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SEAFARERS ARE DIFFERENT? A COMPARISON OF CAR CARRIER CREWS AND CAR FACTORY WORKERS

Erol Kahveci

INTRODUCTION

This paper presents some preliminary findings from an ongoing research project jointly funded by the Economic and Social Research Council and SIRC¹, and conducted by Erol Kahveci (SIRC) and Theo Nichols (SOCSI). The research examines the nature and development of the maritime car carrier industry and the consequences of its dynamics and internal organisation for seafarers in terms of their attitudes toward work, commitment, stress and productivity.

Car assembly workers are amongst the most researched subjects of industrial and occupational sociology. Over the last half century a considerable number of studies have been made of the car assembly line, such as, Chinoy (1955) and (Blauner) 1964 in America, Beynon (1973) in the UK, and Linhart (1981) in France. More recently, a further series of studies has been conducted into the impact of modern management on car workers, for example Berggen (1993), Danford (1999), Delbridge (1998), Dohse, Jurgens and Malsch (1985), Fucini and Fucini (1990), Garrahan and Stewart (1992), Milkman (1991 & 1997), Rinehart, Huxley and Robertson (1997). Yet beyond car assembly plants, which represent only the most visible part of the car industry, dramatic new technological developments have taken place both in production systems, organisational structures and the organisation of work.

Much industrial sociology has focused selectively upon specific loci of given industries, typically the factory and latterly the factory-like call centre. Karel Williams and colleagues have suggested that in relation to the car industry itself such a focus is too narrow (Williams et al, 1998) and that attention should also be given to workers and processes associated in the sale and repair of vehicles. This project

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extends this line of thinking further and focuses on that part of the car industry that transports the finished product to the global market.

In general terms the project is to research how globalisation has impacted on car carrier employers and the consequences for employees. The aims and objectives of the project include:

- To conduct an original study of the changes that have taken place in a neglected industry, its dynamics, and consequences for both management and workers
- To contribute to the development of a comparative economic sociology by a systematic comparison of working and living conditions of seafarers to those of land-based occupational groups
- To examine the consequences of the changing nature of seafarers' work/life balance; attitude towards work, pay and job satisfaction; commitment, stress and productivity

The maritime car carrier industry is substantially globalised. World wide output of vehicle units (including trailers) currently stands at about 60 million per year, of which eight million are shipped on long haul, with millions more shipped on short haul routes (*Lloyd's List*, 2001).

The maritime car carrier industry has witnessed:

- very substantial new technological developments in terms of production systems (port and ship redesign);
- important changes in organisational infrastructure (the emergence of transnational corporations; the development of integrated logistics systems through which contractors can offer complete packages for maritime shipment, port operations and land transport);
- the rise of specialist management companies (and in the field of employment, international crewing agencies);

• considerable change in the nature and scope of employment patterns and working practices.

The maritime car carrier industry is now multinational in ownership. It provides integrated logistics systems that control and co-ordinate delivery by sea, road and rail and which utilise track-and-trace systems to monitor the movement of every piece of cargo at all stages of the delivery cycle. Just in Time (JIT) systems have been introduced and loading and unloading at the land / sea interface has changed beyond recognition over the past quarter of a century.

Since the early 1970s, the average port-stay for maritime car carriers has fallen from 270 hours to 13 hours (Kahveci 1999: 11-19). This development has not yet run its course and the logic is similar to that which has characterised car assembly. As the Executive President of NYK, Europe puts it, 'if we can save one minute in handling one car, the effect with a ship load must be considerable' (Lloyd's List 2000). This is certainly the case as today the most advanced modern vessels have car carrying capacities of 6,000 plus.

Within the maritime car carrying sector, the drive to reduce costs has resulted in several developments beyond the setting of the port. Today, shipowners and managers scour the world for cheap labour. The average speed of vessels at sea has nearly doubled from circa 12 to 22 knots and crewing levels have fallen considerably. In the 1970s vehicles were carried in the holds of lift-on/lift-off general cargo vessels with crews of 30 plus. Today, some of the latest dedicated car carriers take 6,200 vehicles and operate with only 16 crew. Car carriers are now subject to advanced management systems (Drewry, 1999) and, as with all ship types, are increasingly regulated and monitored. However, conditions for workers remain hard as crews live and work in closed and institutionalised environments for extended periods (e.g. nine months) with rare opportunities for shore leave.

