PARTIES:	JOHN DANA ROSECRANCE by his litigation guardian JOHN CHARLES ROSECRANCE AND: MARION FRANCES ROSECRANCE
TITLE OF COURT:	In the Supreme Court of the Northern Territory of Australia
JURISDICTION:	Supreme Court of the Northern Territory of Australia exercising Territory jurisdiction
FILE NO:	No 259 of 1991 (9113480)
DELIVERED:	21 December 1995
HEARING DATES:	19-22 December 1994; 6-8 February 1995; 10 February 1995; 13-17 February 1995; 21-22 February 1995; 29-31 May 1995.
JUDGMENT OF:	MILDREN J

CATCHWORDS:

Negligence - Contributory Negligence - Motor vehicle accident - Single vehicle rollover - Plaintiff was a passenger in the back seat - Severe head injuries - Whether plaintiff's failure to wear seatbelt contributed to his injuries.

Negligence - Injuries to passengers - Motor vehicle accident - single vehicle rollover - Defendant's motor vehicle left bitumen surface of road - Defendant negligent in breaking too heavily - Defendant's negligence caused the plaintiff passenger's injuries.

Damages - Measure of damages - Personal injuries - Special damages - Medical and Hospital expenses - Costs of future care - Whether plaintiff's damages should be assessed on the basis that he should be accommodated in a skilled nursing facility instead of his own home - Reasonableness of costs of medical care to be assessed against the significant health benefits to the plaintiff - Whether a deduction should be made for the possibility that the plaintiff will be ultimately forced to enter a skilled nursing facility.

Damages - Measure of damages - Personal injuries - Special damages - Medical and Hospital expenses - Modifications to the plaintiff's existing home - Additional cost of providing a suitable home for the plaintiff in the future - Whether a deduction should be made for enhancement of the plaintiff's estate - Whether the plaintiff can only recover half of the cost of the new home on the basis that it will be jointly owned by the defendant, his wife.

Damages - Measure of damages - Personal injuries - General damages - Gratuitous services - Whether plaintiff can recover for past or future gratuitous services provided by the defendant, his wife - Whether such recovery would doubly compensate the plaintiff - Whether services were given by defendant intending to discharge her obligation to the plaintiff and were accepted by him with knowledge of that intention - Position where defendant indemnified under a compulsory third party insurance scheme such as that provided by the Motor Accidents (Compensation) Act, discussed.

Damages - Measure of damages - Personal injuries - Loss of earnings and earning capacity - Plaintiff's lost capacity to earn income from grant writing - The fact that the plaintiff had never attempted to earn income from a source does not disentitle recovery - Court must assess the degree of probability that the plaintiff might have earned income from this source.

Legislation

Motor Accidents (Compensation) Act 1979 (NT), s6
Territory Insurance Office Act 1979 (NT), s5
Financial Management Act 1995 (NT), s26

Cases

Yisrael v Chanberlain John Deer Pty Ltd (1987) 5 MVR 491, referred to.
Dawkins v Robinson (1986) 3 MVR 77, referred to.
Froom v Butcher [1976] 1 QB 286, referred to.
Ferrett v Worsley (1993) 61 SASR 234, referred to.
Hoare v Rudd (1989) 9 MVR 229, considered.
Briginshaw v Briginshaw (1938) 60 CLR 336 at 359-60, considered.
MBP v Gogic (1991) 171 CLR 657, followed.
McAuliffe v Vogler (unreported, Angel J, 29 May 1992), referred to.
Thongbai v Northern Territory (unreported, Mildren J, 3 November 1992), referred to.
Frankom & Anor v Woods (Court of Appeal, New South Wales, unreported, 1 October 1980), considered.
Marsland v Andjelic (1993) 31 NSWLR 162 at 176, referred to.
Roberts v Johnstone (1988) 3 WLR 1247, considered.
George v Pinnock [1973] 1 WLR 118, referred to.
Todorovich v Waller (1981) 150 CLR 402, referred to.
Lai Wee Lian v Singapore Bus Ltd (1984) AC 729, at 738-741, referred to.
Cadwallada v Pringle (Supreme Court of the Northern Territory, Toohey J., unreported, 11 June 1985), approved.
Sharman v Evans (1976-77) 138 CLR 563, at 573-574, applied.
Burford v Allan (1993) 60 SASR 428, referred to.
Haylock v State Rail Authority of New South Wales & Anor (Supreme Court of New *South Wales, Newman J, unreported, 22 October 1992), referred to.*
Government Insurance Office New South Wales v Mackie (1990) Aust Torts R 81-053 (Court of Appeal, NSW), referred to.
Burford v Allan (1992) Aust Torts R 81-184 at 615-616, referred to.

Crossman v Le Fevre & Port Adelaide Community Hospital Incorporated (1994) 179 LSJS 329 at 338-339, referred to.
GIO (NSW) v Rizkella (Court of Appeal, New South Wales, 14 March 1993, unreported), applied.
Donnelly v Joyce (1974) QB 454 at 461-462, applied.
Griffiths v Kerkemeyer [1976-77] 139 CLR 161 at 173-181 and 191-194, followed.
Nguyen v Nguyen (1990) 169 CLR 245 at 261-262, referred to.
Van Gervan v Fenton (1992) 175 CLR 327, followed.
Hunt v Severs (1994) 2 All ER 385, not followed.
Cunningham v Harrison [1973] QB 942, referred to.
Lynch v Lynch (1991) 25 NSWLR 411 at 420, applied.
National Insurance Co of New Zealand Ltd v Espagne (1961) 105 CLR 569 at 573; 598-9, applied.
O'Neil v Acott (1988-89) 59 NTR 1, referred to.
Dalywater v Dalywater (1984) 30 NTR 14, referred to.
Treiguts v Tweedley (1959) VR 544, referred to.
Albrecht v Byers and SGIO (Qld) (1975) Qd R 403, referred to.
Bourke v Kecskes (1967) VR 894, referred to.
McCann v Parsons (1954) 93 CLR 431, referred to.
King v Wilkinson (1957) SR (NSW) 444, referred to.
Gurner v Circuit [1968] 2 QB 587, referred to.
Bradvica v Radulovic [1975] VR 434, referred to.
Snape v Reid (unreported, 25 May 1984) digested in (1984) Aust Torts Reps 80-620 the Full Court of the Supreme Court of Western Australia, considered.
Motor Accidents Insurance Board v Pulford (1993) Aust Torts Reps 81-235, considered.
Kars v Kars (Court of Appeal, Queensland, unreported 8 September 1995), disapproved.
Vershuuren v Tom's Tyres Corporation Limited (1992-3) 86 NTR 1 at 5-6, applied.
Graham v Baker (1961) 106 CLR 340, at p345, distinguished.
Blundell v Musgrave (1956) 96 CLR 73, explained.
Wilson v McLeay (1961) 106 CLR 523, applied.
Malec v JC Hutton Pty Ltd (1990) 169 CLR 638 at 642-643, followed.
In the matter of GDM and the Protect Estates Act 1983 (NSW) (1992) Aust Torts Rep 81-190, at 61, 689, disapproved.

