class consciousness exhibited by the various levels of IT employees. In order to determine the influence of class position on class and status identities among IT employees, there is a need to study their subjective attitudes to class and status variables.

Chapter 5: Class and Status Identities among IT Employees

5.0 Introduction

Professionals and experts pose a problem for class analysts, especially Marxist class theorists who define class mainly in terms of property relations in the sphere of production. This is because, on the one hand, they are employees who do not own the means of production, but, on the other hand, they have scarce skills, which place them in a privileged position in the labour market. It is therefore not surprising that Marxists have encountered problems placing these professionals in the class structure.

Pakulski (2005) outlines some of the key factors affecting our ability to locate occupations within class relations. These factors include flexible specialization (which erodes the consistency of occupational tasks), the heterogeneity of occupational categories, and the growing density of social relations across class divisions facilitated by widening access to new communication and information technologies. Pakulski argues that these changes have important implications for how classes might form.

The social class debate is even more important now given the changes in the occupational structure of most Western industrialized countries. The growth in the service sector, especially technocratic occupations, and changes in labour processes have made it pertinent to discuss the class positions of professionals and experts.

The rise of IT has significantly affected issues of class stratification within existing economic frameworks. Studies of class consciousness among IT employees have often been confined to particular occupational groups in the industry (Marks et. al., 2003; Lewin and Orleans, 2000). These studies have reported contradictory or inconclusive findings

with respect to class consciousness among the IT employees they studied. Marks et al. (2003) concluded that most of the software professionals they studied had difficulties articulating their perceptions of class and status. They attributed this to the contradictory position of these software professionals within the class structure. Lewin and Orleans (2000) argue that the IT professionals they studied exhibited awareness of their power, but they directed their energies toward task attainment and individual mobility rather than class based actions.

The studies noted above do not distinguish among the various levels of IT employees. As elaborated earlier, the IT industry is hierarchical, with different levels of employees facing different work situations and status positions. Given this variation, it is important to assess the class and status identities of the different levels of IT employees, not only because of the contradictory class position of the higher level IT employees, but also because low-level IT workers may have a totally different class and status identity from those exhibited by higher level professionals.

If we accept Wright's (1985) thesis that the content of one's job (particularly job autonomy) and position in the class structure both affect class consciousness, then we should expect to see differences among the various levels of IT professionals with respect to their class attitudes. For example, Wright would expect call centre workers to exhibit stronger pro-worker consciousness compared to higher level professionals. Also, all of the interviewees would be expected to perceive people in high class positions as having high status positions in NL society. If, however, postmodernists such as Beck (1992) and Pakulski and Waters (1996) are right about the death of class, then we should not expect any differences in class and status identities and lifestyles among the different levels of IT

employees. This is because Pakulski and Waters (1996) and other postmodernists argue that the impact of class on stratification and identification has been rendered largely irrelevant in a dynamic and globalized world.

This chapter is divided into three parts. The first part examines the subjective class identities/attitudes of the interviewees as manifested in their responses to questions exploring class and status-related attitudes and social inequality in general. It examines the relationship between the objective class locations of interviewees and the subjective class orientation manifested in their responses to some class-related questions. Also, a scale ranking pro-capitalist and pro-worker responses is constructed in order to compare the variation in class attitudes among the different levels of employees. The second part of the chapter outlines some findings related to the lifestyles of the interviewees. The third part discusses other variables that might affect the perceptions of status among the different levels of IT employees. These include historic and cultural factors such as the status position associated with former merchant families who are connected with the fishery, and perceived status differences between "townies" and "baymen."

5.1 Subjective Class Consciousness

In distinguishing between a "class in itself" and a "class for itself" Marx propounded that a working class must become aware of its own objective interests and conscious of itself as a historical actor in order for it to act in its own interest. Much of the debate about class has centred on the relationship between structure and agency. If class location influences the material interests of individuals, and if these interests shape class consciousness, then their position in the class structure should influence their class consciousness and

actions. Thus, one of the main questions addressed in this thesis is: given the various objective locations of the IT workers interviewed, what kind of class consciousness do they exhibit?

The measures of class attitudes or consciousness used in this study are discussed in chapter 3. Some of the measures of class identities are a modification of Wright's 1980 U.S. survey of class structure and class consciousness (Wright, 1985a, see Appendix B). The rest of the questions measure other topics that are indicators of class consciousness or identity. In general, these class-related questions explore the IT employees' attitudes toward income inequality, management, unions, the welfare state and corporate power, with the underlying assumption that people's position in the class structure will shape their attitudes to these issues.

There appears to be a strong link between the objective class position of interviewees and attitudes toward some issues that can form the rudimentary basis of class consciousness. These findings follow the pattern that Wright (1985) predicted. Wright (1985) theorized that the higher people are in society's class structure, the more pro-capitalist they are. For example, one of the issues that exposed significant differences among the different levels of employees is the extent to which workers locate themselves in opposition to managers. According to the alienation thesis (Jones, 2001) workers whose jobs require low levels of skill and have low autonomy will be the most class conscious. Workers who become alienated from their work are more likely to view the labour process in oppositional terms, with management against workers (Jones, 2001). Thus, it is expected that high-level IT professionals will feel more in common with

management and perceive their interests as more closely linked with management compared to low-level IT workers.

Table 5.1: Respondents' Perception of the Group with Which They Feel They Have More in Common (%)			
	IT Strata		
	High	Middle	Low
Workers	29.7	64.3	81.5
Managers and Workers	33.3	14.3	14.8
Managers	37.0	21.4	3.7
Number	27	28	27
Cramer's V = 0.274			
Number of cases =82			

In this study, as shown in Table 5.1, the overwhelming majority of call centre workers (81.5 percent) and middle-level professionals (64.3 percent) stated that they feel more in common with other workers than with management. Only 29.7 percent of high-level IT professions reported feeling more in common with other workers.

Table 5.2 below shows that there is a strong relationship between IT strata and the reasons for feeling more in common with management or workers. The value for Cramer's V is strong (0.602). The probability of an IT employee feeling more in common with management or workers because they share similar work situations depends on the stratum that they belong to.

The majority of low-level employees (81.5 percent) and a significant percentage of middle-level workers (42.9 percent) attributed the perception of feeling more in common with other workers than with management to the fact that they face similar workplace situations as their fellow workers (Table 5.2). They share the same grievances and issues with regard to their workplace conditions. These grievances range from pay to health

conditions and stringent monitoring regimes. This kind of solidarity could form a firm basis for class consciousness.

Table 5.2: Reasons Why Respondents Feel More in Common with Management or Workers (%)

Reasons	IT Strata		
	High	Middle	Low
More in common with workers - similar experiences	3.7	42.9	81.5
More in common with workers - similar interests (e.g. leisure activities)	0.0	21.4	0.0
More in common with workers - other reasons	26.0	0	0.0
More in common with managers - similar work experiences	22.2	10.7	0.0
More in common with managers - similar interests/age	11.1	3.6	3.7
Feel in common with both workers and management- we all work together	37.0	21.4	14.8
Number	27	28	27
Cramer's V = 0.602			
No. of Valid Cases = 82			

Some call centre agents complained that management is only interested in getting them to do as much work as possible. They view management as a group of people who are only concerned with making profits for the company and are not interested in the welfare of the workers. Thus, they feel a sense of closeness to their colleagues because they are all treated unfairly by management. This solidarity was clearly manifested in Joanne's remarks:

I have trouble with companies itemizing people. I feel more in common with fellow workers because we are all pretty much in the same boat. Everyone has

problems. Everyone has other issues. We all make pretty much the same amount of money, so everyone knows what it is. Overall the company that I work for, for Newfoundland, the money is great but for the work we do, it is not. For the amount of work we do and for the knowledge that we have to maintain, it is not. And the responsibility we have and the sensitive information we deal with, we should be getting a lot more than we are getting. The company came to Newfoundland because it has a large pool of highly skilled workers looking for jobs.

John remarks "I feel more in common with my fellow workers, because we are in the service industry. We are all one. Management is a more bottom-line group. Management wants more done in less time for less money."

Another reason given is the communication barrier with management. Some workers complained that at times management is not in touch with the real problems at work. Thus, it is only their fellow workers that they can confide in. For example, Mark remarks:

I feel more in common with other workers. I feel sometimes management don't bring themselves to your level and talk to you. There is a barrier there. We always talk of our managers and our managers are always talking about us...sometimes good sometimes bad.

Maria remarks: "I feel more in common with fellow workers... There is not as much contact with management as with people you work with every day."

In general, the majority of middle- and low-level IT interviewees feel more in common with their fellow workers because they face similar working conditions. Also, being physically close to their co-workers at work creates close ties among them. Many of these middle- and low-level interviewees are also in the same age range and share similar interests outside of work (Table 5.2). Compared to high-level professionals, these employees, especially low-level IT workers, have had many aspects of their work routinized and are subject to more formal control mechanisms. Consequently, they are more likely to identify with their fellow workers than with management. This feeling is a

potent factor that could contribute to the formation of strong collective organizations to protect the workers' interests.

By contrast, high-level IT professionals identify with management in greater numbers than the other levels of workers. Table 5.1 indicates that 33.3 percent identify with managers and 37 percent identify with both managers and workers (the latter result is an expression of the managerial ideology of – “we all work together”). High-level professionals are more likely to identify with management because some of them hold positions with some managerial authority and therefore associate more with their colleague managers. Because some organizations are small, and their organizational hierarchies flat, there is a lot of interaction among all the employees, management and non-management. For example, Jonas (who is employed in a small IT company) remarks: “In our company we don't distinguish between management and workers... The tiers are not well graded... The hierarchy is flat. So there is little distinction.” In such small companies, interaction is likely to be closer between management and non-management staff than in bigger companies where the hierarchy is more graded. John notes: “It is hard to say here, we are a smaller company. There are only nine people, so you have to associate with everyone.”

Because these high-level professionals possess sought-after skills, management cultivates close relationships with them. These close relationships with management contribute to the high degree of informal flexibility enjoyed by these professionals in their work processes. No doubt these factors influence the relationship between these professionals and management.

The interviewees from different strata also differed significantly with respect to their responses to the fundamental class-related question of whether the working class is underpaid or not. Table 5.3 shows that there is a moderate relationship between occupational category and belief that the working class is underpaid. The Cramer's V value is 0.406. The results show that an interviewee's IT stratum has a significant effect on his or her perception of whether the working class is underpaid or not.

Table 5.3: Perception Among Employees of Whether or Not the Working Class is Underpaid (%)

	IT strata		
	High	Middle	Low
Yes – Workers are underpaid	48.1	60.8	85.2
No (incomes are market-based)	51.9	32.1	14.8
Don't know	0.0	7.1	0.0
Cramer's V = 0.406			
No. of Valid Cases = 82			

As shown in Table 5.3, 51.9 percent of high-level professionals do not believe that working class people are generally underpaid. They argue that working class people receive a fair income based on their levels of skills and expertise. According to these well-paid professionals, the forces of supply and demand ensure that there are no unfair inequalities in the labour market. They also argue that the income people receive is a function of their responsibilities. Whether it is corporate, technical or managerial responsibilities or all combined, high-level interviewees believe that people are rewarded for those tasks. This is clearly put in interviewees' responses to the question on working class pay levels. Anthony remarks:

I think there is an element of people preparing themselves to work at an appropriate level. I spent four years to go to a university to better myself for an occupation and there are people who have not finished high school. If the person is willing to invest more in their education and training, it is certainly appropriate for that person to earn more. In my work, I have had a lot of experience, the amount of time I spend reading manuals, looking at how the computer system works etc. I have a university degree which gives me the qualification to get me the job I want. If somebody has not completed high school, I don't think they can get such a job. There are people who are high school graduates, so people who invest in schooling should be paid more.