ORGANISATION OF THE STUDY AND METHODS OF INVESTIGATION

The research examines the car carrier sector at two inter-related levels, firstly, political economy and secondly, seafarers' living and working conditions.

At the level of political economy the objective is to examine an industry which has been overlooked by social scientists and students of work and organisation but which has undergone rapid and substantial change over the last 25 years and which depends substantially on the implementation of new technology. The industry is investigated with respect to changes in cost structure and dynamics; in ownership, freight, labour and other markets; in technological innovation and ship design; and in relation to car manufacturers, management companies and crewing agents.

In investigating these areas the study involved interviews with managers of shipping companies; the examination of documentary sources; and utilisation of the Cardiff SIRC global labour market database which holds information on the flagging practices of owners throughout the world and the related geographical origins of a quarter of a million seafarers.

With respect to seafarers' living and working conditions key matters investigated include attitudes towards work, pay, work/life balance, job satisfaction and job security; as well as levels of commitment, stress and productivity. In order to facilitate comparison with the attitudes of workers in other fields of employment, approximately 80% of the questions used in the questionnaire with seafarers paralleled questions used in the 1998 Workplace Employee Relations Survey (WERS 98). Referencing the Workplace Employee Relates Survey (WERS 98) enables us to systematically compare the responses of seafarers on car carriers to other land-based occupational groups.

Data on seafarers' living and working conditions is being collected in two ways: via onboard observation and using interviews with seafarers conducted in port, as detailed below.

- On board: observation, semi-structured interviews, focus groups and reflective diaries of researchers provide in-depth information on living and working conditions, on the performance of work processes, on variation and intensity of work rhythm at sea and when loading/unloading and on social interaction between peers and in authority relations.
- In port: following a method developed by Nichols and Beynon (1977) and utilised by them in numerous other studies, interviews take a processual form, beginning with life stories and career histories.

THE NATURE AND THE DEVELOPMENT OF THE MARITIME CAR **CARRIER INDUSTRY**

Table 1 gives a general idea about the global nature of passenger car production and sales. The table shows that in 2000 the main car producers were the USA, Japan and Germany with 25, 16 and 10 per cent of world production respectively. Eastern European countries, China and Mexico are increasing production levels as they attract inward investment, often as a result of relatively cheap land and labour. Certain countries, such as Germany and Japan, are net exporters of cars while others, such as Italy and the US, are net importers.

Table 1: Passenger cars new registrations and production, 1997–2000 ²

	New registrations (000s)			Production (000s)				
	1997	1998	1999	2000*	1997	1998	1999	2000*
Western Europe								
France	1,713	1,944	2,148	2,171	2,259	2,603	2,784	2,955
Germany	3,528	3,736	3,802	3,401	4,678	5,348	5,310	5,136
Italy	2,396	2,369	2,348	2,416	1,574	1,402	1,410	1,425

² The countries listed in this table are (with the exception of NAFTA) not inclusive of their area and therefore the sub totals below are not a sum of their particular figures.

WORLD 45,082 44,913 47,718 49,193 47,655 46,761 49,427 51,472 Source: adapted from Financial Times, 8 December 2000								
Total WORLD	7,808	6,491	7,237	7,825	12,698	11,184	12,310	13,073
South Korea	1,159	558	913	1,165	2,308	1,625	2,362	2,604
Japan	4,492	4,093	4,154	4,255	8,492	8,056	8,100	8,369
China	475	508	570	610	482	507	565	606
Asia								
Total	2,467	2,078	1,711	1,859	2,203	1,744	1,422	1,684
Brazil	1,569	1,198	996	1,102	1,680	1,244	1,103	1,322
Latin America								
Total	17,034	17,616	19,114	19,981	15,690	15,596	17,088	17,809
US	15,161	15,586	16,944	17,515	11,800	11,649	12,621	12,896
Mexico	479	641	663	889	1,335	1,418	1,476	1,889
Canada	1,394	1,389	1,507	1,577	2,555	2,529	2,991	3,023
NAFTA		<u> </u>					<u> </u>	
Total	2,183	2,180	2,394	2,290	2,209	2,301	2,470	2,610
Poland	478	515	640	500	499	563	652	653
Hungary	80	104	129	140	76	90	123	148
Former USSR	1,150	1,065	1,149	1,203	1,055	923	1,009	1,070
Eastern Europe	<u> </u>	<u>"</u>		<u> </u>			<u> </u>	
Total	13,426	14,378	15,098	14,832	14,976	15,152	15,377	15,474
UK	2,171	2,247	2,198	2,190	1,698	1,748	1,787	1,711
Spain	1,016	1,191	1,405	1,406	2,010	2,216	2,209	2,344