Texts and Articles

Luntz, *Assessment of Damages for Personal Injury and Death*, 3rd Ed, at p219 note 17, 267-268
Voluntary Services Provided by the Defendant' (1995) 2 Torts Law Journal 80
(1995) 2 Torts Law Journal 184
The Dutiful Tortfeasor in the House of Lords (1995) 3 Torts Law Rev. 63
A Tortfeasor's Lot is Not a Happy One? (1995) 58 MLR 395

REPRESENTATION:

Counsel:

Plaintiff:	T. Riley QC and P. Barr
Defendant:	T. Worthington QC

Solicitor:

Plaintiff:	Cridlands
Defendant:	Ward Keller

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IN THE SUPREME COURT
OF THE NORTHERN TERRITORY
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No. 259 of 1991
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BETWEEN:
JOHN DANA ROSECRANCE by his litigation guardian JOHN CHARLES ROSECRANCE

Plaintiff

AND:
MARION FRANCES ROSECRANCE

Defendant

CORAM: MILDREN J

REASONS FOR JUDGMENT
(Delivered 21 December 1995)

1. INTRODUCTION

The plaintiff, who sues by his son as his litigation guardian, claims damages for negligence against the defendant, his wife, arising out of a motor vehicle accident which occurred on the Lasseter Highway, in the Northern Territory, on 21 July 1988. At the time, the plaintiff was a passenger in a motor vehicle driven by the defendant. The vehicle, for reasons which are discussed below, left the highway and rolled over at a point approximately 50 kilometres east of Curtain Springs. As a result of the accident, the plaintiff has suffered severe injuries, loss and damage, and expense. Liability is not formally admitted, although counsel for the defendant did not argue that negligence had not been proven. The defendant's main argument was that the plaintiff had been guilty of contributory negligence for failing to wear a seat belt which seriously aggravated the injuries which the plaintiff suffered. This contention gives rise to the following issues:

1. Whether the defendant has proven that the plaintiff failed to exercise due care by not wearing a seat belt; if yes -
2. Whether the failure to wear the seat belt aggravated the injuries the plaintiff probably would otherwise have suffered; if yes -

3. What is the appropriate apportionment of liability for the damages the plaintiff has suffered.

There are issues between the parties also on the quantum of damages the plaintiff is entitled to recover.

2. LIABILITY

At the time of the accident, the plaintiff was a 51 year old Associate Professor employed at the University of Nevada, at Reno, Nevada, United States of America. The plaintiff and his wife lived in the USA. After travelling to Australia to attend a conference in Canberra, at which the plaintiff delivered a paper, they flew to Alice Springs, arriving on 20 July. They hired a Nissan Pulsar two door hatchback sedan and drove to Ayers Rock, where they stayed overnight. The following day, they set out to return to Alice Springs. The accident occurred on the Lasseter Highway, about 50 kilometres east of Alice Springs, at about 11.15am. At the time, the defendant was the driver of the vehicle. No other vehicle was involved in the accident.

The plaintiff has no memory of the accident. The evidence relied upon by the plaintiff concerning liability consisted of the following:

(a) The defendant's answers to interrogatories (Ex P3).
(b) The evidence of Senior Constable K J Flood who attended the accident scene.
(c) A statement (tendered by consent) of Mr Hornsby, an engineer who attended the scene. (Ex P8).
(d) The evidence of Mr C.T. Hall, an expert in mechanical engineering and accident reconstruction.
(e) Professor D.A.A. Simpson, a neurosurgeon.
(f) A statement from Dr. Cotton (Ex P9) who attended at the scene.
(g) A report from Dr. Parameswaran, specialist surgeon. (Ex P6).

The defendant called the following evidence in relation to liability:

1. Mrs P.J. Dingle, who attended at the scene;
2. Mr R.J. Dingle, who attended at the scene;
3. Mr N. Gillies, an engineer and expert in accident reconstruction;
4. Mr E.J. McGargill, a plant inspector and motor mechanic; and
5. Mr G.W. Willoughby, an enquiry agent.

The defendant was not called to give evidence by either party.

2.1 Findings of fact on liability

The plaintiff and the defendant left Ayers Rock at about 9:30am to return to Alice Springs. It was a fine, sunny day. Initially the plaintiff was the driver. After about 10 minutes, the plaintiff asked the defendant to take over the driving as he felt a bit sleepy. The plaintiff stopped the car, got into the back seat and sat in the near side of the car. The defendant took over as the driver, and proceeded towards Alice Springs.

Initially the plaintiff began to write down some notes concerning a research project he was undertaking, but after a while he appeared to be asleep with his head leaning on the head rest.

There was hardly any traffic on the highway. The road is sealed (about 6.2 metres in width) and generally fairly straight. Occasionally the defendant passed cars, large tourist buses and road trains travelling in the opposite direction. About an hour later the plaintiff awoke and enquired as to the time. He then began to write again. A little while later the defendant entered a large radius right hand curve in the road. At a point 200 metres beyond the tangent point, and 49.3 kilometres from Curtain Springs, the vehicle left the road.

Immediately before this, the defendant had passed a large bus or truck going in the opposite direction. She made a comment to the plaintiff that the vehicle passed so closely that "it seemed to almost blow the car over." The plaintiff advised her to drive nearer to the left side of the road. The defendant moved to her left, and in doing so, the near side wheels left the bitumen surface.

The vehicle travelled for a further 52 metres partly on and partly off the bitumen surface until eventually it left the bitumen entirely. At this point, the defendant applied the brakes heavily and attempted to steer the vehicle back onto the bitumen. The brakes locked, causing

the steering to fail to respond. After travelling a further 30 metres parallel to the road surface, the defendant released the brakes. The defendant had oversteered to the right, and when the brakes were released, the vehicle underwent a severe clockwise yaw on the dirt verge, and continued to yaw at an angle across the bitumen surface. On the verge of the opposite side of the road was a concrete culvert. The vehicle travelled sideways across the bitumen towards this culvert for a distance of about 26 metres. The near side wheels dug into the dirt verge just short of the culvert causing the vehicle to become airborne, and to roll over, right side over left, at least one and a half times, before coming to rest on its roof at a point some 34.5 metres from the culvert, and 10.5 metres off the bitumen on the opposite side of the road from the normal direction of travel for vehicles driving towards Alice Springs. When it came to rest, the vehicle was pointing in the opposite direction from its direction of travel, and at an angle to the road. At the time the defendant first applied the brakes she was travelling at about 90 to 100 kilometres per hour.

At the time when the defendant left the bitumen road surface, there were no other vehicles in the immediate vicinity, and the road was straight. The bitumen surface was approximately 6.2 metres wide and in good condition. There were 1.2 metre gravelled shoulders. There were no abnormal or extraordinary features to the road which contributed to the accident.

The defendant did not intend to leave the bitumen surface; she did so inadvertently.

2.2 Conclusions as to the defendant's negligence

The plaintiff alleges that the defendant was negligent in her driving due to inattention and a failure to keep a proper lookout, and I so find. I do not find that her speed before leaving the bitumen was excessive. Lasseter Highway is a country road. There is no evidence that she exceeded the speed limit or that the conditions were such that she should have travelled at a slower speed. It was not suggested that the defendant was an inexperienced driver. Counsel for the plaintiff submitted that the speed was excessive for travelling on the dirt verge. I accept that it was excessive for this purpose, and had she deliberately left the bitumen, this would have been negligent. Nevertheless the defendant should have foreseen that, at the speed at which she was travelling, leaving the bitumen surface was potentially dangerous and should have paid more attention to her driving and kept a proper lookout for the bitumen edge when she veered over towards the left. The defendant also was negligent in her driving in applying the brakes heavily instead of simply trying to gently steer the vehicle back onto the

road surface.