James also calmly remarks: "I don't have an axe to grind. It is a supply and demand issue. The people I work for calculate their profitability and the wages they offer to workers. There will always be complaints but we as a society are living beyond our means."

Neo-Marxist class theory predicts that high-level professionals would be more likely to believe that the working class is not underpaid. These professionals occupy high level positions in the class structure and are highly paid because of their skills and credentials. According to Wright (1985) they are skill exploiters and consequently they believe that people need to be adequately rewarded for their human capital. By contrast, the majority of the middle-level professionals (60.8 percent) and call centre workers (85.2 percent) believe that the working class receives less income than they deserve. The main theme in interviewees' responses is that, in some companies, workers are not given fair compensation for the work they do. As Chris notes:

It is the definition of business, make the most profit you can for the least investment. You want to get a product made for the lowest amount you can have it made for and sell it for the highest amount you can make ... so you maximize your profit and this is done at the expense of employees.

Max also remarks: "Workers are required to do a lot of extras and are not paid for all the extras. Some people do sixteen-hour jobs, taking time from their family, for little pay."

Some interviewees also report that many companies employ people on non-standard employment contracts (part time employment) so as to avoid paying other work-related benefits such as health insurance.

Another interesting issue that emerged during the interviews was the argument by many interviewees that employers in NL have a tendency to pay workers less than what they would pay workers doing the same jobs in other places such as Ontario and British Columbia. Interviewees argue that because of the high unemployment in this province, employers pay workers less than what they are entitled to. They argue that this is one reason why many companies prefer to invest in NL. For example, Max remarks:

In Newfoundland, employers take advantage of the geographical position of the province to give lower wages to people. The "you are lucky to get a job syndrome" is used often... younger people are not buying it anymore. They have high debt loads. So they move to other provinces (to look for jobs).

Martin also remarks: "Companies look at Newfoundland and say you don't need high income because of the low cost of living. Companies know there is high unemployment so companies keep wages low. The substitutability of labour is high here."

Interestingly, when all the interviewees talk about the working class they always referred to people working in low level retail and service jobs. This was prevalent even among call centre workers. Given this tendency, it was no surprise that the majority of call centre workers self-identified as middle class.

Another fundamental component of class consciousness is the question of the relationship between big businesses and governments. Various occupational groups have different relationships with economic capital and high-level professionals are more likely than low level IT employees to downplay the influence of corporations on politicians (Kamieniecki and O'Brien, 1984). The different strata in this study also differed in their

responses to the question of corporate influence over government decisions in NL. When interviewees were asked whether they believe that most provincial government decisions are influenced too much by big businesses, 74.1 percent of low-level IT workers and 53.6 percent of middle-level employees agreed that corporations and businesses have too much influence over political decision-making in the province. As shown in Table 5.4, however, high-level professionals were split over the issue with 48.1 percent believing that corporations have too much influence over decision-making in NL and 48.1 percent responding otherwise. Those interviewees in all the strata who believe that corporations have a big political influence in decision-making expressed one main theme: that politicians and businessmen are too closely connected and this relationship leads to businesses influencing government decisions.

Table 5.4: Perception among Employees of Whether Corporations Have Too Much Influence on Political Decisions in NL (%)

	Percent of IT Strata		
	High	Middle	Low
Yes	48.1	53.6	74.1
No	48.1	42.8	25.9
Don't Know	3.8	3.6	0.0
Number	27	28	27
Cramers V = 0.167			

Many interviewees drew attention to the fact that the current Premier of the province was a businessman. Richard sums this up in his remarks: "If you look at the election of Danny Williams, it is like big business stepping at the door of politics." John also remarks:

Yes (political decisions are influenced by big businesses), because the politicians are in this higher social status circles, and they probably got certain businesses and investments. So I do believe that. For example, Danny Williams has his hands

in just about everything. Last summer there was so many millions of dollars being put into the golf courses in this province and Danny Williams owns about 2 or 3 courses.

This cynicism extended even to the lower levels of government. Interviewees drew attention to some decisions that they think have been influenced by big business. One issue frequently mentioned (which was a topic of heated debate during the research period) was the question of what to do with the old Memorial stadium. The city council was debating whether to accept a proposal by Loblaw's to establish a supermarket in the old stadium premises or to demolish the stadium and convert it into a park. The general impression was that the council was leaning toward accepting Loblaw's proposal and this was cited frequently as an example of big business influencing decision-making. Interviewees argue that business interests are placed above the environmental concerns expressed by some citizens.

Some interviewees (from all the strata) also charged that politicians get kickbacks from businesses, and so it is natural that they will make decisions that favour business in general. This is noted in some of the remarks of the interviewees reported below. Jake notes: "There are some people that grease palms to get things done. Whoever is in power caters to the guys who have the bucks. The guys who put them there." Todd reports:

Yes, we are driven. It is politicians anywhere but more so here. As you move east, more problems set in. Islands are unique upon themselves and Newfoundland is an island, it has a lot of those traits. Politicians have to say one thing and do another. In a lot of cases, (decisions) are driven by the people who provide the money to fund campaigns, or keep the associations or organizations going.

However, a sizable percentage of high- and middle-level professionals reject the idea that corporations have too much power over government decisions. These sentiments were more pronounced in the high level stratum where 48.1 percent do not believe that corporations have too much influence over government decisions. Multiple

reasons were advanced for this belief, but the most widely reported explanation was that Newfoundlanders are politically active and so the government makes decisions that will satisfy the populace rather than big businesses. For example, Krista remarks:

Although that has happened before, I believe that there (is) a strong enough type of backlash that can occur so that political decisions are dictated by the will of the people. Because of the history of Newfoundland, the way fishermen suffered at the hands of merchants and because of things that happened during and at the time of confederation, politicians are sensitive to how the people feel here, if they are being taken advantage of. Things that large businesses want to do are viewed with suspicion and stopped no matter what it is. Unpopular things can be changed even if it is not in the best interest of the province.

Margaret also reports:

There are situations where the wishes of big businesses influence government actions or decisions are biased for them, but overall many decisions are based on the people's needs or the democratic needs of the people. Money is spent on services based on the needs of the communities.

Some interviewees from across all the strata expressed the view that major decisions are made on the basis of the votes they will bring for the government. Thus, they do not think politicians would risk their political future just to satisfy big businesses. There is a belief that due to people's strong desire to fight for what they want, politicians listen more to the ordinary person than to big businesses. These interviewees argue that politicians are generally concerned about doing the things their constituents want rather than satisfying the demands of corporations.

Overall, these findings mirror those of Chan and Goldthorpe (2007b) who reported that class is dominant in influencing peoples' attitudes to left-right issues that involve primarily material interests. Generally, my study shows differences among the various levels of IT employees with the high- and middle-level interviewees (who are objectively in the middle class) exhibiting the rudimentary basis of pro-capitalist class consciousness. On the other hand, call centre workers (who are objectively situated in

the working class) display the fundamental characteristics of pro-working class consciousness and identity. This leads to the question; do these employees convert the rudimentary bases of class-based attitudes which they possess into a coherent class consciousness? This issue is explored next.

With respect to other class-related issues, interviewees in all the strata generally exhibited fragmentary class consciousness. In some instances, the responses of the interviewees exhibited attitudes that are consistent with their objective class situation, while some other responses did not reflect their objective class position. For example, despite differences in class locations, the majority of interviewees in all the strata agree that workers should take job action to press their work related demands. High- and middle-level professionals (more than low-level workers) were expected to be mainly against job action because they are closer to management and some of them even hold management positions. However, the majority of these professionals, like call centre workers, support job action (Table 5.5).

Table 5.5: Support for Job action among IT professionals (%)			
	IT Strata		
	High	Middle	Low
Support Job action	74.1	92.9	88.9
Do not support job action	25.9	7.1	11.1
Number	27	28	27
Cramer's V = 0.229			
Number of valid cases =82			

Also, while by virtue of their objective location in the class structure, call centre workers were expected to report that unions are relevant to their jobs, the majority of them, like high- and middle-level professionals actually reported that unions are irrelevant

to their jobs. These responses point to the ambivalent nature of the class identities exhibited by the low-level interviewees.

One important issue related to class interests is the perception of who benefits the most from the operations of businesses, owners of businesses or workers and consumers. Like income inequality, it was expected that higher level professionals would adopt a more pro-capitalist stance toward this issue than call centre workers. As shown in Table 5.6, although there is a weakly developed pattern that is consistent with their class position, the majority of interviewees across all strata view the operations of companies as mainly benefiting their owners and not the workers and consumers. These employees cited examples of cases from other companies where executives give themselves huge pay raises and leave other workers out.

Table 5.6: Perception of who benefits most from the operations of Companies by IT Job Level (%)			
Main beneficiaries	IT Strata		
	High	Middle	Low
Owners and shareholders	66.7	82.1	92.6
Workers and consumers	33.3	17.9	7.4
Number	27	28	27
Cramer's V = 0.267			
Number of valid cases =82			

George remarks: "They (companies) all use standardized cookie cutter methodologies to rip off workers." Michael reports: "Companies are there to make profit for shareholders, so if they can keep the money from your pocket they will. Profit is the main aim of these companies." Maggie notes: "If you are higher in the company you get more money than workers. Why should a person making one million dollars get more

perks than one making \$5.75? Everyone should share in the profit. It adds to morale among workers.”

Interviewees across all the strata argue that many jobs, especially service jobs, such as clerical and homecare work, are underpaid mainly because employers know that they can easily replace their labour. This is principally because there is a large pool of available labour for such jobs in NL. Thus, employers can afford to depress the wages and get away with it.

With respect to union membership, there are generally low levels of union membership across all the strata (Table 5.7). None of the high-level professionals were unionized, while only 7.1% of middle-level professionals were members of unions. As expected, call centre workers (22.2 percent) recorded the highest level of union membership (Table 5.7). This low level of unionization among interviewees is a recognized pattern in the IT industry (Deery and Walsh, 1999; Hyman, 1991). IT employees have generally resisted attempts to be unionized. This can be attributed mainly to a high degree of self-efficacy among high- and middle-level IT employees in solving work-related problems. Among low-level workers, the lack of an organized union membership drive and hostile management policies toward unions inhibits the formation of unions in those occupations.

Table 5.7: Union Membership by IT Strata (%)

	Percent of IT Strata		
	High	Middle	Low
Unionized	0.0	7.1	22.2
Non-unionized	100.0	92.9	77.8
Number	27	28	27
Cramer's V = 0.310			
Number of valid cases =82			

One of the most striking findings of this research is interviewees' perception of the relevance of unions to their current jobs. As Table 5.8 shows, the majority of the interviewees in all the strata believe that unions are not relevant to their current jobs. The majority of high- and middle-level professionals, 96.3 percent and 89.3 percent respectively, reported that unions are not relevant to their jobs. And fully 63 percent of call centre workers reported that unions are not relevant to their jobs. It is surprising that even the majority of call centre workers feel that way and it raises the question - Why would call centre workers, whose objective work situation is mainly Tayloristic, consider unions irrelevant to their jobs?