Globalisation and diversification in car manufacturing in the last 20 years has had a direct impact on the maritime car carrier market. Fairplay (June 19, 2003) reports that twenty years ago according to figures generated by Swedish-Norwegian vehicle carrier company Wallenius Wilhelmsen, the routes from Japan to North America and

Japan to North Europe / Mediterranean commanded a staggering 60 per cent of the car carrier trade. Other routes from Japan accounted for 17 per cent, giving this one country about three-quarters of the entire trade. Little changed during the 1980s and carriers are regularly ballasted back to Japan to pick up load upon load of cars destined for Europe and the USA.

However, despite these continuities the period 1982-2002 saw a fragmentation in the trade (Figure 1). Whilst routes from Japan retain around half the vehicle shipments, Korean exports are currently estimated to constitute 20 per cent of the trade and there are indications that shipments will soon reach significant levels in South Africa, Thailand, Australia, Mexico and China (Fairplay June 19, 2003).

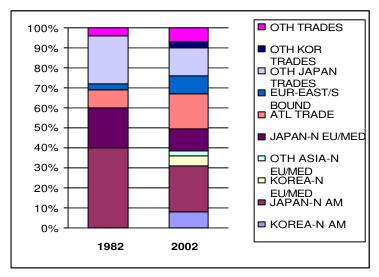


Figure 1: Global deep sea vehicle shipments: 1982 and 2002

(adapted from: Wallenius Wilhelmsen Lines, 2003)

The globalisation of car manufacturing has been matched by the globalisation of the maritime car carrier sector. As figure 2 shows, there is a close relationship between vehicle production and deep-sea vehicle shipment overtime. Notwithstanding some divergence such as that illustrated in the period 1994-1997 when there was a general decline in deep-sea shipment at a time of increased global vehicle production.

62 500 Global vehicle production(left hand scale) 60 000 Deep sea shipments(right hand scale) 9 200 57 500 8 800 55 000 8 400 52 500 50 000 7 600 47 500 CINTS 7 200 45 000 6 800 42 500 6 400 40 000 37 500 35 000 32 500 4800 30 000 4 400 (adapted from: Wallenius Wilhelmsen Lines, 2003)

Figure 2: Vehicle production and deep sea vehicle shipments

With the steady growth in vehicle shipment the total car carrying fleet has grown rapidly from 313 ships with a 1.3m car carrying capacity in 1993 to 417 vessels with a 1.9m capacity in 2003. We can also estimate the number of seafarers employed aboard car carriers as just over 9,000.

Whilst Japanese dominance in the car export trade has diminished, the big three Japanese maritime car carriers, NYK, Mitsui OSK and K-Line, still retain a 50 per cent share of the fleet. Wallenius Wilhelmsen holds a 16 per cent stake in the pure car carrier / pure car and truck carrier sector, doubled to 32 percent now that the Hyundai Merchant Marine fleet has come on board as EuKor Car Carriers.

OTHERS
7 %
NMCC
7 %
NYK
18 %
HUAL
8 %

HUAL
8 %

K-LINE
14 %

Figure 3: Fleet capacity by carrier

(adapted from: Wallenius Wilhelmsen Lines, 2003)

SEAFARERS' LIVING AND WORKING CONDITIONS

As emphasised earlier, data on seafarers' living and working conditions was collected through onboard observation and interviews conducted in port. To date, two voyages have been completed; one aboard a car carrier trading in Western Europe and the Mediterranean and another on a car carrier trading in Europe and North America. Two further voyages are planned.