By applying the brakes heavily, she caused the wheels to lock, lost control of her steering, and, when she released the brakes, oversteered to such a degree that the vehicle yawed. Even making allowance for the sudden emergency that her inattention created, I do not consider that an experienced, competent driver would have applied the brakes heavily in those circumstances or released the brakes when the steering wheel was turned hard to the right. I find that the plaintiff has proven that the accident was caused by the defendant's negligence.

3. Contributory Negligence

3.1 Introductory

The defendant's case is that the plaintiff failed to wear a seat belt, and that had the plaintiff been wearing a belt, the injuries to him either would not have occurred at all, or their effect would probably have been diminished. In order to establish contributory negligence, therefore, the defendant must prove, on the balance of probabilities:-

1. that there was a seat belt fitted to the vehicle available to be used by the plaintiff and in good working order: *Yisrael v Chanberlain John Deer Pty Ltd* (1987) 5 MVR 491; *Dawkins v Robinson* (1986) 3 MVR 77.
2. that the plaintiff failed to wear the belt so provided.
3. that had the plaintiff worn the belt, the injuries he sustained either would not have happened at all, or their effect would probably have been diminished: *Yisrael, (supra); Dawkins v Robinson, (supra). Froom v Butcher* [1976] 1 QB 286; *Ferrett v Worsley* (1993) 61 SASR 234.

In *Hoare v Rudd* (1989) 9 MVR 229 at 233 the New South Wales Court of Appeal noted that the consequences of a finding of contributory negligence based on the failure to wear a set belt were of "some seriousness", and applied the test in *Briginshaw v Briginshaw* (1938) 60 CLR 336 at 359-360 in the circumstances of that case, where the trial judge's finding depended upon inferences drawn from circumstances without the assistance of expert evidence, there having only "meagre" direct evidence on the subject. In this case there is some direct evidence, and as well, expert evidence on the topic; but it is conflicting, and I consider that it is appropriate to bear in mind certain of Dixon J's observations in *Briginshaw v Briginshaw* when evaluating the evidence.

As his Honour said, at 361-363:

> "Except upon criminal issues to be proved by the prosecution, it is enough that the affirmative of an allegation is made out to the reasonable satisfaction of the tribunal. But reasonable satisfaction is not a state of mind that is attained or established independently of the nature and consequence of the fact or facts to be proved. The seriousness of an allegation made, the inherent unlikelihood of an occurrence of a given description, or the gravity of the consequences flowing from a particular finding are considerations which must affect the answer to the question whether the issue has been proved to the reasonable satisfaction of the tribunal. In such matters `reasonable satisfaction' should not be produced by inexact proofs, indefinite testimony, or indirect inferences ... This does not mean that some standard of persuasion is fixed intermediate between the satisfaction beyond reasonable doubt required upon a criminal inquest and the reasonable satisfaction which in a civil issue may, not must, be based upon a preponderance of probability. It means that the nature of the issue necessarily affects the process by which reasonable satisfaction is attained."

3.2 Findings of Fact

I find that there was a seat belt fitted to the vehicle available to be used by the plaintiff in the rear seat. The seat belt was a lap-sash inertia roller retractor belt. The release mechanism was a button on the buckle side. When worn by a passenger sitting on the near side, the belt came over the left shoulder and a tongue fitted into a buckle fastened to the floor. I am satisfied that the belt would lock normally and not come apart when tugged and there was no sign of damage to the webbing. I base this finding on the evidence of Mr McGargill who examined the belts of the vehicle after the accident. I accept his evidence on this topic. His evidence was supported by the evidence of Mr Willoughby, which I also accept. The plaintiff's counsel suggested the possibility that the belt may have come undone during the accident. Mr Hall's evidence was that seat belts may come undone when connected in the normal fashion when placed under greater than normal strain. He said, in his statement, Ex P14, that seat belt failures are not uncommon. In evidence-in-chief, he was asked (Tr.p83):

> "Have you been in a situation where a seat belt, a retractable sash seat belt, has been able to be connected in the normal fashion and then pulled without it coming apart but then pulled under greater weight and it does come apart?---Yes.
>
> What has caused that?---That normally occurs when there is foreign material down in the locking mechanism that prevents full engagement of the latch into the tongue. With just partial engagement under a steady normal body-type force against the belt the latch can hold, but when subjected to sudden jerks of greater magnitude in force it can let go."

The vehicle inspector, Mr McGargill had also experienced this type of problem. He

conceded that he had tested belts which had pulled out only with difficulty:

> "You've tested seat belts before and put the buckle into the clip. Is that right?---That's correct, yes.
>
> And I think on some occasions they've pulled straight out again?---Yes.
>
> And some have pulled out with some difficulty but they've still pulled out again?---Yes, that's correct."

It was submitted by Mr Riley QC for the plaintiff that those who tested the seat belts subsequent to the accident did so after the vehicle had been removed from the accident site and interfered with in substantial ways. However that circumstance is hardly likely to have improved the efficiency of the belt.

Some criticism was directed towards Mr McGargill's inspection but, I accept, notwithstanding this criticism, that he tested the belt. However, he conceded that he would not have placed the belt under much strain. He said (Tr.271) that he gave the belt a "normal tug", not a "very big tug". This was the limit of the test he applied. Mr Willoughby conducted the same test. He said (Tr.283) that he gave it "a short tug, not with any great force..."

The evidence of the defendant's expert, Mr Gillies, was that such events could occur although they were rare. He said that in such cases, the tongue did not properly fasten into the buckle. When the tongue fastened properly, there would be a noticeable "click" sound; if the belt did not fasten properly, the "click" would be absent and this would be noticeable to an alert passenger. (Tr.pp 219, 220, 226). He agreed in cross-examination that it is possible for a seat belt to "connect and be difficult to dislodge, but able to be dislodged with extra force, or greater force" (Tr.p 226). He considered such events would be "infrequent". It is not clear whether or not Mr Gillies was saying that such failures could occur even if there had been a noticeable "click". Mr Hall was not asked about the "click" sound. His evidence was left unchallenged.

I prefer the evidence of Mr Hall. I find that it is possible for a seat belt of this type to appear to be properly done up, and to come apart if there is sufficient strain placed upon the belt. I am not satisfied that the tests conducted by Mr McGargill and Mr Willoughby eliminated this possibility. No scientific tests appear to have been undertaken to the belt, and no explanation has been given for this. In those circumstances I am not able to find that the defendant has proven, the burden being on the defendant, that the belt available to be used by

the plaintiff was in good working order.

In case I am wrong about this finding, I have reached conclusions on the other issues relating to contributory negligence and I consider that it is desirable that I should record my findings.