Table 5.8: Employee's Perception of Whether Unions are Relevant to Their Jobs by IT Job Level (%)

Union Relevance	IT Strata		
	High	Middle	Low
Yes	3.7	10.7	37.0
No	96.3	89.3	63.0
Number	27	28	27
Cramer's V=0.377			
Number of valid cases =82			

There is a strong association between the occupational stratum that interviewees belong to and the reasons they advance for believing that unions are *relevant* or *irrelevant* to their current position (Table 5.9). The Cramer's V value for occupational category and reasons why unions are relevant or irrelevant is 0.634. Thus, interviewees in the different IT strata report different reasons for perceiving unions as relevant or irrelevant to their jobs, depending on their job situation. Whether an interviewee states that unions are irrelevant to him or her because they have a high degree of individual efficacy in solving

their problems or because his or her wages are good depends on the occupational stratum to which he or she belongs.

As Table 5.9 shows, the high- and middle-level professionals offered different reasons from those put forward by call centre workers for their stance. This variation is mainly due to the different work situations experienced by these different levels of employees.

Table 5.9: Reasons for Accepting or Rejecting Unions by IT Job Level (%)			
Reasons	IT Strata		
	High	Middle	Low
Accepting unions - because they help solve work-related problems	3.7	10.7	37.0
Rejecting unions - because of the nature of work (work too diverse and not amenable to union categorization).	18.5	21.4	0.0
Rejecting unions – we possess high degree of individual efficacy to solve work-related problems	59.3	53.6	3.7
Rejecting unions – wages and benefits are fine even without unions	0.0	0.0	40.7
Rejecting unions - temporary job	0.0	10.7	18.5
Rejecting unions - wage increases passed on to us regardless of union membership status/other reasons	18.5	3.6	0.0
Cramer's V = 0.634			
Number of valid cases =82			

As shown in Table 5.9, 59.3 percent and 53.6 percent of high- and middle-level professionals respectively reported that unions are irrelevant to their jobs because they

possess the power and ability to solve any work-related problems they may face. They stated that, because of their expertise, they can negotiate directly with management and extract good benefits from them. They are confident that because of their valuable skills, if negotiations with management fail, they always have the option of finding other jobs. They feel that because of their high level of self-efficacy in solving work related problems they do not need unions. For example, Max remarks: "There is nothing a union can do for me that I can't do for myself in my position." Ryan states: "I don't see any job issues that a union will help with in my role. If I was unionized in my job it will cause more problems."

James observes:

For my position being manager, I can always manage my group the way I want to. We got open communications back and forth. If a union is in place I can't do that. I would want to talk to my group myself. The pay and benefits and work conditions I got now is fair. I don't see how a union can improve that for me.

Also, the high-level employees expressed satisfaction with their current performance-based salary structure, which they argue is not based on the seniority model associated with unions. They argue that the performance-based salary structure ensures that people work hard and that lazy people do not "free ride" and receive increases they do not deserve. As Mark puts it:

Generally, I don't agree with unions, for example, if I was looking for flex hours, I could discuss it with managers myself. They are very reasonable. Wages for example are performance-based, I believe in that. Increases are based on that. I don't believe in a set yearly increase.

Dominic comments:

I have been there before. I hated it. I hate the absence of performance based wages, increases and backroom deals. I hate the draconian conditions imposed on workers by unions. There is too much pressure on people who do not support their actions.

Other reasons advanced by some high level interviewees for considering unions as irrelevant to their jobs include good employment conditions and the fact that unions are not suitable for IT jobs. They state that the nature of their work makes it unnecessary to join a union. They argue that the way unions function is to force very precise definitions on the workplace of the people involved. Some high- and middle-strata interviewees also consider their occupations too diverse and autonomous for unions to be of help to them. As Steven laughingly states: "The job that I am doing sometimes defies definition. There is too much individual free will and initiative for this job to benefit from a union." James remarks:

There is not a quantity of this type of job to be put in a group and unionized. There is too much fluidity in the industry for it to be unionized. What is it you are trying to quantify? There is so much fluidity. There are different levels of skills among people.

Krista notes:

We are too small and diverse to consider that. We have different scientific professionals and skill sets too. Someone doing software with a master's degree or PhD and someone doing work with a college degree and one year experience, how do you lump them all in one union?

The majority of the professionals argued that different people with different levels and kinds of skills have varying market values to the employer. Therefore their pay and benefits structures cannot be negotiated using the union model which mainly involves negotiating for many people with fairly homogenous skills.

At the same time, some interviewees in the high- and middle-strata reported that, even though they are not unionized, they "free ride" on benefits negotiated by unionized employees in their companies. This is because management passes these additional benefits to all employees regardless of union status. They were happy that they did not

have to pay union dues but still enjoy these benefits. This free rider advantage could also be a reason why these professionals do not think unions are relevant to their current jobs. Unfortunately, due to the low level of union membership among IT employees as shown in Table 5.7, it is impossible to analyze and compare those high- and middle-level professionals who are unionized to their non-unionized colleagues.

Compared to high-level professionals, middle-level professionals are slightly more likely to consider unions relevant to their jobs because they are subject to more formal control by management. It might be expected that, as one moves down the IT occupational hierarchy, the more relevant unions are expected to be to one's job. Surprisingly however, even call centre workers (63 percent), expressed the widespread belief that unions are not relevant to their current jobs. As indicated in Table 5.9, a large proportion of the call centre employees (40.7 percent) noted that, although they are not currently unionized, they get high pay and other benefits that they did not have in their previous jobs. They contend that they are well taken care of by their companies. Consequently, they do not think unions will make any difference to their working conditions. They also argue that by NL standards their jobs pay relatively well. Some even went further to state that, apart from the federal and provincial governments and a few private companies, their jobs are amongst the highest paid in St John's. For example, Mike remarks: "Take "DEXT" for example. We have no unions but we are the best paid. We have benefits that are pretty good for NL standards." Kate also remarks: "My company is not unionized but we get more benefits. I don't see how it (unions) would benefit us." Striking as this result might be, it is important to take into account the previous jobs held by these interviewees. Sixty-three percent of these interviewees were

employed in low paying retail or customer service jobs prior to their IT employment. Clearly, call centres offer more pay and, some argued, a more relaxed working environment compared to their former jobs.

Other call centre workers rejected unions for different reasons. For example, some call centre agents stated that call centre jobs are a lower level job and they are doing it as a stepping-stone to something else or just to help pay the bills. They argued that because they do not intend on staying long in these jobs, unions are not relevant to them. For example, Rob remarks:

It is a bottom-level kind of job. I don't know what a union can do. There is only a handful of people who have been there for a long time. For the most part there are people moving in and out of the job. It is used as a stepping stone to get something else. Mainly women work there, women whose husbands are working somewhere else so it is used as secondary income."

Mike remarks: "It is a student job. No one is doing it as a career job. It would not be my career path. So a union is not relevant to me." Thus, there may be a difference in opinion on this question between those who see the jobs as short-term and those who see them as a career or long-term occupation.

Another important theme that emerged is the issue of management hostility to unions. Many low-level interviewees believed that if unions are formed in their workplaces their employers will move out. For example, Agnes remarks: "If somebody breathes "union" "DEXT" will pull out, because unions bring a level of nuisance to employers." James also remarks:

If you talk about unions in DEXT you will be fired right away. The same thing happened in the same company in Moncton. People got together and had a meeting to form a union and they were found out and fired. I think a union should be there but I am not going to be the one to set the ball rolling.

Another interviewee intimated that the head of their company had threatened once to close the centre if a union was formed. These sentiments reflect the success of management in stifling the formation of unions in call centres. By dismissing anyone who tries to organize unions in the workplace, management has made the issue of unions a taboo topic in many of these centres. Consequently, workers who want to keep their jobs stay clear of unions and this hostility of management to unions is no doubt an important factor contributing to the low rate of unionization among call centre workers.

Despite such concerns, 37 percent of call centre workers believe that unions are relevant to their current jobs because these unions could help improve their present employment conditions. The most frequently cited work issues that they believe unions could help with are pay and health conditions. Some interviewees complained that their pay is capped at \$14 an hour, irrespective of how long they stay in their workplace. They do not think this is fair and expressed optimism that a union could solve this issue for them.

Some other low-level interviewees also complained about the health conditions in their workplace. Interviewees from one centre complained about being cold at work during the winter because the offices are not adequately heated. Madiana grumbles: "I am always frozen at work. There are extremes, one side of the building is so hot and the other side is cold. They can't have the same temperature throughout the building. They say the heating system is not strong enough to do it." There were also complaints about the air quality in another call centre. Mary remarks: "All the times that they tarred the roof, the air quality is bad. It is sickening, your eyes are watery, and you feel nauseating." She

alleged that even though they complained about this to management, the authorities did nothing about it. According to her, management claimed that Department of Health officials had inspected the building and declared it safe for agents to work in. Despite the fact that the centre is open 24 hours a day, she claimed that nobody saw the inspectors from the ministry. One interviewee even went so far as to contact the Health department herself, but she complained that nothing was done about it. The interviewees alleged that the government did nothing about their complaints because they did not want the company to pull out of the province and leave many people unemployed. These allegations raise questions about the types of jobs the government is encouraging in a bid to create employment.

Another example of fragmentary class consciousness among the interviewees was the belief among the majority in all the IT levels that the social assistance system is abused. Although there was generally strong support for the welfare system in all the strata, the majority of these interviewees believe that the system is being abused (see Appendix D). Call centre workers, who on the basis of their class position might be expected to be more sympathetic to welfare recipients, exhibited strong reservations about the operations of the system. Such reservations were expected from the high- and middle-level professionals, but not from call centre workers.

About eighty-five percent of the high-level professionals mentioned abuse of the system as a serious problem compared to 59 percent of call centre workers with similar beliefs. For example, Martha (a call centre agent) remarks: "I have known people who are on welfare having skidoos and having more than the working class who work hard to

support the system. The system is abused. I am sure things need to be changed."

Charles (an IT director) remarks:

I do tend to resent working and paying disgusting amount of taxes to be paid to lazy people who don't want to work. It is one thing some people who can't work due to illness etc it is reasonable. To support people who choose not to work or go to school so that they can get a decent job or to support single mums because they are single and have to raise a child is not fair to the taxpayers. Single mums made a wrong choice in their lives and as a taxpayer I have to pay for that. They should not be cut off the system, but they should be doing some work for the welfare.

Cynthia (a call centre agent) narrated a story of a friend (who is a single mother) on welfare who gets 100 dollars more every month than she gets working 40 hours a week. She contended that her friend can work if she wants to but she prefers being on welfare. Cynthia complained that such abuse is not fair to those working and paying taxes to support the system. She was not the lone voice complaining about abuse of the system. Many interviewees loathed the fact that they have to pay taxes in order to support people who are on welfare and abusing the system. Interviewees also charged that the system lacks effective monitoring mechanisms to prevent abuse.

These findings reveal that with respect to some of the class-related variables, class does not appear to shape the general attitudes and identities of these IT employees. Although the different levels of IT employees exhibit some attitudes that constitute the rudimentary basis for class consciousness corresponding to their objective class positions, these attitudes are not developed with a coherent class consciousness. Despite differences in the objective class positions of the various levels of IT interviewees and in their attitudes toward the class-related issues discussed earlier, the class consciousness exhibited by these IT employees is fragmentary and not cohesive. These results provide some empirical support for postmodernists like Pakulski and Waters (1996) and Bauman

(1992) who argue that people's identities have become decentred from class or any other collective consciousness. However, there is a need for a wider sociological inquiry (covering the population as a whole) into people's perception of class and status before such a conclusion could be confirmed. Given the fluid nature of the class attitudes exhibited by this research into the IT sector, it is important to know which of the various levels of IT employees exhibited the most pro-worker consciousness.