Port-based interviews utilise a modified version of the *Workplace Employee Relations Survey* (WERS98) conducted in major ports around Europe. This is a national survey of British workplaces, in which key role-holders at each workplace provide information on the nature of employment relations at their place of work. The survey is jointly sponsored by the Department of Trade and Industry, the Advisory, Conciliation and Arbitration Service, the Economic and Social Research Council and the Policy Studies Institute.

WERS 98 is the fourth in a series of surveys which began in 1980. Its primary aim is to provide statistically reliable, nationally representative data on the current state of workplace relations and employment practices in Britain. The survey is based on British workplaces and employees in those workplaces with at least 10 employees except for those in the following Standard Industrial Classification (1992) divisions: A (Agriculture, hunting and forestry); B (Fishing); C (Mining and quarrying); P (Private households with employed persons); and, Q (Extra-territorial organisations).

This part of the paper focuses on some of the responses of seafarers to the questions relating to attitudes towards work, pay, work/life balance, job satisfaction and job security; and their levels of commitment, stress and productivity. This part also compares the seafarers' responses with the WERS98 respondents working in manufacturing industries and with those car factory workers employed in two factories. All WERS98 respondents presented here are non-management employees.

The study aims to conduct 700 interviews all together. So far 150 questionnaires have completed by car carrier crews. Forty eight per cent of the respondents are junior and senior officers and the remaining 52 per cent are ratings – including petty officers. The majority of the respondents come from India and the Philippines although some come from European countries like England, Italy and Bulgaria. On average respondents are into their 3rd contracts on car carriers.

The nature of employment

As can be seen from Table 2, comparison of the length of work contracts demonstrates a sharp contrast between land-based manufacture workers and seafarers. All seafarers in our survey work on fixed term contracts whereas both manufacturing and car factory workers are overwhelmingly employed as permanent workers. Length of contract for officers in our survey varied from four to seven months, however, ratings were employed on fixed contracts of an average of nine months duration. Both officers and ratings had experienced rehiring by their employers or crewing agencies, but there was nothing to guarantee rolling contracts.

100%

	Manufacturing	Car factory	Car carrier crews
	employees	employees	
Permanent	97%	97%	-

3%

Table 2: Is your job permanent, or is it temporary or for a fixed term?

2%

1%

Note: The WERS data is weighted by size of establishment, therefore it represents the British industry entirely.

Working Hours and pay

Temporary

Fixed Term

Table 3 reveals that 77% seafarers work over 70 hours a week. There is no seafarer amongst the respondents working less than 61 hours a week. In contrast all workers in car factories work less than 51 hours a week. When the seafarers' working hours are compared to those of manufacturing workers a similar contrast persists; 90% of the latter work less than 51 hours in this industry.

Table 3: Weekly Working Hours – including any overtime or extra hours

Hours	Manufacturing employees	Car factory employees	Car carrier crews
Up to 36	10%	0	0
Between 37 and 40	45%	94%	0
41 to 50	35%	6%	0
51 to 60	8%	0	0
61 to 70	1%	0	23%
70 and over	1%	0	77%

When seafarers working aboard car carriers were asked about their reasons for working overtime or extra hours, the majority of the respondents (70%) said that it was required as part of their jobs. In contrast only 20% and 14% of the manufacturing and car factory workers respectively gave this reason.

Including extra hours and overtime UK manufacturing workers on average work 42 hours a week whereas car carrier crews on average work 73 hours. However, these long working hours are not reflected in seafarers' wages. Table 4 shows that 56% of

the car carrier crews earn \$284 or less a week but only 18% of manufacturing workers fall into this category.

Table 4: How much do you get paid for your job before tax and other deductions are taken out?

	Manufacturing employees	Car factory employees	Car carrier crews
\$80 - \$127 per week	2%	0	8%
\$128 - \$284 per week	16%	0	48%
\$285 - \$411 per week	26%	5	12%
\$412 - \$569 per week	27%	57	16%
\$570 – \$853 per week	22%	32	12%
\$854 - \$1074 per week	4%	3	4%
\$1075 or more per week	3%	3	0

Note: Seafarers' wages include basic wage and overtime. Seafarers are paid in US\$. UK manufacturing wages converted to US\$ (based on 31 August 2003 exchange rates £/\$1.58).