There is a serious factual contest between the parties as to whether or not the defendant has proven that the plaintiff was not wearing a seat belt at the time of the accident. After the accident, the defendant found herself upside down in the car, caught in her belt. The rear window of the vehicle had broken, and the plaintiff was lying on the ground underneath the overhang of the rear portion of the car, part in and part outside the back window of the vehicle. The evidence of Mrs Dingle, who was on the scene very shortly after the accident, was that the top part of the plaintiff's body was around and to one side of the vehicle, so that his body made a "U" shape with his legs. The plaintiff was lying more on his right side, partly facing towards the car. The rubber seal from the hatch window was around his legs, between the hips and the knees, like a hoop. Only the lower parts of his legs were inside the vehicle. She was unable to see any seat belt on or around any part of the plaintiff, and she was unable to say that she had a look at the plaintiff's legs, until they slid out when the vehicle was righted a short time later. The evidence of Mr Dingle was that the plaintiff's head and the top part of his body was trapped underneath the roof of the car. He agreed that the plaintiff's legs, from the calf down, were still inside the rear of the car, and the rest of his body was twisted in a foetal position, ending up underneath the roof. It was because the plaintiff was trapped that the decision was made to right the vehicle. He did not see a seat belt in the vicinity of the plaintiff. I do not think that it is necessary for me to resolve the differences in the observations of these witnesses. I find that the plaintiff's body was in a foetal position, with his legs protruding into the rear window, that wrapped around his legs was the rubber seal of that window, and that at that time he was not wearing a seat belt, and nor was one wrapped around his legs. I am unable to conclude from this evidence that he was not wearing a belt at the time of the accident. There are two other possibilities. First, the forces of the accident may have caused the plaintiff to come out of the belt. Second, the plaintiff may have released the belt after the impact.

The only other eyewitness account as to the plaintiff's position before the vehicle was righted is to be found in the answers to interrogatories of the defendant. According to her, she yelled for the plaintiff and heard nothing. She got out of her belt and called out again to

the plaintiff, but got no response. She looked through the space between the two head rests. She could see the plaintiff's legs up to his waist. He was motionless. She tried to get out of the car, but could not open the doors or roll down the windows. She screamed for the plaintiff, and heard him moan. She sounded the car horn for help. She continued to try to open a door or break a window. She heard voices asking if anyone was injured. She told the people that her husband "was halfway in and out of the car through the hatch." Shortly after that, the vehicle was righted. In answer to interrogatory 8, the defendant says:

> "I did not see whether the plaintiff was wearing a seat belt at or shortly before the time of the accident. Immediately after the accident and while the car was resting on its roof, I tried to get to the plaintiff in the back seat. Although I could not reach him, I clearly remember looking into the back seat and seeing his legs held together suspended in the air. I believe that his seatbelt kept the plaintiff from being thrown completely through the hatchway and that the seatbelt was holding his legs together suspended in the air unnaturally."

I observe that the defendant does not purport to say that_σηε_σαω the plaintiff's legs held up by a seat belt. The defendant had been unconscious for a short time. She was likely to have been disorientated and upset. It was suggested by counsel for the defendant that she may have seen the rubber seal around his legs. However she does not mention seeing anything around his legs. Neither of the Dingles could see the ends of the plaintiff's legs. If his legs were "held together suspended in the air", it was submitted by the plaintiff's counsel that both experts accepted that the likely cause of this was a seat belt which had been worn prior to the accident. Mr Gillies was asked:

> "If it be the case that at the end of the accident, that could only occur, could not it, if he had been wearing a seat belt before the accident?---Almost certainly, yes."

Mr Gillies did not go so far as to suggest that there was no other possible explanation for the defendant's observation that the plaintiff's legs were "held together suspended in the air."

The plaintiff's expert, Mr Hall, in his statement (Ex P14) says:

> "If Mrs Rosecrance's description of the plaintiff's feet being entangled in the seatbelt after the accident is correct, this could not have happened unless he was wearing a seat belt."

However, this assumes that what was causing the plaintiff's legs to be held together

suspended in the air was the seat belt. Nevertheless assuming the defendant's observation is reliable, it is difficult to imagine what else it could have been. But, if the plaintiff's feet had been entangled in the seat belt, it is improbable that, when the vehicle was righted, his feet would not have been still caught up. If this had happened it is remarkable that this would not have been noticed by either of the Dingles. Indeed Mrs Dingle observed that his legs "appeared to slide out" when the car was rolled over. (Tr.p154).

Both experts were asked about the possibility that the plaintiff may have come out of the seat belt during the rollover. Mr Hall (Ex P14) states:

> "One possibility is that his shoulder came free of the seat belt during the rollover, allowing some slack to be given to the lap belt, causing him to slide out of the rear of the vehicle."

However in cross-examination, Mr Hall conceded (Tr. p118) that given the dynamics of the rollover and the position in which the plaintiff was found after the accident, that he could not have been found in this position after the vehicle came to rest if he had been wearing the seat belt. When recalled for further cross-examination, he repeated this opinion (Tr. p186). Mr Gillies considered that it was improbable that the plaintiff could have escaped from the seatbelt, had he been wearing one, in the circumstances (Tr.pp224-225). I accept these opinions.

I conclude from this that it is unlikely that the plaintiff was forced out of the belt by the dynamics of the accident. I prefer the evidence of Mr Gillies on this point. Mr Gillies observed that in order to be forced out of the belt towards the roof, the knees would be required "to in effect bend backwards to curve the other way to go through underneath the belt." (Tr. p224) I consider that the defendant's observations concerning the position of the plaintiff's legs after the accident are not reliable. I find that the plaintiff was not forced out of the belt, assuming it was functioning properly.

I consider that it is most unlikely that the plaintiff undid the belt himself. The main evidence which suggests this possibility is the position the plaintiff was in when found by Mr and Mrs Dingle. Professor Simpson's evidence was that the plaintiff's injuries were such that this possibility was unlikely, but not impossible, based on the eyewitness accounts which suggested that his brain functions at that time were relatively well preserved. (Tr.p258). The defendant's account, as contained in her answers to interrogatories (Ex P3, annexure A, paras 8, 9 and 10) suggest that the plaintiff was not conscious until after the Dingles arrived on the

scene, and she did not see him moving. Mr Gillies' opinion was that the plaintiff ended up in the foetal position because the vehicle's last movement, after ending up on its roof, was to turn slightly on the axis of its roof causing the plaintiff (who had fallen out of the hatch window as the vehicle came from its side to the roof), to be wrapped around the corner of the window. (see Tr.p214). Mr Hall's opinion as to the last movements of the vehicle before it came to rest were consistent with Mr Gillies' theory. This is a reasonable and plausible explanation of how the plaintiff ended up in this position. I am satisfied on the balance of probabilities that the plaintiff did not undo his belt after the accident. The positioning of the release mechanism of the belt makes it very unlikely that the belt could have been released accidentally during the accident. It is possible, but unlikely, that the plaintiff deliberately undid the belt in the interval of time between the vehicle leaving the bitumen surface and the vehicle coming to rest on its roof. I am satisfied, on the balance of probabilities that the plaintiff was not wearing his seat belt at the time of the accident.