5.2 Class Consciousness Scale

In order to outline differences in subjective class consciousness among the different categories of interviewees, a scale measuring pro-worker attitudes was constructed from the responses of interviewees to 11 questions (see Appendix F). A positive response to any of these questions was recorded as +1 on the scale while a neutral answer elicited 0. A negative response was recorded as -1 on the scale. A total of +11 on the scale represents the highest level of pro-worker consciousness and -11 the lowest level of pro-worker class consciousness.

As expected, the degree of pro-working class attitudes increases as we move down from the high-level IT occupations to the lower levels of the occupational hierarchy. The mean for pro-worker attitudes of high-level professionals is -0.07, but the mean increases to 4.99 (around the mid-point on the scale) for call centre workers. Middle-level professionals (2.56) fall in the middle, between the high- and low-level employees (See Appendix E). The list of questions used to construct this scale is attached in Appendix F. These results support Wright's (1985) thesis that pro-working class attitudes become more prevalent as we move down the class structure.

This scale presents the general picture of class-related attitudes for the interviewees in the different IT occupational strata, but it does not tell us much about a particular occupational stratum's attitude to particular class variables. Examining responses to individual class variables is important in order to gain insight into the nature of class consciousness.

As discussed earlier, employees in all three IT strata exhibited patchy class consciousness. The fragmentary class consciousness displayed by the high- and middle-level professionals generally corresponds to their objective class position, which is a contradictory position in the class structure. While they expressed more pro-capitalist sentiments compared to low-level workers, they also expressed some strong pro-working class consciousness. This outcome should be considered problematic for Wright's theory because although he noted that the contradictory class position of these professionals makes it more likely that they will exhibit disjointed class identities, there is also a strong theme in his theory which states that there is an overall linkage between class position and class consciousness. Although the high- and middle-level professionals showed some marked differences from call centre workers with respect to their attitudes to some of the fundamental bases of class consciousness, this is not translated into strong pro-capitalist class consciousness.

Call centre workers, who are objectively in the working class location, were expected to exhibit strong pro-working class attitudes and consciousness. The background assumption is that disadvantage will create this identity. However, in this study, although call centre workers exhibited fairly strong pro-working class consciousness, they also showed some pro-capitalist attitudes. Therefore, they also failed

to display a coherent class consciousness. This outcome replicates earlier findings by other researchers such as Tanner and Cockerill (1986), Newby (1977), Brown and Brannen (1970) and Mann (1973).

The question then is, why do call centre workers exhibit incoherent working class consciousness? The reason appears to be that the interviewees perceive inequality in NL in a non-class manner. This is reflected in the responses offered by interviewees to the question asking about their perception of what kinds of inequalities exist in NL. Interviewees in the various strata reported multiple forms of inequality related to sexual orientation, wealth, education, religion, gender, race and ethnicity. One significant finding in this study is that there is also an urban/rural dimension to perceived inequality. Inequality in Newfoundland and Labrador is defined partly in terms of perceived status differences between people from St John's and those from outport NL. For example, in response to a question asking what kinds of inequalities interviewees think exist in NL, John reports:

The male/female inequality (and) the social status differences. In terms of social status, certain elements of our society, people from main urban centres are considered different from rural people. It is common to refer to them (people from the outports) as baymen. The baymen are looked down upon. Also, the male female divide is like what it is in the rest of the world. Maybe not extreme like in others but we still have a long way to go. Certain companies have two people doing the same job with different pay.

Meghan also remarks:

Two (forms of inequality) come to mind; one that comes to mind is in the form of the townie versus bayman issue. The dialect is the most important issue or obvious tell-tale sign. It has always been that way. Another is the one you see anywhere, it is social inequality... the stigma against the have-nots by the haves. I have a personal problem with that.

The most widely reported inequality issue in the high and low strata was the issue of class and status inequality resulting from geographical area of origin. Some 48.1 percent of high-level professionals and 25.9 percent of call centre workers mentioned the class and status differences between people from St John's called the "townies" and those from outside of St John's called the "baymen" as the main social inequality issue in the province (Table 5.10).

Kind of inequality	IT Strata		
	High	Middle	Low
Townie/bayman divide	48.1	21.4	25.9
Gender	40.7	35.7	14.8
Class/wealth	18.5	25.0	22.2
Religion	11.1	7.1	7.4
Race and ethnicity	11.1	10.7	14.8
Other	7.4	21.4	18.5
Number	27	28	27
Cramer's V = 0.222			
Number of valid cases =82			

Also, 21.4 percent of middle-level professionals expressed similar sentiments (Table 5.10). Some interviewees noted that people from St John's look down on people from outport communities, considering them crude and not well-educated. Although most of these interviewees agreed that nowadays this is mainly done in jest, they believe that this status issue has concrete economic effects on inequality in society. It is argued that access to opportunities in NL depends on one's geographical area of residence. Rural NL communities lack various economic and social opportunities. Thus it is argued that this creates social inequality between those living in St John's and those from the outports. For example, John remarks:

Inequality in Newfoundland is mostly driven by demographics, geographic location. The inequality here is between St John's and the rest of the province perception wise. Whether it is reality I would not be able to tell you. It is the townie versus bayman issue. Some of it is in fun, in jest but some is real. The economy in the rural areas is driven by the fishery and this has resulted in inequality. People in St John's have more opportunities than people in the bay. This has affected the way people perceive themselves. Most people from St John's have their roots outside of St John's. At the university, there was always the townie/ bayman clash. It is not as obvious but it is still there. People, because of the economic conditions in Newfoundland, think people in St John's are well off. The fishery is closing down so people who were employed there are jobless, but all of the government jobs are located in St John's and they think it is not fair. If I can't live where I grew up that is not nice.

Morris also notes:

There is geographical inequality; the opportunities are greater in urban areas than in rural areas. It is a reality. It is recognized in society, and government is trying to resolve it but because of the so rural nature of our society it is a reality, and people struggle all the time. There is no inequality of opportunity per se but there is educational inequality. People in St John's have a higher level of education than those in the rural areas; and the higher your level of education, the more opportunities you have. Another example is the inequality between natives and non-natives up in Labrador.

Chris states:

It (class) is not firmly defined. The most substantial class division is the separation between people born in St John's versus people from outside St John's, the townies versus the baymen. It is taken lightly now but differences in opportunities available to people from different parts of the province are real. It is an advantage for people in St John's because of their contacts that are well established from family history. In that case, it is an inequality because for someone in rural Newfoundland to establish business in Newfoundland, it is difficult because they don't have the same family contacts.

This is an interesting outcome because area of origin is not only perceived as having some status implications, but it is also seen as having ramifications for the class structure. This result is one that neither Wright's class theory nor post class analysts like Pakulski and Waters would have predicted. It shows that local factors are important in shaping people's class identities. Although this finding replicates the results of previous

research which have found that broader historical and cultural forces are important sources of working class consciousness variation (Hill, 1978; Gallie, 1978), it is one of the important findings of the study which should be explored in the future in NL.

Another issue frequently mentioned by interviewees across all the strata is gender inequality. Among high-level professionals, 40.7 percent reported this form of inequality, compared to 35.7 percent and 14.8 percent among middle- and low-level interviewees respectively (Table 5.10). For example, Deborah (a call centre worker) remarks: "There are situations where men and women are doing the same jobs, but the women get paid less. I can't think of anything else." Margaret notes: "generally, the IT industry is male-dominated, sometimes you wonder, you got the boys club up there. Until you prove yourself, you won't be allowed to do certain things." Many interviewees were of the opinion that NL society is still largely traditional and gender discrimination in the workplace is still rife. They mentioned unequal pay rates and unequal access to high positions by women in the workplace as examples of gender inequality in the province. They also believe that in rural NL there is still occupational segregation based on gender. Gender inequality is considered deeply rooted in traditional NL society.

Low-level IT workers were expected to be more conscious of wealth inequality because of their objective economic situation. Indeed, 22.2 percent of call centre interviewees mentioned wealth inequality as a major inequality issue. Nevertheless, 18.5 percent of high-level professionals and 25.0 percent of middle-level professionals were also conscious of inequality of wealth. The relatively low percentage of call centre workers reporting class and wealth as major inequality issues could be related to the perception among these low-level IT workers that income inequality is not highly polarized in the

province. Consequently, many do not think wealth inequality is an important stratification issue.

Another indication of how detached from class are the interviewees' perceptions of inequality in NL is their responses to the question asking them whether they think there are different classes in NL. An overwhelming majority of the interviewees in all strata appeared surprised by the question and conceded that class is not an issue that they think about frequently. Many interviewees paused for a few seconds to contemplate what to say before stating that the interview was the first time they had ever thought about the issue of classes. Savage et al. (2001) reported similar findings in their study of 178 respondents from diverse socio-economic backgrounds in North Western England. They were surprised at the significant number of interviewees who reported that they had never thought of class before. Savage et al. (2001) concluded that this sort of response from interviewees suggests that the interviewees had hardly reflected on their identity with any precision. Saunders (1989) suggests, however, that if people are given a list of social class categories, then they may place themselves within them, but it does not follow that these categories are salient to them. This appears to have been the case in this study. When the issue of class was clarified to the respondents, the majority of the interviewees in all the strata went on to respond that there are class differences in NL and placed themselves within the class structure.

The majority of IT employees agreed when prompted that there are class differences in NL based on income disparities. They used traditional class terminology like upper class, middle class, and the lower class. A few interviewees also distinguished between the working class and an even lower class encompassing those receiving

welfare payments. Nevertheless, the majority of interviewees were of the opinion that there are three major classes in NL (the upper, middle and lower classes) and that they are distinguished by income.

Many interviewees across all the IT strata believe that the distinctions between these classes in NL are not as polarized as in other parts of the world. The general assumption is that there are few very rich people in the province, so the income distribution is not as polarized as in many other places. For example, Michael states: "Yes, it (the class structure) is not clearly defined. There are the rich and poor classes but the difference is not great between the classes." Maria notes: "it is not like other countries. There could be the very wealthy, middle income and the lower working class. People think the divisions are not clear cut."

When interviewees were asked to identify which social class they belong to, the overwhelming majority in all the strata believed that they fall within the middle class, with relatively few identifying with the lower class. The main reason given by most of the interviewees for identifying with the middle class was that their income levels place them in this class location. Some interviewees gave other reasons such as their education level and the kinds of jobs they hold.

This self-identification with the middle class among the majority of the IT employees holds for both those who are objectively in the middle class and those who are not. This finding is contrary to the traditional Marxist argument, which holds that the objective conditions of production in capitalist society will lead workers to recognize that they are at the bottom of the social hierarchy (Marx and Engels, 1968:37). This result is especially interesting considering that the objective class position of most call centre

workers is the working class. Many call centre workers associate the lower class with people who are receiving income support from the state. Hence, there is a reluctance to identify with that class and instead they consider themselves as belonging to the middle class.

This finding is consistent with other research that has shown that, when people are asked to place themselves in the class structure, they tend to identify with the middle class, and this is sometimes done irrespective of their objective class position. According to Evans and Kelley (1995): "rich and poor, well educated and poorly educated, high status and low status, all see themselves near the middle of the class system, rarely at the top or bottom" (1995:166). Their conclusion is that in all contemporary western societies, peoples' subjective class identification is with the middle class or just below, with very few people identifying with the top or bottom classes. This finding is replicated in this study.

Overall, the responses of a majority of the interviewees to questions about social inequality in NL raise important issues about people's perception of social inequality in NL. That most of the interviewees admitted that the interview was the first time they had thought of classes in NL can be interpreted to mean that the interviewees do not perceive social inequality as mainly centred on class terms. Interviewees went on to name and place themselves in three income classes. Interviewees perceive inequality as based on income inequality, not on the ownership or lack of ownership of property or the means of production. Although these interviewees distinguished these classes and could identify with them when class was explained, such identification seems to be contextual. Class may not be an important source of their identity (Savage, 2000). Consequently, for these

interviewees, thinking in class terms may not be synonymous with the kind of class consciousness needed for the generation of class conflict, because identification with classes is not salient with their identity and occurs only when they are asked about what class they belong to.