However, the above analyses of weekly wages is not reflected in wage-satisfaction levels of respondents. Table 5 below shows how satisfied the respondents are with the amount of pay

Table 5: How satisfied are you with the amount of pay you receive?

	Manufacturing	Car factory	Car carrier crews
	employees	employees	
Very satisfied	5%	14%	14%
Satisfied	30%	32%	59%
Neither satisfied nor dissatisfied	23%	30%	18%
Dissatisfied	28%	22%	9%
Very dissatisfied	14%	3%	0

Despite receiving much lower wages than manufacturing and car factory employees, 73 % of the car carrier crews are either satisfied or very satisfied with the amount of pay they receive. This satisfaction evel is 35% of car factory employees and 35% for manufacturing employees. Only 9% of the car carrier crews are not satisfied with their pay however, 42% of the manufacturing employees and 25 per cent of the car factory employees are either dissatisfied or very dissatisfied with the amount of pay they receive.

Satisfaction of car carrier crews' with their pay level is also reflected in their responses to other questions. When car crews were asked about what made them decide to become a seafarer, 'to earn good money' was the overwhelming response. Again one of the things that car carrier crews liked about their job was mainly related to better wage conditions compared to land-based employees in their countries of origin. Many seafarers from Asia and South East Asia stated that the alternative to working at sea was low paid employment, unemployment or self-sufficient agricultural activity. Here the multinational composition of the seafarer sample seems to be a critical factor as wage levels need to be contextualised with reference to standards of living in countries of domicile. In real terms, the wage levels of seafarers may not compare as badly with UK shore-based employers as a straight comparison with the WERS98 data implies. This highlights the complexity involved in making such comparisons.

Company loyalty and management climate

WERS98 contains a number of statements to which respondents were given the opportunity to express their level of agreement/disagreement. Table 6 summarises the responses given to the statement: 'I feel loyal to my company'

Table 6: 'I feel loyal to my company'

	Manufacturing employees	Car factory employees	Car carrier crews
Strongly agree	15%	16%	17%
Agree	37%	43%	55%
Neither agree nor	30%	27%	23%
disagree			
Disagree	10%	11%	5%
Strongly disagree	5%	3%	0

As can be seen from the table, the majority of employees feel loyal to their companies. However, close examination of the responses shows that the car crew workers feel relatively more loyal to their companies. Altogether 72% of the seafarers agreed with the statement "I feel loyal to my company" and only 5% disagreed. 52% of the manufacturing employees and 59% of the car factory employees also agreed

with the statement. Only 15 and 14 per cent of them disagreed, or strongly disagreed, respectively.

When the seafarers were asked for the reasons for their loyalty some said:

"Because they selected and brought me up to this position"

"If any other company pay me more I would quit but I wouldn't do that for a couple hundred dollars more because it is better to work for the same company"

A similar trend could also be observed in the responses of employees to the statement, 'I am proud to tell people who I work for'. As can be seen from Table 7, the majority of employees agreed with the statement regardless of their group. However, the car carrier crew's pride in their companies was higher then the other two group (87%).

Table 7: 'I am proud to tell people who I work for'

	Manufacturing employees	Car factory employees	Car carrier crews
Strongly agree	15%	14%	14%
Agree	38%	54%	73%
Neither agree nor disagree	31%	19%	8%
Disagree	10%	5%	5%
Strongly disagree	5%	0	0

When the reasons for this pride in their companies were asked the car carrier crews responded that:

"You get your payment on time. In some companies you get your payment two months late etc."

"This is a good company in our country. They also give us respect. They always call us for job"

"It's a very big company. Foreign based and we earn in US\$"

Despite employee's high level of company loyalty and pride in their companies the management was perceived by the different group of employees as less participative on issues like consultation, providing information on changes to work practices, responding to suggestions and pay. In fact, in some areas car crew management was perceived as relatively less participative by their employees than management in the other two respondent groups.

As can be seen from Table 8, 41% of car carrier crews have never been asked their views on changes to work practices. However, only 19 and 27% of the car factory and manufacturing employees fell into this category.

Table 8: 'How often are you and others here are asked by the company for your views on changes to work practices?'