The plaintiff contended that, notwithstanding this finding, I ought not to find that the defendant had proven that the plaintiff's injuries would not have happened at all, or would have been substantially diminished. Although the plaintiff suffered injuries other than his head injury, notably some cracked ribs and a fracture to the right scapula, it was not suggested that these injuries were of any significance for the purposes of this argument. The evidence does not satisfy me that had the plaintiff worn his belt, these injuries would not have occurred; nor were they, medically, of any real significance. These injuries could have been inflicted at any part of the rollover and were consistent with being caused by loose or loosened objects from within the vehicle. The argument of counsel for the defendant was that had the plaintiff worn his belt, it is inconceivable that he would have suffered such massive fractures to the head as he in fact did. Counsel for the plaintiff contended that not only were such fractures possible in the circumstances, but highly likely.

In order to deal with the parties' contentions it is necessary to consider the evidence in some detail. The experts are agreed that the fractures must have been caused by the front of the head suffering a heavy blow by coming into contact with a very hard object. Professor Simpson considered that the fractures were probably caused by a single blow to the left side of the forehead, although he could not rule out the possibility of there being multiple impacts (Tr. p246, 251-252). He considered that the object was possibly a "vertical structure", and "something fairly hard." The plaintiff's blindness was caused at the same time and as a direct

consequence of this blow or blows. There is no dispute that the horrific consequences to the plaintiff of the accident are causally related solely to this injury. Professor Simpson saw no signs of a "dragging injury". He considered that the wound at the primary fracture sight was probably "something like an angle edge which shattered in the frontal bone." (Tr. p251). He described the force required to shatter the skull as being "about 4 or 5 kilo-newtons which is something like a blow with a sledgehammer". There is no evidence as to what this means except in general terms; he described the force as "very severe". He was asked if it was possible to express the force in terms of the forces of gravity. He said that it was wrong to try to equate impact force with gravitational forces and not correct to try to deduce from impact force to acceleration (the measure of gravity) (Tr. p254). Notwithstanding those observations he made some observations in which he did make comparisons with G Forces. He conceded he was not qualified to offer an opinion as to the likelihood of such an injury if the forces of gravity applied to the car did not exceed 5Gs. He observed that the forces of the impact to the head was related to the time over which the force is exercised and whether the head is free to move at the time of impact or not (Tr. p257) but this was not further explored. The end result is that based on Professor Simpson's evidence, I am satisfied that the injury could well have been caused by a single blow to the left forehead by the head impacting with considerable severity with a hard object, probably with an edge, and probably a vertical structure relative to the head at the time of the impact. I am unable to make any findings which are more precise than this; in particular I consider that no conclusions can be drawn as to the amount of force required by making comparisons with the G forces of the vehicle during the rollover.

The plaintiff submitted that the head injury was caused by the plaintiff's head striking the edge of the hard roof rail on the left side of the vehicle. As the vehicle moved in its clockwise yaw across the road, the plaintiff would have been forced to the left hand side of the vehicle. The plaintiff would probably have turned his head to the left to look towards the direction of travel, and his natural instinct would have been to lean away to his right. The plaintiff's head struck the roof rail when the vehicle tripped, as its near side wheels dug into the dirt verge. Because the plaintiff was 6' 3" in height, his head, immediately before the trip, was likely to have been in about the centre of the vehicle. The sudden deceleration of the vehicle, caused by the trip, generated a sufficient difference in momentum between the vehicle and the plaintiff to cause the plaintiff's head to hit the roof rail with considerable

force. Mr Riley QC submitted that the evidence did not support the conclusion that the plaintiff's head struck any object outside of the vehicle, such as the ground, nor any object which may have intruded into the vehicle through the window; nor did the evidence support the conclusion that the plaintiff's head injury was caused by the roof of the vehicle either during the roll-over or by the roof landing onto his head after the plaintiff had fallen through the hatch window. The plaintiff submitted that the evidence supported the conclusion that, had the plaintiff been wearing the belt, it would not have offered any significant restraint to the head and upper torso from sideways or lateral movement. Consequently the head injures would have occurred in precisely the same manner, whether or not the plaintiff was wearing a seat belt. Alternatively Mr Riley QC submitted that the defendant had not demonstrated that this sequence of events was unlikely or less likely than any other hypothesis. I accept this alternative submission.

The opinion of both experts was that the only object inside the vehicle sufficiently hard to have caused a fracture to the skull was a roof rail. Mr Gillies suggested that the roof rail to the hatch window was also a possibility but was unable to express any degree of preference for one as opposed to the other. (Tr. p261). The opinion of Mr Gillies was that the rear hatch window was probably broken when the vehicle landed on its roof, after the initial trip. I accept that opinion. Both experts were agreed that the vehicle first landed on its roof, then onto its wheels, then onto its left side, and finally onto its roof, assuming the vehicle rolled one and a half times. Both experts agreed that the vehicle could have rolled either one and a half times or two and a half times, and both regarded both possibilities as equal.

The vehicle was also moving clockwise through the roll(s). The description of the roll(s) does not support the conclusion that the plaintiff was ejected through the hatch window. I find that he fell through it, after the vehicle came to land on its roof at the end of the last part of the roll(s). The evidence does not suggest that this was the time he suffered his head injury. I consider an impact with the ground is a most unlikely explanation. The photographs taken at the scene (P12) show that the ground was soft and sandy. A fall to the soft sandy ground does not seem likely, and does not fit Professor Simpsons' description of the kind of object likely to have caused this injury. There is a possibility he may have hit a rock, but if this occurred, it was more likely to have occurred when the vehicle fell onto its side.

There is evidence that the nearside passenger window may have been open. Given the plaintiff's height, and the absence of any dragging injury to the face I think it is more likely

that his head hit the side rail, probably at the time of the trip when the vehicle was travelling at its greatest speed. This was the opinion of Mr Hall, which I consider to be very plausible. I also accept Mr Hall's evidence, which was not successfully challenged, that the seat belt would have offered only minimal restraint to the plaintiff's head and upper torso when lateral forces were applied. The main difference in opinion between the experts is that Mr Gillies' view was that the plaintiff's head would have been too close to the side rail, given the forces acting upon his body moved him to the left, to generate sufficient difference in momentum to cause such a severe head injury
(see Tr.p210). However Mr Gillies did not deny that the natural reaction of a passenger in the plaintiff's position before the trip would have been to lean to the right (Tr. p273); nor did he suggest that such a movement was not possible. Mr Hall considered that "the potential for very heavy impact to the head at the roof rail is identical, whether the person is belted or unbelted." It has not been demonstrated that this opinion is wrong. Another possibility canvassed at the trial was that the injury may have occurred by the roof falling onto the plaintiff's head after he fell through the hatch window. Neither expert thought this explanation very likely. The flat surface of the roof is not consistent with Professor Simpson's evidence: see also Mr Hall (Tr. p172).

I conclude that the defendant has not established on the balance of probabilities that had the plaintiff been wearing his seat belt that his injuries would not have occurred or would have been less severe.

Accordingly I am unable to find that the defendant has established, on the balance of probabilities that the plaintiff was guilty of contributory negligence which caused or contributed towards his injuries.

3. DAMAGES

3.1 The Plaintiff's pre-accident life

The plaintiff was born in Detroit, Michigan, in January 1937. His parents were teachers. He married the defendant whilst he was an undergraduate sociology student at Wayne State University, Detroit, in about 1956. The plaintiff and the defendant had three children; Ann, born 11 September 1956, now an environmental chemist; Dr John Charles, born 18 January 1958, now an assistant research scientist with the Bio-mechanics and Ergonomics Faculty of the University of Iowa; and Bill, born 5 December 1960, an industrial engineer.