It is clear that there are empirical data to both support and refute Wright's class theory that the collective class identities, and the interests and actions of people can be deduced from their objective economic position. We do observe some evidence of the de-linking of identities from class processes, as Pakulski and Walters (1996) propound. But the consciousness exhibited by the interviewees appears to reflect the influence of local historical, cultural and labour market factors more so than the factors Pakulski and Waters (1996) outlined as leading to the death of class. The townie versus bayman issue, for example may be a unique factor, having its roots in historic, geographical and political factors in NL, which neither of the theories predicted. Also, the high proportion of people receiving income support in NL may have significantly influenced people's perception of the class system. Even call centre workers' attitudes and perceptions were shaped by these issues which overshadowed any class considerations.

Overall, it does not appear that IT workers in NL are class conscious when class is defined as involving class self-identification and membership of collective organizations. While there are some important differences in class identities among the various levels of IT employees, these identities are fragmentary and patchy. Class inequality may, however, be an important factor in influencing lifestyle and one's perception or awareness of status.

5.3 Class Inequality, Status and Lifestyle

As noted earlier, one criticism of Wright's class theory is that it concentrates on the impact of occupational structure on class consciousness and ignores the impact of status on stratification. To evaluate the importance of status identity as a factor that might limit class consciousness, this study measured various lifestyle variables. These include homeownership, vacation destination, daily leisure activities and the kinds of groups or social clubs joined by these IT employees.

As discussed in Chapter Two, Bourdieu (1984) suggests that different classes exhibit different lifestyles that reflect their class positions. Some of the findings of this study appear to confirm the thesis that social class influences lifestyle pursuits. For example, significant differences were recorded between the high- and middle-level professionals on the one hand and the low-level employees on the other hand with respect to some important lifestyle variables. Firstly, homeownership rates were found to be higher for the high- and middle-level professionals than for the low-level employees. As shown in Table 5.11, 88.9 percent of high-level professionals and 85.7 percent of middle-level professionals own their homes, in contrast to only 44.5 percent of low-level workers. This is a significant finding in light of the Marxists' assertion that homeownership plays an ideological role in the maintenance of social order and the legitimation of capitalist socio-economic relations (Kemeny, 1981, Marcuse, 1987, Saunders, 1978: 234). Underlying this hypothesis is the assumption that homeowners are more integrated economically and socially than tenants and, therefore, homeowners are more conservative (Verburg, 2000). Embourgeoisement theorists also argue that worker affluence serves to diminish working class consciousness as workers assume

bourgeois consumption habits and values. There is very limited research on the relationship between housing tenure and political conservatism in Canada. Pratt (1987) and Verburg (2000) found that homeowners in Canada are generally more conservative than tenants on certain socio-economic attitudes including opposition to strikes, labour protests, and social welfare provisions.

Related to homeownership is the question of area of residence. Although many neighbourhoods are mixed in St John's, the high- and middle-level professionals are more likely to live in the affluent parts of suburban areas like St. Philips and Portugal Cove. Also, some of these professionals live in the prestigious King Williams Estate within the city. Overall, compared to low-level IT workers, high- and middle-level professionals are likely to own their own homes and live in affluent neighbourhoods.

Table 5.11: Homeownership (%)			
	IT Strata		
	High	Middle	Low
Homeowner	88.9	85.7	44.5
Renter	7.4	10.7	22.2
Free Accommodation	3.7	3.6	33.3
Cramer's V = 0.345			
No. of Cases = 82			

Another important area of difference is in the type of leisure activities undertaken by interviewees. The majority of high- and middle-level professionals reported leisure activities like golfing, hunting, photography, hiking, carpentry, fishing, triathlon and skiing. Generally these activities require the purchase of expensive gear or equipment, or even travelling. These leisure activities are undertaken by people who can afford to spend extra money on these pursuits.

In contrast, call centre workers reported a wide variety of relatively simple leisure activities such as reading, watching movies, walking, playing video games, skiing in the winter, playing basketball, skating and playing pool. A few interviewees in the higher segment of the low stratum reported doing woodworking, fishing, hunting and golfing. However, the majority of low-level respondents engage in inexpensive leisure pursuits.

These findings appear to validate Bourdieu's (1984) thesis about the correspondence between class and consumption. However, there is a problem with the exclusivity of cultural groups. Bourdieu (1984) often assumes a direct one to one relationship between class, culture, and consumption patterns. But is this always the case? That is, does the existence of a stratified cultural universe where the upper classes go and watch classical musical performances and the lower classes watch the Jerry Springer show really exist?

There is no shortage of authors who refute the correspondence between social class and lifestyle. As discussed in Chapter Two, post class or postmodern analysts like Beck (1992), Lash and Urry (1994) and Pakulski and Walters (1996) proclaimed the death of class and its influence on lifestyle and status, implying that people of different classes share similar lifestyles.

Some of the findings in this study offer limited support to postmodern theorists who propound that lifestyle has been de-linked from class. Despite the differences in the objective class positions of the IT employees, especially between the high- and middle-level professionals on the one hand and the low-level workers on the other, I found no differences among the various levels of employees in terms of vacation destinations and kinds of social groups and clubs joined. However, it was noted that, compared to other IT

employees, far fewer call centre workers take any vacation at all. Among those who do take vacations, there are no significant differences in destinations between them and the other levels of IT employees.

One contributing factor could be the number and age of children of high-level professionals. Table 5.11 shows that a higher proportion of these professionals have children compared to the other levels of IT employees, with 81.5 percent of high-level professionals having children compared to only 59.3 percent of call centre workers (Table 5.12). Table 5.13 reveals that 50 percent of high-level professionals have at least one child between the ages of 0 and 11 compared to only 36.3 percent of call centre workers.

Child status	IT Strata		
	High	Middle	Low
With children	81.5	42.9	59.3
Without children	18.5	57.1	40.7
Number	27	28	27
No. of children			
1	18.2	25.0	63.6
2	50.0	50.0	18.2
3	18.2	16.7	18.2
4	13.6	8.3	-
Number	22	12	11

Dependent children restrict how parents plan their vacations. For example, Margaret remarks: "Before the kids came we used to go to Europe, but now we just go around the Atlantic provinces or outside of St John's to see family." Mark states: "When you have younger children you cannot go to exotic places without them. You cannot always take

them with you because it is expensive, so we just take day trips outside of St John's or visit family in the outports."

Table 5.13- Age of Children by IT Strata for Employees with At Least One Child (%)

Age	IT Strata		
	High	Middle	Low
0-11 (only)	50.0	58.3	36.3
12-19 (only)	18.2	16.7	27.3
Over 19 (only)	4.5	-	18.2
Children between 0 -11 and 12-19 years	9.1	16.7	9.1
Children between 12 -19 and over 19 years	18.2	8.3	9.1
Number	22	12	11

Overall, there is not enough evidence from this study to support or refute either Bourdieu's or the postmodern theoretical perspectives of the relationship between class and consumption. However, it appears that the similarities and differences in lifestyle activities among interviewees are affected by other social factors. For example, the number of children and levels of disposable income influence vacation destinations of the interviewees. Yet, it can be concluded that income levels do affect homeownership and the kinds of leisure pursuit engaged in. Next I report on the effects of class position on interviewees' perception of status in NL.

5.4 Subjective Perception of Status

If one believes that class is of little or no significance in determining social stratification and lifestyle pursuits, then one should not expect differences in the perception of status

among the different levels of IT employees. When respondents in this study were asked whether they think some people in NL have higher status than others, the overwhelming majority believe that some people have higher social status than others and report that wealth is an important determinant of status in NL. Significantly, many interviewees in all the strata reported that descendants of the former merchant class in NL form a high status group in NL society. They stated that certain families who were associated with and dominated the fishery in the 19th century have high prestige because of the fact that they used to be dominant socially and economically and still maintain some amount of wealth. Interviewees mentioned last names like the Crosbys as people who have a long history of family wealth and power, and thus high social status in NL society. For example, Mathew remarks:

The best place to start with is to look at the merchant class versus the fishermen. I couldn't draw a line between people and their ancestors and what they are doing today because descendants of the merchant class now occupy the high class in Newfoundland.

Mark observes:

Certain families here in Newfoundland and Labrador who have historical family wealth throughout generations or have built a good life for themselves through business ventures or other opportunities. They created their own success and have become well-known and successful. They have a definitely higher social status.

Trevor remarks:

Certain families have high social status, the Crosbys for example. Newfoundland was always a fishing environment where they had the merchants versus fisherman and no matter what the fishermen did they could not break out of the hands of merchants. The merchants stood out in the community because of their money. The merchants stood out, and the money is still there.

Generally, the responses of the majority of interviewees demonstrate that the impact of class is significant in shaping their perception of status. These comments are a reflection

of the prevalent attitude among many people in NL when they talk of status. People tend to ascribe high status to capitalist families which were dominant during an era with a different mode of production, in this case merchant families in the 19th century. Prominence is rarely given to capitalist families in the current industrial mode of production.

Also, some interviewees believe that the bayman/townie division, which was discussed earlier, still remains an important status issue in NL society. For example, Maria reports: "The townies put themselves at a level higher than the baymen. The townie versus the bayman issue is the main one I can think of. A friend called them "hicks" and "red necks" (farmers, and outport fishermen). Interviewees made reference to a common saying among townies, which goes: "The only good thing that came through the overpass is the empty school bus." The overpass referred to is the bridge over a highway just west of St John's that symbolizes the border between St John's and the rest of the province. The implication of the statement is that it is preferable if people from the outports do not come to live in St John's.

Some interviewees also report that there is disrespect directed at people coming from the outports (baymen). For example, it was suggested that there is a bias against people from the outports with strong accents in terms of recruitment into certain positions like teaching and other customer service jobs. People with such accents are also regarded as "dumb". For example, Paul remarks:

The people from the bay are not given opportunities as urban men. This is due to their accent. For certain positions like teaching that is important. Also, there are rich people in Newfoundland with all the network and connections. A lot of them have influence over decisions that affect everyone. Big money people control what happens. It is not extreme but they do control things. People know the names like Danny Williams, the Penneys etc.

Rick reports:

Status and class here could be a big issue. People judge people on their speech and appearance. I am from around the bay... because of the way I speak they assume I have a low level of intelligence. Just because I speak with an accent does not mean I am stupid. They assume you have a certain level of intelligence. Lots of people in the bigger cities believe that. Over the years people in St John's have high class jobs and people in the bay did hard manual work.

The perception that the townie/bayman divide is an important factor affecting status identities cuts across the occupational divide. Therefore, even a high-level professional from the outports feels a sense of status inequality between him or her and townies.

Outmigration from the outports to St John's has been a topic of interest to many researchers and policy-makers in NL, especially after the cod moratorium. Region of origin plays an important part in understanding the respondents' perception of status. Forty-four percent of the interviewees in the high-level IT stratum were born in the St John's metropolitan area. Another 41 percent reported that they were born in NL but outside of St John's. Among middle-level professionals, 53.6 percent were born in the St John's area; similarly, almost half (48.1 percent) of the low-level interviewees were born in this area. These figures point to a significant level of rural-urban migration in the province. All of those who reported that they were born outside of St John's but in NL, stated that they migrated into St John's to attend school and then they stayed afterwards to work. This is not surprising considering the fact that St John's is home to the major educational institutions in the province.