	Manufacturing employees	Car factory employees	Car carrier crews
Frequently	15%	28%	18%
Sometimes	40%	42%	36%
Hardly ever	16%	11%	5%
Never	27%	19%	41%

Similarly, the responses presented in Table 9 indicate that 64 per cent of car carrier crews had never been asked about their views on staffing (crewing) issues. However, 52 and 58% of the manufacturing and car factory employees fell into this category.

Table 9: 'How often are you and others working here asked by the managers for your views on staffing (crewing) issues?'

	Manufacturing employees	Car factory employees	Car carrier crews
Frequently	7%	3%	5%
Sometimes	19%	22%	26%
Hardly ever	22%	17%	5%
Never	52%	58%	64%

Furthermore, only 9% of car crews responded that they were consulted by their management on pay issues and when car crews were asked how good management was in responding to suggestions from employees only 17 per cent of them said 'good'. An account from a junior officer highlights the situation:

"On this ship it's difficult to go any further than the captain or chief engineer. There is no chance of any form of contact with the shore side of the management. The superintendent is coming to this ship first time. I might see him, might not."

However, management's handling of health and safety at work was rated very highly by employees of car carriers. Sixty-eight per cent of car carrier crews said that their management had frequently asked for their views on health and safety issues. However, only 24 per cent of manufacturing and car factory employees fell under this category. There are several issues to consider here. These include the extent to which seafarer "loyalty" to companies is a result of the context of insecure employment within the global seafarer labour market. Certainly the discrepancies between seafarers' responses to questions about company loyalty and the degree of participation and contact they have with companies requires further consideration.

Life/work balance

As far as the life/work balance is concerned, long contracts spent confined to a ship, exacerbated by long working hours are unthinkable for most manufacturing and car factory employees. It needs to be recognised that as far as the life/work balance is concerned car carrier crews are an extreme case, nevertheless evidence of car carrier crews' difference on life/work balance comes from the responses to the question below.

Table 10: If you needed to take time off, at short notice, for example to look after a sick family member, how would you usually do it?

	Manufacturing employees	Car factory employees	Car carrier crews
Use paid leave	53%	8%	0
Take time off and			
make it up later	10%	38%	5%
Go on leave			
without pay	21%	27%	59%
Couldn't take time			
off	3%	3%	36%
Some other way	7%	14%	0
Doesn't apply to			
me	5%	11%	0

As can be seen from Table 10 when the 3 groups of employees were asked if they needed to take time off, at short notice, how would they usually do it, the majority of the car carrier crews (59%) responded that they would go on leave without pay. Using paid leave was not an option for seafarers. However, for the majority of the manufacturing employees (53%) and 8% of the car factory workers this was an option. 36% of the car carrier crews stated that they could not take time off at all. In contrast only 3% of the manufacturing and car factory employees said so.

The following additional comments reflect the limited options of car carrier crews:

"You have to be repatriated on compassionate grounds and have to wait for your reliever to come onboard"

"I can take leave without pay but I have to pay for my own fare"

"I have to break my contract and go"

"I have to write to the company and give it to the captain to be forwarded. It depends on the response from the company. It could be accepted or rejected"

When the car carrier crews were asked "is it easy for you to get time off to attend to personal needs such as attending a wedding or a funeral" 11 per cent affirmed that it

was easy. However, 14, 18 and 55% said it was difficult, very difficult or impossible respectively. It is these differences in life/work balance which may prove key to the attitudes of seafarers and potential seafarer recruits when considering their future life and careers. Recruitment and retention are ongoing concerns for most responsible shipowners keen to establish and maintain high standards of service delivery as well as health and safety. Further data collection and analysis will be reported as the project completes and should be of interest to shipowners and managers as well as those involved in the recruitment and education of future seafarers.

CONCLUSION

At this early stage in the project, it is possible to tentatively report the following preliminary findings:

- Unlike other industrial sectors considered here the nature of employment for car carrier crews is contract work. Despite this, and their relatively low pay, they appear to be loyal to their employers and proud of who they work for. However, this may relate more to the tenuous nature of their employment than with strong corporate identification and further analysis is required in this area.
- The work-life balance of car carrier crews is extremely out of proportion and particular attention needs to be paid and this area is improving employee perception of work.
- The management of car carrier crews seems to be less participative than in other areas on even the most basic issues such as providing information on changes to work practices, responding to suggestions from employees and wages.

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