The plaintiff graduated with a B.A. in Sociology in 1960. Between 1956-61 he was employed as a quality control supervisor and carboloy products and assembly line operator for Chrysler. In 1961 he obtained employment as a welfare supervisor for Wayne County, Michigan, a position he held until 1965. Between 1965-68, he was employed as Juvenile Court Officer at Wayne County. Whilst working for the County he had a second job as a college instructor at Macomb College, Mount Clemens, Michigan.

In 1968 the plaintiff and his family moved to Santa Barbara, California. They purchased a home at Montecito, nearby. The plaintiff obtained employment as an Adult Probation Officer for Santa Barbara County, a position he held between 1968-1980. In the meantime, the defendant, who had obtained qualifications as a teacher, pursued that career.

In 1980 the plaintiff began a Master's Degree in Sociology at the University of California. He obtained this degree in July 1982. He then pursued his doctorate, obtaining his Ph.D. in Sociology in February 1984. It normally takes 6 years to obtain both of these degrees. During this period the defendant's income supported both parties; in addition, the plaintiff was engaged in investing in real estate, stocks and bonds.

At the age of 47, the plaintiff obtained his first academic position as an Assistant Professor at South-Eastern Louisiana University, Hammond, Louisiana, in 1984. He and his wife moved to Louisiana, the defendant taking leave of absence from her teaching position. The plaintiff was interested in the sociology of gambling. In 1985 his first book on that subject, *The Degenerates of Lake Tahoe: A Study of Persistence in the Social World of Horse Race Gambling* was published. After a year at Hammond, the plaintiff obtained a position as an Assistant Professor at the University of Nevada, Reno, in 1985. The defendant was unable to accompany him. She returned to their home in Montecito to resume her teaching career.

The plaintiff and the defendant remained very close. They communicated regularly by phone. The plaintiff flew to Santa Barbara each Thursday to spend as much time as he could with the defendant, returning to Reno on the following Monday. They were devoted to each other, and had an enjoyable sexual relationship. The defendant was interested in the plaintiff's work and assisted him in his research. They enjoyed spending days in libraries together. She assisted him in developing his public speaking skills, and to overcome a slight stammer. The plaintiff's love for horse racing and the study of gambling took them often to the track. They enjoyed dinner parties, conversation, and having their children and friends visit them.

They travelled extensively, although frugally. They had been to every state in the USA, Canada, Mexico, the Carribbean, New Zealand, Fiji and Australia.

The plaintiff also led an active physical life. He performed callisthenics daily, swimming usually twice weekly, bike-riding, camping, walking, running, hiking in the mountains, and occasionally went skiing.

He was physically very fit. Indeed he had climbed Ayers Rock immediately before the accident. He enjoyed going to the movies, football and basketball games, and to the races.

In 1988 the plaintiff was promoted to the position of Associate Professor. In the same year, his second book, *Gambling Without Guilt: The Legitimation of an American Pastime* was published. The plaintiff was a prolific writer. He had had many articles published between 1985 and the time of his accident in 1988, mostly in respectable journals. By this time he had developed both a national and international reputation as one of the more prolific and respected scholars in the field of the sociology of gambling. He received invitations to speak at conferences. He enjoyed this lifestyle and his work immensely. It gave him intellectual stimulation, national and international recognition, work satisfaction and good remuneration. By the time of his accident he had almost completed a text book, *Probation and Parole*. Because of the accident, this was never published.

Around the home, the plaintiff did some yard work and would clean up the kitchen after dinner parties. The defendant did most of the housework.

The plaintiff enjoyed lecturing, and was well-regarded amongst students and academics at the University of Nevada. He was on track to obtain a fully-tenured position as a full Professor in the near future. Although his specialty was a narrow one, with only a handful of established authorities in it, of which the plaintiff was one, it was an area of increasing interest to the commercial world. Governments and private enterprise sought advice from experts in this field on an increasing basis, as more gambling facilities were being offered, or proposed to be offered, to the public in various parts of the world.

Clearly the plaintiff had an impressively enjoyable lifestyle, with much to look forward to in the future, including strong prospects of further personal advancement.

3.2 Injuries sustained and treatment received as a consequence of the accident

The immediate injuries are described in the report of Dr Parameswaran, (Ex p6) some of which I have already mentioned. In addition his nose was severely lacerated, he had severe peri-orbital haematomas on both sides, and retro-orbital haematomas on both sides. His

pupils were dilated in a fixed position. The eye-balls protruded and his lids could not be closed.

After he had recovered sufficiently from shock, he was operated upon at the Alice Springs Hospital. The depressed fractures were elevated, the wounds to the nose and lip cleared and sutured, and the left eyelids approximated. Post operatively he was stabilized before transference to the neurosurgical centre of the Royal Adelaide Hospital, under the care of Professor Simpson.

Upon arrival at the Royal Adelaide Hospital, the plaintiff was still unconscious. On 22 July, Professor Simpson explored the head wound and evacuated a surface clot in the extradural space. A tracheostomy was performed. Over the next two days, his conscious state slowly improved. He had a serious degree of paralysis on the left side. On 25 July 1988 a tube was inserted into the brain to drain off fluid to control high intra-cranial pressure. This was successful. He developed pneumonia but recovered. On 11 August, an extensive operation was carried out by Professor Simpson and Mr David J David, an eminent craneo-facial surgeon. The damage to the base of the skull was repaired, tissue grafted, and fractures of the jaw bones put into position and fixed with plates. The craneo-facial fractures were reduced and internally fixed. It is not necessary to go into the full details of this lengthy and complicated procedure. Those details are to be found in Exhibits P23 and P25, (the reports of Professor Simpson and Mr David), which I accept. He received treatment also from Mr Tomich from the Ear Nose and Throat Clinic, J E Gilligan from the Intensive Care Unit, Dr Thomas from the Clinic Biochemical Department and from Dr. M. Hammerton of the Ophthalmological Clinic. At this stage he still needed secondary surgery to recontour his face. He was left completely blind, with left hemiplegia and diabetes insipidus. Each of these conditions were the direct consequence of the fractures of the skull. He responded at that stage by writing notes to his wife. He was able to respond to orders with his right arm and leg, but not his left.

In the meantime, the plaintiff's sons had flown to Adelaide. About two weeks after the accident, Dr John C Rosecrance began to provide physical therapy to the plaintiff. This was an area in which he had expertise, both academically and practically. He taught the defendant and his brother how to position the plaintiff to avoid contractures. The three of them worked in shifts, doing a range of motion exercises, talking to the plaintiff, and generally caring for him. The plaintiff lapsed into and out of consciousness. Some of the procedures he endured

were very painful. The family members, particularly the defendant, spent many hours with him daily. They were encouraged to do so by Professor Simpson, and to collaborate with the hospital's own team of physiotherapists. Professor Simpson said that he believed that the family were helpful in the plaintiff's recovery, particularly as he was blind, and to assist in his making a good psychological recovery. He regarded this participation as a necessary part of his treatment, and greater in time and quality than one normally would expect from family members. This evidence was supported by Mr Loveridge, a clinical care registered nurse employed by the hospital and who looked after the plaintiff at the time. I accept this evidence which was not contested. By the beginning of September the plaintiff had recovered sufficiently for him to be transferred to an appropriate rehabilitation centre in the United States, and he was transferred to Rancho Los Amigos, Los Angeles, under the care of Professor J Perry on 9 September.