Another important finding (albeit among a small proportion of the interviewees) is the assertion by some interviewees from all the strata that status differentiation is not important in NL. They noted that some people imagine that they have higher status than others but that such a perception really exists only in their minds. They insist that people

in NL do not really look at others like that. They believe and adopt the "we are all Newfoundlanders" approach. Therefore, in their minds no one is of a higher status than the other. For example, Mark states:

It depends on how you look at that. When it comes to status that is more applicable in some group that say or think they are rich so they are better than others but apart from that other people don't care. They don't care what people do, how they live, it does not make any difference to their lives. It is more a perception issue. The fish plant worker in the bay does not care a shit about Danny Williams.

Damien remarks:

Because Newfoundland is so unique, I don't think it is recognized as such. Like someone on social services or someone who is Brian Tobin you see them as the same. For me I don't see them as any better. I don't see them as belonging to another class. They are, but I don't see them in that light, rich and poor because I don't view people as being in different classes. We are all just one class; we are all just Newfoundlanders.

Thus, it is clear that a strong sense of regional identity also affects the development of class and status identity in the province. This peculiar dynamic affects the way some people perceive their fellow Newfoundlanders. They see everyone as equal and belonging to the same group. All of these findings speak to the uniqueness of NL society and the influence of local historical and cultural factors in influencing interviewees' perceptions of status in the province.

Some interviewees in each of the IT strata also report that people occupying certain positions in society are looked upon as having high prestige. These include high - profile politicians, professionals like doctors, lawyers, and, in some cases, the clergy. Respondents note that the professions and lifestyle of these people, and the fact that they are in exclusive circles, give them high prestige. They noted that their positions give them wealth, which also affects their lifestyle as manifested in their areas of residence, and the types of cars they drive.

It is clear that the interviewees' subjective idea of status is partially explained by Marxist (Wright's) class theory in that they mentioned wealth as a determining factor, and some mentioned that people in professional occupations have high status in NL society. However, it is clear that interviewees are significantly influenced by local factors such as the social position of the former merchant class, the townie versus bayman divide and a strong sense of regionalism among Newfoundlanders, which transcends class and status for some people. These findings raise the question of why do high- and middle-level professionals, who can be considered the drivers of the new economy and globalization, see people of the former fishery merchant class as possessing higher social status. This outcome points to the uniqueness of NL society. It is clear that class and status identities in the province are not only influenced by class factors but by other local socio- economic, cultural and historical factors in NL.

5.5 Conclusion

An exploration of factors affecting the class and status identities of the different levels of IT employees was undertaken in order to determine whether these identities are framed by class-related factors or not. It was noted that although there is some correlation between class position and class identities as exhibited by the correspondence of some subjective class attitudes and class position, employees in the various IT strata exhibited fragmentary class consciousness. While this result indicates that the effect of class is not totally absent in determining subjective class identities, it also shows that local socio-economic and cultural factors strongly affect class identities. These factors include the lack of unions in the IT sector to educate people on class issues (see Gallie 1978), the

depressed local labour market situation in the province (during the period of the research), and the townie versus bayman divide. In terms of lifestyle, there is no clear cut evidence to suggest a strong relationship between class position and lifestyle. While class is a factor in determining some lifestyle pursuits, other intervening social factors such as the number of children and the ages of these children in a family, also affect the kinds of activities people of different classes undertake.

Similarly, the perception of status among all the levels of IT employees appears to be influenced only partially by class mechanisms. Historical and social factors such as the continuing high socio-economic status of the former merchant class, the townie versus bayman divide, and the high sense of regionalism felt by many Newfoundlanders impact the interviewees' perceptions of status.

These findings show that social theories like Erik Olin Wright's class theory and the post class theory of Pakulski and Walters (1996) cannot wholly explain class and status identities in the NL context. Class theorists must recognize the importance of local and historical factors in the development of class and status consciousness, as these variables could be especially significant in societies with distinct cultures like NL.

Chapter 6: Conclusion

6.0 Introduction

The late 20th and early 21st centuries have witnessed the evolution of information and communications technologies (ICT), so that the entire global social and economic system is well-connected through computer networks and the Internet. IT is playing an important facilitating role in globalization and these developments have made IT employees a pivotal part of the information revolution sweeping the world. In this thesis, I have examined the objective class positions and the class and status identities exhibited by different levels of IT employees in the Canadian province of Newfoundland and Labrador. In this conclusion, I will summarize the factors that were found to influence the identities exhibited by these employees.

While not providing the final say on class and status identities among different levels of IT employees in NL, this research has been able to clearly identify some of the important factors affecting class and status identities among these employees, some of whom are at the cutting edge of the IT revolution. In the first part of this chapter, the major findings of this research are discussed in relation to the theoretical perspectives outlined in Chapter Two. The second part outlines some of the limitations and challenges encountered in this study. This part also discusses some implications for future research in this area, given the results of the study. Lastly, a brief discussion on the suitability of class theory as an effective tool for studying class and status identities is presented.

6.1 Pioneering Research

One of the innovative aspects of this research is that it is the first time that a study of class and status identities among various levels of IT employees has been undertaken in NL and Canada. It provides a comparative analysis of the work and non-work life of various levels of IT employees in NL. This represents a break from past studies that concentrated on one stratum of the IT industry, or those that studied all IT occupations as if these jobs were uniform in terms of skills, qualifications required and economic benefits.

Chapter Four demonstrates that there are different levels of IT employees with different work processes and labour market positions. This is especially the case when we compare high- and low-level employees. Thus, this thesis will go a long way in erasing the perception that all IT employees are typical middle class professionals, who are mainly pro-capitalist. This research adds to existing knowledge by providing comparative information on different IT jobs. Also, the thesis is theoretically important because it provides insight into the factors that shape the perceptions of class and status among employees of the IT industry in Newfoundland and Labrador, a peripheral economic area with what many people consider a distinct social, cultural and historical heritage.

Being a peripheral economic area, NL is trying its best to position itself as a leader in what has been called the new economy. In this light, any research that explores labour processes in these jobs will provide vital information to the government as to the types of jobs to encourage as part of its economic renewal program. For example, it has been noted that the call centre landscape is diverse, with differences in labour processes and levels of pay among call centres. It is known that inbound call centres dealing with

computer technical support utilize more skills and qualifications, pay more and have a relatively more liberal labour process in operation than outbound centres. Consequently, this is one kind of call centre that the province should seek to encourage. Outbound call centres are known to have stringent labour processes, which can be a health hazard to their employees. Knowledge of the labour processes in these jobs can also help the government implement regulations to guide the operations of these call centres.

Apart from the innovative nature of this study, other significant findings were made. Among them is identification of major differences in the labour processes among the different strata of IT professionals. This is especially pronounced between the high- and low-level IT employees.

6.2 Differences in Objective Class Positions

One important finding of this research study is that significant differences exist in organization of work and the labour market situations faced by the different levels of IT employees. The most significant differences in labour processes were between the high-level professionals and the call centre workers.

Generally, compared to call centre workers, high- and middle-level professionals possess a high level of skill and formal qualifications. Consequently, these employees, especially high-level professionals, are subject to less stringent labour controls. They possess a high degree of control over their work processes and enjoy a high degree of job autonomy. These employees are highly valued by their employers. Therefore, they have certain perks at their disposal. These include stocks, bonds and flexibility with

regard to work arrangements. These professionals generally enjoy a high status in the workplace.

Although there were some similarities in the labour process conditions experienced by high- and middle-level IT professionals, differences do exist between these two levels of employees. Some of the tasks related to many middle-level IT jobs have been routinized, and some employees are subject to more formal control measures. Also, the kinds of tasks some middle-level IT employees perform make it more likely that they will be subject to some form of monitoring (overt or covert). For example, middle-level IT employees engaged in operational tasks are often monitored to see if they have solved the technical problems that are registered in the help desk system. It is therefore not surprising that the majority of middle-level IT employees in this study report that they are subject to more formal and even technological forms of control. However, despite the implementation of more formal control measures, these middle-level jobs have more control over their work processes than most low-level IT workers.

Most of the call centres whose workers were interviewed in this study implement strict labour control mechanisms. Employee discretion is minimal in most cases and standardization of work processes is the norm. Although an overwhelming majority of interviewees possess a university degree or post secondary diploma, most of the jobs, with the exception of in-house computer technical support, do not require such qualifications. Consequently, many call centre workers are relegated to performing jobs that are primarily routinized and strictly controlled.

It must be emphasized there is also variety among call center workers themselves. In-house inbound call centre workers involved with computer support tasks appear to

have a less stringent labour process than other call center workers. This is due to certain socio-technical conditions such as the kind of services they provide, the client base served and management policy. It solidifies the point that in some cases factors other than the structural position of those workers are more important in determining the organization of work. Therefore, two call centre workers in two different centres may face two different labour processes. Nevertheless, the majority of call centre workers are subject to stringent monitoring and have relatively low status in their workplace. Also, unlike the high- and middle-level employees who are highly valued by their organizations because of their skills and qualifications, the majority of low-level employees are engaged in jobs that do not require high levels of skill. Therefore, their employers do not give them incentives to win their loyalty. It has even been argued that management in some of these workplaces encourages high turnover because it ensures a continuing supply of motivated workers.

While most call centre workers do not appear to be highly valued by their employers, the vast majority of high-level professionals are highly paid, and own a significant amount of shares in companies. These differences in labour processes, incomes, and ownership of stocks indicate that there are objective class differences among the different levels of IT employees, with high- and middle-level employees being objectively in the middle class and call centre workers in the lower or working class.

Overall, this research reveals that Wright's theoretical class categories (the foundation of my different levels of IT job strata), are meaningful in explaining differences in labour processes and the work experiences of different levels of IT employees. Given

the differences in their objective class positions, it was expected that this would lead to differences in class and status identities among the different occupational strata.

6.3 Fragmentary Class Consciousness

This study did reveal that in many instances, there is a strong relationship between the objective class position of interviewees and attitudes toward some issues that could form the basis of rudimentary class consciousness. For example, higher-level IT professionals located themselves closer to management than low-level employees. Higher level employees were also found to be less likely than low-level workers to think that the working class are underpaid. These professionals were also more likely to downplay the influence of big business on government decisions in NL. The question, however, is whether these fundamental bases of class consciousness converted into a coherent class consciousness among these employees. The answer is no.

One significant finding is that the overwhelming majority of interviewees report that the interview was the first time that they had ever thought about social classes in NL. Class (as understood in the Marxist sense) plays a minimal part in the thoughts or subjective consciousness of these employees and possibly, the people of the province. When questioned and probed further, however, the majority of interviewees in all the strata report that there are three main classes in the province, the high, middle and lower or welfare class and the majority of the interviewees in all three strata self identified with the middle class.

Another example of the weakness of class consciousness among these employees is reflected in their responses to questions measuring class consciousness, which were

converted into a scale measuring pro-working class attitudes. As expected, the high-level employees scored the lowest in terms of pro-working class sentiments, while low-level IT workers registered the highest level of pro-worker consciousness, with middle-level employees lying between the two polar ends. However, among all the levels of IT employees, class identities were fragmentary. For example, contrary to expectations, high-level professionals like other levels of IT employees overwhelmingly supported the welfare system. Svallfors (2004) argues that classes that are more privileged are the least supportive of state intervention. In this study, all the interviewees, including the high-level interviewees, reported that they support the income support payment system because it provides assistance for people who for many reasons are not able to take care of themselves. Many interviewees cited cases of people close to them or someone they know being on welfare. Although they alleged that the system is abused, they also report that the majority of the recipients of welfare who they know have legitimate reasons for receiving social assistance. Closeness to, or knowledge of, people who use the welfare system may act as a factor in softening people's attitudes toward the welfare system. As was expected, however, a large percentage of high-level interviewees (more than any other strata) believe that the working class is not underpaid and that people get the pay they deserve based on their qualifications and the type of work they do.

Another example of the fragmentary class consciousness among these employees is related to unions. A majority of call centre workers report that they do not think unions are relevant to their current jobs. The main reason given is that they are satisfied with their current pay and benefits so unions cannot do much for them. This result may be because the majority of these interviewees were previously employed in low-level sales

and retail sector jobs, where the pay is not as high and the work is more intensive than in their current jobs. The call centres in NL offer relatively higher wages and more generous benefits than most other service sector jobs in the St John's area. Therefore, these jobs are considered relatively good jobs.

Although the majority of call centre interviewees reported that unions are not relevant to their jobs because they have good pay and benefits in their current jobs, many also reported that, if unions were formed, the company would fold up. Several cited incidences where management threatened that if unions were formed they would move the company out of the province. Therefore, many workers may not want unions to be formed because of the fear of losing their jobs. Also, there was a widespread perception among interviewees, particularly low-level employees, that unions only serve the interest of a few people. They reported that they had heard stories where unions have not served the interests of the people that they represent. Interestingly, most of those who expressed these sentiments conceded that they had never been unionized before, but that they had heard these stories from other people close to them.

It is clear that class consciousness among the IT employees, as measured by some of the variables measured in this study, is patchy. One reason for this could be the status differential arising from one's area of origin, which cuts across the traditional class divide. When asked what kinds of inequality exist in NL, some interviewees from all the IT strata report that the townie versus bayman divide and the status and economic inequalities deriving from this relationship influence class and status divisions in the province. They report that people living in the outports are economically deprived and that

there is entrenched poverty in many rural communities. This has led to the existence of a class of rural poor, which contrasts with the relative wealth of people residing in St John's.

Many people see inequality in terms of people's geographical location of residence, not necessarily in terms of people's position in the occupational structure. Although some people acknowledged that reference to the townie/baymen divide is mainly done in jest, there are others who think it has serious socio-economic consequences.

Another factor could be that there are no organizations or political parties in the province dedicated to organizing people to confront class-related issues. Therefore, the degree of class consciousness is low. It is also possible that family background has an impact. Possibly, a high-level professional whose parents are from a working class background may express pro-working class sentiments, or a call centre worker married to a business owner or professional, or whose parents are from a middle or upper class background, may express pro-capitalist sentiments.

Overall, it is clear that, while traditional class variables appear to have some influence on class identities, their effects are overshadowed by other socio-economic and cultural factors.

6.5 Similarities and Differences in Lifestyle

Bourdieu (1984) theorized that different classes exhibit different lifestyles that mirror their social class due to varying levels of social, economic and cultural capital. Occupational class is said to have an impact on consumption habits because different classes vary in their levels of social, economic and cultural capital (Tomlinson, 2003). This theory is in

contrast to the postmodernist accounts of Beck (1992), Lash and Urry, (1994) and Pakulski and Waters (1996), who argue that consumption patterns have become individualized and lifestyles can no longer be associated with class or status.

Having discovered that employees in the different IT strata belong to different objective class positions, I studied whether there are lifestyle differences among these different levels of IT employees. For example, are high-level professionals more likely than low-level workers to visit exotic locations for their vacation? The results showed similarities among the interviewees with respect to some lifestyle variables, including the choice of vacation destinations and the kinds of social groups and clubs joined. Among all the strata, there were similarities in locations visited during vacation periods. One striking difference is that call centre workers were less likely than the other levels of employees to take a vacation at all. When they do take a vacation, they visit the same locations that other employees go to for their vacations.

There were, however, some differences among the various levels of employees, mainly between the high- and middle-level employees on the one hand and the low-level workers on the other. The high- and middle-level professionals have a higher rate of homeownership than call centre workers, and are more likely to reside in high income residential areas. Another difference is that high- and middle-level professionals undertake more expensive daily leisure pursuits than call centre workers.

Taking all of these findings together, it is clear that, although class is important in influencing lifestyle, other social factors are also influential. These findings provide only partial support for the thesis by authors such as Pakulski and Waters (1996) Lockwood (1981, 1992) Featherstone (1987) Du Gay (1996) and Lash and Urry (1994) that the

relationship between class and lifestyle has diminished. At the same time, there is no compelling evidence to support Bourdieu's thesis that class determines lifestyle either. While class is important, other social variables also affect the consumption patterns of people in different class locations.

In light of the only partial influence of class in shaping class and status identities and consumption, what other factors influence these different levels of IT employees' perceptions of status in NL society? Do they consider people living a particular lifestyle as occupying high status positions? Or do they consider people occupying certain jobs or earning certain amounts of money as occupying high status?

6.6 Subjective Perception of Status

The majority of interviewees in all the strata believe that some people in NL society have higher social status than others. The consensus among most interviewees in all the strata is that family descent is an important factor in determining status position in NL society. Many interviewees argue that some people descending from families who were formerly in the merchant class (who controlled the fishery sector in the 19th century) possess high status positions because of the fact that their family names are well-known owing to the power and wealth they have accumulated over the years. Many claim that these families still continue to have high status, power and wealth in the society. These families are also said to have affluent lifestyles, to move in exclusive circles and to be invited to prestigious events in the capital.

The significance of this finding is that even high- and middle-level professionals, who hold highly paid and prestigious jobs, still consider these families as people who hold

high status in society. Merchant families dominated life in the pre-industrial era but people's perception of status is still affected by these historical factors. None of the professionals mentioned their own jobs as status-enhancing positions. This may be related to the fact that the interviewees mainly consider themselves to be middle class employees.

Another significant issue reported as contributing to status differences among people in NL is the issue of the bayman/townie divide. Many respondents report that there is a perception among people from St John's (townies) that people from the outports (baymen) are uneducated, crude and rude and so they are accorded a lower status position. Some people argue that this distinction has class and status consequences for people from the outports. Certainly, while rural/urban income differentials are known to cause differences in economic opportunities, the finding that status differences are due largely to geographical area of origin is interesting. This may or may not be a status factor that is unique to NL society. This needs to be researched in other locations.

Another important finding of this research study is the belief by some interviewees (albeit a minority in all the strata) that there are no status differences among people in the province. They report that it is just a perception among some people who believe they have higher social status than others but in reality differences in status do not exist. They argue that people are all the same and that they are all "Newfoundlanders," and "no one is better than the other." This perception reflects the influence that the strong sense of regional identity has on class and status identities in NL. There is a strong sense of "we" in the province, and so some people do not see why a particular section of people should be put on a higher pedestal than others. What matters to these people is that everybody

is a "Newfoundlander" and that is the most important identity. This is another area for future research. It would be interesting to know the prevalence of such perceptions in the general NL population, and how this compares to people in other places.

In sum, while class and status identities and perceptions of status among IT employees are influenced by traditional class variables such as income, wealth and occupation, local socio-economic, cultural, historic and geographical factors also affect people's identities. Depending on the particular factors in play, they may even be more influential in shaping identities than traditional Marxist and Weberian class and status variables.

Consequently, these findings emphasize the need for restraint in transplanting and applying these grand theories of class and status to different parts of the world. This is because local social, cultural, economic, historical and political factors may affect class and status processes. Thus, it is always important to be cognizant of the local context in applying social theories developed in other social settings.

6.7 Limitations and Challenges

This study encountered many challenges and has some limitations. The most significant challenge was access to research subjects. The original plan of the study was to get all the interviewees in the different levels of IT work from one organization, thereby eliminating the need to interview respondents from different organizations. This would have avoided possible biases that could result from interviewing respondents employed in organizations with different management and organizational characteristics. However, all of the companies who have the manpower to provide the required numbers of

interviewees declined my request to conduct interviews with their workers. This led to a scenario where interviewees from different companies had to be interviewed to meet the quota for the different IT levels. This raises the possibility of the interviewees' responses being influenced by organizational factors such as differences in management policies and labour control mechanisms.

I also had to use snowball sampling to get the required number of call centre employees. This sampling method increases the possibility of introducing bias in the sample of call centre workers, because the sample may not be representative of the total population of call centre employees.

Another shortcoming of this study is that only two organizations agreed to allow me to observe their labour processes. While this does not affect the outcome of the study, it limited my ability to observe work-related processes in several workplaces. Even the two organizations where observations were carried out permitted them for only a short period of time (about 3 days). Despite these challenges and limitations of this study, I am convinced that its major findings will stand up to future research efforts.

6.8 Implications for Future Research

This research has shed light on differences in the nature of work in different levels of IT jobs in NL. While there is enough information on the differences in the nature of work in the inbound and outbound centres, future studies should endeavour to observe the labour processes in both in-house and outsourced centres. This would afford the opportunity for a thorough comparison of labour processes between these different kinds of centres. Such a study could also be significant in detecting more nuances in the degree of

autonomy and level of qualifications and skills required for work in call centres. It could also highlight potential differences in opportunities for career mobility in these centres.

One important finding is that the majority of call centre workers possess some form of post-secondary qualifications, mainly university degrees. However, due to the fact that some of my interviewees were chosen through snowball sampling, it is important not to conclude too hastily that underemployment is rife in call centres in NL. A study utilizing an unbiased sample, coupled with information from other jurisdictions on call centre worker qualifications, would give a better indication of the educational level of call centre workers in NL vis a vis workers in other jurisdictions.

The apparent impact of the townie versus bayman divide and the enduring image of the merchant class which have affected the class and status identities of IT employees, is an important finding. Future research on class and status issues should explore the depth of these issues among a larger sample of the general population of Newfoundlanders. For example, researchers should explore people's perceptions and experiences of the townie versus bayman divide. What are the implications of these perceptions and experiences on the socio-economic life of people? Is this issue merely done in jest or does it have tangible consequences? This will provide a broader indication of the importance of this factor in shaping class and status identities. Future studies should also explore the processes through which at least some of these so-called "merchant families" have managed to maintain their high social and economic positions in NL society decades after their dominance of the fishery. What roles do these families continue to play in NL life? Do they have high ranking in the current modes of production?

Some findings in this study may also have important policy implications for the province. Through its Economic Diversification and Growth Enterprises (EDGE) program, the government offers generous incentives to businesses (including call centres) willing to invest in NL. Companies such as Convergys, ICT and HelpDesk Now have taken advantage of these incentives and have located centres in the province. However, in view of the findings of this study, which show that many call centres operate stringent labour processes (although variations exist), the government should only consider encouraging call centres (specifically in-house inbound centres) which have less rigorous labour process models, and utilize the qualifications of workers. The government should also seek to protect workers through appropriate legislations against call centres that operate like "sweatshops."

In relation to this point, further research should be conducted into unions in the province. Although NL has a high density of unions, it would appear that this society is not a class conscious one. While this finding in the IT sector, which is mainly un-unionized is understandable, the following questions arise. Why is it that, despite the high density of unions in the province, people are still not class conscious? How do unions in the province frame work-related issues? Are these issues organized on class terms or framed in other terms? The conventional argument in scholarship on labour movements has been that "non-class" factors such kinship and religious loyalties of workers constitute an obstacle to the growth of class identities. Are other social cultural and historic factors in NL more potent factors overriding the influence of unions on class consciousness? These are some of the issues that future studies could explore.

6.9 Is Class Theory an Effective Framework for Explaining Class and Status Identities?

It is obvious that studying class identities in the 21st century is not the most obvious research to undertake. This is especially so because most of the political predictions of Marxist theory and its variants have failed to materialize. The relevance of class is in doubt, given that the middle class has grown in size and other factors impacting identities such as race, gender and local socio-cultural factors have remained largely unaccounted for in class theory.