Whilst at Rancho Los Amigos Dr John C Rosecrance and his wife, who is also a physical therapist, visited the plaintiff regularly. They provided him with physical therapy to prevent contractures. The therapy was quite painful, but necessary to ensure maximum use of his limbs. The plaintiff began hallucinating. Tests there revealed diabetes insipidus, hypothyroidism and difficulty with bodily temperature control. Dr Rosecrance became dissatisfied with the level of care available and in October 1988 the plaintiff was transferred to Long Beach Memorial Hospital, Los Angeles, a large acute care hospital with a rehabilitation wing for patients with head and brain injuries. Whilst there he developed heterotopic ossification of the left hip, and sleep apnoea. Tests revealed decreased hearing on the right side. After a further period at Long Beach Memorial Hospital, Dr Rosecrance decided to relocate the plaintiff to Kentfield Hospital near San Francisco. This was near to where Dr Rosecrance lived, and it enabled him to visit the plaintiff more regularly and frequently. He was transferred to Kentfield on February 16, 1989. During his stay there he developed a decubitis ulcer on his left heel, caused by being constantly bed-ridden. Dr Rosecrance made special foam boots to prevent the bony parts of the heel from coming into contact with the mattress, and he still wears them. The plaintiff began to learn to sit up and transfer from his bed to a wheelchair, with the assistance of a certified nursing assistant (CNA). The plaintiff became withdrawn and depressed, and developed contractures of the left hip, knee, shoulder and elbows. This required intensive physical therapy over the next year to correct. The extreme pain of this therapy made the plaintiff abusive and resentful. The plaintiff

perseverated frequently.

For a considerable period he denied his blindness. It was thought he had partial panhypopituitarism. On July 19, 1989, the plaintiff was transferred to the Rehabilitation Institute at Santa Barbara, where he came under the care of Dr Robert S Djergaian, the Associate Medical Director of the Institute, and Medical Director of the Brain Injury Program. The basic goals of the Institute are to optimise medical management, return patients to the highest possible level of function, educate patients and their families about the specific disabilities, provide emotional support, and, wherever possible, to return patients to their homes and families. At this stage the plaintiff was still receiving all food and medication via a gastrostomy tube. He was incontinent in both bowel and bladder. He could transfer with minimal assistance, and ambulate short distances with physical assistance. His self care activities needed moderate to maximal assistance. His level of alertness varied. He fatigued easily. His attention was limited and he was irritable. He could follow some simple instructions, but not others. He could give his name, but was not oriented to time or place. He had limitation of movement, especially at the shoulder, knee and ankle, and he had pain throughout the left upper and lower extremities. His left upper extremity was non-functional and his right lacked co-ordination.

Dr Djergaian directed a team of professionals including a physician, physical therapist, occupational therapist, speech therapist, rehabilitation nurse, therapeutic recreationist, neuropsychologist and social worker. He was treated on a daily basis.

The plaintiff was discharged home on 1 June 1990. He had made a significant recovery, but still required significant assistance for all activities. He was able to take food and fluids by mouth. He required minimal to moderate assistance for transfers. He was not functionally ambulating. He required assistance with dressing. He was using an external catheter and was continent. His attention had improved, but there was still a lot of confabulation, limited attention and markedly impaired short-term memory. He could not problem solve and was disoriented. He was frustrated easily, did not tolerate pain well, and had intermittent episodes of verbal aggression.

The plaintiff was discharged to a rented home in Montecito which was accessible for a wheel chair. He needed 24 hours a day attendant care. Various equipment was obtained for him, including a standing frame, exercise bicycle, exercise mat, bolster, upper extremity ergometer, transfer bench, rolling commode, appropriate shower hose, grab bar, electric bed,

external catheters, electric blanket, as well as special clothing to help control his body temperature.

After his discharge home, he was treated as an outpatient. Further problems ensued. He received psychiatric care for depression. In January 1993 he slipped during physical therapy and sustained a fracture of the left hip, requiring open reduction and internal fixation, followed by a short period back at the Rehabilitation Institute between 15 and 26 January 1993. At home he was provided with regular therapeutic activities, including aquatics. He started attending some classes at the local college. But he still had significant memory impairment, difficulty with new learning and difficulty with all aspects of executive functioning. IQ testing showed a significant drop to the average level. He was diabetic, and required a special diet. He needed to be prompted a lot. He drooled at the mouth and still had periods of incontinence.

In 1994 the plaintiff and the defendant purchased a new house in Montecito which was wheelchair accessible. The plaintiff still resides there with the defendant. Some modifications have been made to the house to meet the plaintiff's needs and further modifications are proposed. The defendant has, and still does, spend a considerable amount of her time caring for the plaintiff and supervising the CNAs who look after him each day.

The plaintiff's condition has now stabilized to a considerable degree. Although there is still a slight chance of further improvement in the immediate future, there is also a significant chance that his condition will also worsen in the long term, and perhaps to such a degree that he will ultimately have to be permanently institutionalised. The plaintiff has permanent brain damage which has a number of important consequences to him. In addition, he is permanently blind. It is the combination of these conditions which magnify the effects of his very significant disabilities, all of which are permanent. These disabilities include: double incontinence and left-sided hemiparesis with weakness on his left side. His left foot falls down and his left arm will "wander" unless restrained; he is generally confined to a wheelchair, but has a limited capacity to walk with physical assistance. His gait is markedly abnormal; he has dysphagia; hypothermia; diabetes; chronic aspiration; partial paralysis of the vocal chords; he suffers from haemorrhoids, and, on occasions, from decubitus ulcers. He has left sided facial weakness, which causes him to be dysarthric and have diminished breath; he continues to have some pain in the head, left arm and left leg, although not as severe now

as in the past. Nevertheless physical therapy is on-going and still painful. He has a painful dental condition. He is unable to clean his teeth properly which causes gum disease. He will need periodontal surgery within 3 to 5 years, which may require hospitalisation. He suffers from depression on a frequent basis. Dr Atkinson considers his depression to be an organic affective disorder of moderate to severe magnitude. At times he is labile and seeks emotional comfort through the intimacy he can achieve with the defendant. When at his best cognitively, he is able to participate in planning to reduce these problems. He is capable of further improvement if given sufficient external cognitive support and assistance by his caregivers. His depression is severe. He had, as Dr Clarke put it, "much to be depressed about. He is in the worst situation he could be in. He had much to lose in terms of his career, his family, his physical condition and he has lost most of those things. I believe that he is generally aware of the level of his loss." (Ex P26).

Dr Djergaian believes that the plaintiff is able to appreciate his physical loss and, from time to time, the loss in his mind as well. I accept these opinions. He is still often disoriented in time, and sometimes speaks as if he were still actively teaching. This was evident when he gave evidence before me (Ex P78, p922).