Nevertheless, evidence from this research shows that class is still an effective mechanism for predicting people's "life chances," which is defined by Giddens (1973:131) as "chances an individual has for sharing in the socially created economic and cultural goods that typically exist in any given society." This is exhibited in the different objective class positions of the various levels of IT employees in this study. These variations in class positions affect not only the class identities but also their status position and leisure pursuits of these employees. For example, considering status identities, both the high- and middle-level professionals have a high percentage of homeownership and they also engage in more expensive leisure pursuits, compared to call centre workers. However, we noticed little or no differences among the employees in terms of vacation destination and the kinds of groups or clubs joined. This latter finding casts a shadow of doubt over the thesis by Bourdieu (1984) that class structures consumption patterns.

The findings do offer partial support to the theory by postmodernists such as Pakulski and Waters and Lash and Urry (1987) that consumption patterns are increasingly becoming uniform in society. However, the assertion that, because the

influence of traditional class factors is waning (due to increasing differentiation and flexible specialization) identities are increasingly being drawn from consumption patterns is not fully supported. If we do agree that class theory has some relevance in explaining some socio-economic reproduction, how much applicability does it have to different societies?

One important aspect of the debate on class analysis that emerged from this research is the issue of the applicability of class theory to explain the existence or otherwise of class identities in contemporary societies. It is apparent that the IT employees in NL do not exhibit strong cohesive class identities and this is attributed to various social, cultural, and historical factors that are not dealt with in traditional class and status theories. The lesson emanating from this research is that these grand theories cannot be transplanted wholesale into all societies and be expected to explain identities. Extenuating factors existing in societies often serve to impede the formation of class consciousness, as in many cases these factors are so deeply rooted in these societies that they dominate all other concerns. A more comprehensive study of the effect of these factors on class and status identities should give a detailed account of the impact these variables have on people's identities.

Many postmodernists theorize the death of class due to increasing differentiation in society and the perceived importance of consumption communities. These theorists, like some Marxists, ignore the importance of local factors in shaping people's identities. Perhaps the most important contribution of this research is to highlight the importance of the "local" variables over the homogenizing propensities of these "grand" theories. It is

hoped that this and future research will thoroughly explore the interaction of traditional class variables and indigenous dynamics when studying class identities.

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Appendices

Appendix A: Research Interview Schedule

Guide for Semi-Structured Interviews.

This interview will ask questions related to the nature of your current occupation, your career objectives, your family life, your homeownership status, lifestyle and your attitude toward inequality in society.

First I would like to ask some questions about your personal background.

Demographic Issues

1. Gender. M _____ F _____
2. Where were you born? a. If not in St. John's, when did you move here?
 - b. What was the reason for your move?
3. Did you complete High School? Yes _____ No _____
 - a. If no, why was that?
4. Do you have any university or college education? Yes _____ No _____
 - a. If yes, what qualifications did you obtain?
5. Do you have any other qualifications? Yes _____ No _____
 - a. If yes, which qualifications do you possess and where and when did you acquire them?
6. Have you completed any courses related to your job, which we have not already covered? Please can you tell me, in what age category do you fall? A. Under 25 B. 25-34 C. 35-44 D. 45-54 E. 55- 64. F. 65 and over.

7. Please can you tell me, what is your marital status? A. Never married B. Married C. Living in common-law D. Divorced E. Separated. F. Other. If other, explain. If B or C, what is the occupation of your spouse/partner?
8. What was your mother's main occupation when you were growing up?
9. What was your father's main occupation when you were growing up?
10. Do you have any children? Yes _____ No _____
- a. If so, how many?
 - b. What are their ages?
 - c. How many are still living in your household?

Status variables

11. Are you a homeowner? Yes ___ No _____
- a. If no, do you pay rent? Yes ___ No _____
12. Which neighborhood do you reside in?
13. Which if any leisure pursuits do you undertake?
14. If you take vacations, where do you normally go?
15. Are you a member of any social, health, recreational or other group or club?
- Yes ___ No _____
- a. If yes, which one(s)?

Now I would like to talk about your work and career.

Occupational History

16. How long have you been employed in this organization?
17. What positions have you held in this organization?
18. Where did you work before here?

19. How many years did you work there?
20. What positions did you hold there?
21. What is your current official job title?
22. What are the qualifications required for your job?
23. What are the responsibilities and duties in your job?
24. What do you do on a typical day or week?
25. How many people are in the same position as you in this organization?
26. When you are at work, how much freedom of movement do you have?
- a. Please explain why.
- Probe - Can you determine your work schedule?
27. Who determines your work schedule?
28. In order to carry out your work, are you required to travel outside of the workplace?
- Yes__ No __
- a. If so, how often?
- b. Where do you travel?
- c. For what reason do you travel?
29. To what degree would you say your work is determined by company rules and regulations? Explain.
30. In your job, do you have much discretion in how you carry out your work? Please explain.
31. When problems arise, can you solve them independently or do you consult your colleagues or superiors? Probe. What kinds of problems and whom do you consult?

32. Is your work performed as part of a team? Yes ____ No ____
- a. If so, who else works in this team and what are their positions?
33. How is your job performance measured by management?
34. In carrying out your duties, are you subject to any kind of monitoring by management? Yes ____ No ____
- a. If yes, what kind of monitoring? If yes, does any form of technological control influence the pace of your work?
- a. If no, are there any technological controls? Yes ____ No ____
- b. If yes, please explain.
35. Are any parts of your job measured in specific units of time? Yes ____ No ____
- a. If so, what are they?
36. Do you supervise or have authority over the work of other employees in the company? Yes ____ No ____
- a. If so, how many and what are their job titles?
37. In your current position are there opportunities for advancement? Yes ____ No ____
- a. If yes, what are they?
38. Do you intend to stay in your current occupation? Yes ____ No ____
- a. If not, what are your plans?
39. Are you satisfied with your level of pay? Yes ____ No ____
40. Do you think you have been held back in your career because of your gender?
Yes ____ No ____

If yes, explain briefly

a. If not, do you think you have had more opportunities in your career because of your gender? Yes ___ No ___

b. If yes, please explain.

I would like to ask you some questions on your opinion about equality and inequality in Newfoundland and Labrador.

Variables related to class-consciousness

41. How would you describe inequality in Newfoundland and Labrador to someone who has never been here?

42. Do you think there are different classes in Newfoundland and Labrador?

Yes ___ No ___

a. If yes, describe them.

b. Which of these classes do you belong to?

43. Do some people in Newfoundland and Labrador have higher social status than others? Yes ___ No ___

a. Please explain why.

44. Do you believe that political decisions in Newfoundland and Labrador mainly reflect the wishes of big businesses? Yes ___ No ___

a. Please explain why.

45. Do you support the present system of welfare or social assistance payments?

Yes ___ No ___

a. Please explain why.

46. Do you believe that most people on welfare rolls are not working because they are lazy, and not because of the lack of jobs? Yes _____ No _____

a. Please explain why.

47. Do you support the employment insurance system? Yes _____
No _____

a. Please explain why.

48. Do you believe that major changes are needed in our system of government income support? Yes ___ No _____

a. Please explain why.

49. Do you believe that most working class people receive much less income than they deserve? Yes ___ No _____

a. Please explain why.

50. Do you believe that companies and corporations benefit owners at the expense of workers and consumers? Yes _____ No _____

a. Please explain why.

51. Do you feel more in common with management or with fellow workers?

a. Please explain why.

52. Do you agree that workers have to take job action to press their work related demands? Yes _____ No _____

a. Please explain why.

53. Do you think unions are necessary to protect workers' rights? Yes _____

No _____

a. Please explain why.

54. Are you a union member? Yes _____ No _____

55. Are unions relevant to your work situation? Yes ____ No _____

Please explain why.

Income and Financial situation

56. Which income bracket do you fall into? A. 0- 9999 B. 10000- 19999 C. 20000- 29999 D. 30000- 39999 E. 40000- 49999 F. 50000-59999 G. 60000-69999 H. 70000-79999 I. 80,000 and above.

57. If you have a spouse or partner, which income category does he or she fall into? A. 0- 9999 B. 10000- 19999 C. 20000- 29999 D. 30000- 39999 E. 40000- 49999 F. 50000-59999 G. 60000-69999 H. 70000-79999 I. 80,000 and above.

58. Do you own shares or stock options in this company or any other company?

Yes ____ No _____

59. Do you and or your partner have other sources of income other than your job?

Yes ____ No ____ a. If yes, what are they?

60. Are there any other topics or any other comments you will like to raise? Yes ____

No _____

a. If yes, please what are they?

Thank You

Appendix B:

Erik Olin Wright's Questions used to measure class consciousness.

Except from Wright (1997)

Five attitude items were used to construct a simple class consciousness scale. These items are all Likert type questions in which respondents were asked whether they strongly agreed, agreed, disagreed or strongly disagreed with each of the following:

1. Corporations benefit at the expense of workers and consumers
2. During a strike, management should be prohibited by law from hiring workers to take the place of strikers.
3. Many people in this country receive much less income than they deserve.
4. Large corporations have too much power in American/Swedish/Japanese society
5. The non-management employees in your place of work could run things effectively.

Wright's Pro-capitalist Scale

Responses to the questions are given a value of:

1. -2 for a strong pro capitalist response;
2. -1 for a somewhat pro capitalist response;
3. 0 for don't know;
4. +1 for a somewhat anti capitalist response;
5. +2 for a strong anti capitalist response.

Based on simple addition, a score of -10 is interpreted as strongly pro capitalist while one of +10 is interpreted as strongly anti capitalist.

Appendix C: Attitudes towards Job action

Support for Job action among IT Employees (%)			
Main beneficiaries	IT Strata		
	High	Middle	Low
Support Job action	74.1	92.9	88.9
Do not support job action	25.9	7.1	11.1
Number	27	28	27
Cramers V – 0.229			
Number of Respondents - 82			

Appendix D: Support for the Income Support Payment system

Support for the Income Support System among IT employees (%)			
	IT Strata		
	High	Middle	Low
Support welfare system (income support)	92.6	85.7	88.9
Do not Support payment of income support	7.4	14.3	7.4
Don't know	0	0	3.7
Number	27	28	27
<i>Conditional Support for Income Support programs</i>			
Support system but it is abused	85.2	67.9	59.3
Number	23	19	16

Appendix E: Pro-worker Class Consciousness Scale

Pro-worker Class Consciousness Scale			
	IT Strata		
	High	Middle	Low
Mean	-0.07	2.56	4.99
Number	27	28	27

Appendix F

Questions utilized to construct the Proworker Class consciousness Scale.

1. Do you believe that political decisions in Newfoundland and Labrador mainly reflect the wishes of big businesses? Yes _____ No _____
2. Do you support the present system of welfare or social assistance payments?
Yes__ No__
3. Do you believe that most people on welfare rolls are not working because they are lazy, and not because of the lack of jobs? Yes_____ No_____
4. Do you support the employment insurance system? Yes _____
No _____
5. Do you believe that most working class people receive much less income than they deserve? Yes___ No___
6. Do you believe that companies and corporations benefit owners at the expense of workers and consumers? Yes_____ No_____
7. Do you feel more in common with management or with fellow workers?
8. Do you agree that workers have to take job action to press their work related demands? Yes _____ No _____
9. Do you think unions are necessary to protect workers' rights? Yes _____ No _____
10. Are you a union member? Yes _____ No _____
11. Are unions relevant to your work situation? Yes ___ No ___