The plaintiff's life expectancy has also been reduced. It was agreed between the parties that the amount of reduction is between 5% to 10%. As at the time of the trial, his future life expectancy is between 18 and 19 years. If he is required to live in a nursing home in the near future, this would point to the lower of the two figures; if he were to remain at home, it would point to a longer life span. I am satisfied on the evidence of Dr John Rosecrance, that the plaintiff will remain at home and be cared for either by the defendant, or should she be unable to do so, by Dr Rosecrance, for as long as possible. I am satisfied that, on the balance of probabilities, this means, effectively, until his death. Nevertheless I consider that there is a significant chance that the plaintiff may be forced into institutional life because of his condition deteriorating. I assess this chance at about 30%. This means that this chance could well affect his life expectancy by a small margin in the future.

A significant loss to the plaintiff is the inability to enjoy his pre-accident occupation. The plaintiff has completely lost his earning capacity, and with it, the lifestyle he had enjoyed. In addition, although the defendant has remained loving and devoted to him, he has lost the ability to enjoy marital relations for both physical and cognitive reasons, although he still has sexual desires.

He has also facial weakness and scarring, and is sensitive to his post accident appearance.

On the other hand, life is not all gloom and doom. On days when he does not feel depressed, he maintains an interest and love for music. He is even able to memorize the lyrics of some popular songs, and sings them himself. He enjoys listening to television, in particular, "Jeopardy", a popular quiz show. He has an excellent vocabulary, and better than average general knowledge, despite his short term memory loss. His claim to be able to answer most of the questions on "Jeopardy" is supported by other witnesses. He seems to get on reasonably well now with his caregivers, although he says that he would prefer not to have them. Miss Handelman, one of his attendants, is close to him as a friend. Despite his depression, he has maintained a somewhat grim and dry sense of humour. He is taken ten pin bowling and fishing occasionally, and sometimes goes out to lunch. He enjoys occasional outings to the movies, or to lectures. He likes to play games such as "Trivial Pursuit". He can still have intelligent discussion to some degree, but the opportunities are limited. He is able to enjoy to some degree now the aquatic side of physical therapy in the pool at his home three times a week, or at a pool elsewhere. Although he enjoys this, he finds it boring doing exercises. He participates in other physical therapy activities three times weekly. These include stretching, ranging and walking activities. He rides his exercise bicycle daily. Yet he still requires 24 hour a day supervision. He has not been able to learn braille. He is often depressed and withdrawn. He is able to enjoy recorded books and magazines for the blind. He attends the Braille Institute and does various courses it runs; current events, sports and travel for example. He will need regular medical attention in the future, particularly because of upper respiratory tract infections and urinary tract infections which are likely to require 10 days to a fortnight per year in hospital. He now has a specially adapted van to enable him to be transported around without having to transfer him out of his wheelchair. On the other hand, temperature control is still a major problem for him, and it is necessary for him to be in a controlled environment most of the time which is warmer than most would find comfortable. If his body temperature drops, this affects his level of function and cognition. He becomes less active, more withdrawn and is not able to interact or communicate as well. This limits the extent to which he is able to enjoy his residual capacities.

I have mentioned his short-term memory loss, but there is also a significant loss of long-term memory. Dr Djergaian described this loss as one where he remembers "bits and pieces". His pre-accident memory is not complete; what he has retained is not totally as

accurate as it should have been; and it is variable in the sense that it is inconsistent from day to day. His brain injury makes it difficult for him to deal well with excessive stimulation; it is hard for him to process a number of different stimuli simultaneously. Exposure to excessive stimulation would probably result in withdrawal; he is not capable of complaining about this himself so as to reduce the level of his stimulation. Alternatively, excessive stimulation could cause him to become very agitated, especially verbally.

Because of his general lack of mobility, his bones have less calcium in them; they are weaker, and they are more prone to stress than in a normal person. He has less lung capacity, and is more prone to pneumonia. Dr Djergaian recommends more walking to improve these conditions.

He does not sleep well, and tends to throw off his blankets at night. It is not medically advisable for him to use sedatives. He is also hyperphagic. The brain injury has altered his ability to know when he has had enough to eat. Consequently he constantly wants food; this is controlled by dieting. He finds the diets boring and does not enjoy his food.

He attends church every Sunday, and since the accident has been confirmed. He was not a regular churchgoer prior to the accident. He appears to have obtained some comfort from his religion.

There is no doubt that the care that he is receiving at home is superlative, and because of that he is still able to enjoy his life to a degree, and, I should say, to a far greater degree than if he were to be confined to a nursing home facility. I will deal with the comparisons between his present life-style and what he may come to expect in a nursing home facility later. Suffice it to say that although he may continue to enjoy much of what he is presently able to enjoy, there is a significant difference in quality of lifestyle, not the least of which will be an inability to enjoy to the same degree such of the pleasures of his marriage (particularly the companionship) as are presently available to him. There is a risk this may yet occur, and I take that risk into account in assessing damages for his future pain and suffering and loss of enjoyment of life.

3.3 Damages for Pain and Suffering, Loss of Amenities and Loss of Expectations of Life

In summary, the plaintiff has had significant pain and suffering since the accident, which has slowly diminished to a tolerable level and with which he is now able to cope. He will continue to have pain in the future, which at times, will be significant. He has lost nearly all,

but not quite all, of his amenities of life. Mr Riley QC likened his situation to that of a quadriplegic. The analogy is apt, given the compounding effect of his blindness and his depression. The award of damages for this head of loss must reflect the severity of his loss. He was a high achiever with much yet to be achieved; he has virtually lost it all, and is, for the most part, aware of his loss and the level of it. I bear in mind what he has endured in the past (some 7 years) and what he will endure in the future, given his probable life expectancy. I bear in mind that his life has become deprived of all usefulness, and he is condemned to suffer much of it in depression, boredom, frustration, emptiness, deprived sexually, and to a lesser degree, emotionally, physically dependent on others and in significant physical discomfort. His capacity to divert himself by any interesting, worthwhile or pleasurable activity is fairly minimal. A moderate, conventional sum, must also be allowed for his shortened life expectation. I bear in mind that my task is to make a moderate assessment which is fair to both sides, and that damages for negligence are compensatory and not punitive. Making due allowance for all of these matters, and taking into account contingencies, favourable and unfavourable, I award the sum of A$350,000 under this head. I apportion this sum as to past pain and suffering and loss of amenities, $140,000 and $210,000 for the future.

3.4 Interest on non-economic losses

The plaintiff is entitled to interest on the amount of $140,000 from the date of the accident until judgment pursuant to s84 of the Supreme Court Act.

This Court has, since *MBP (SA) Pty Ltd v Gogic* (1991) 171 CLR 657 awarded interest at the rate of 4% over the whole period: *McAuliffe v Volger* (unreported, Angel J, 29 May 1992); *Thongbai v Northern Territory* (unreported, Mildren J, 3 November 1992). I see no reason to depart from this practice in this case, and no submission was made by the defendant that I should.

Accordingly I award interest on the sum of $140,000 for the period of 7 years 5 months at 4%. I calculate this to amount to A$41,533, and award that sum.

3.5 Past Special Damages

Substantial agreement has been reached between the parties on a number of issues. First, I record that the dividing line adopted by the parties between the past and future damages under

this head and for gratuitous services and economic loss is 6 February 1995.

3.5.1 Medical Expenses incurred by the plaintiff in Australia

These have been agreed at A$141,187.89. I award that sum.

3.5.2 Medical and Household expenses incurred by the plaintiff in the USA

These have been substantially agreed. The items claimed are set out in Ex P75. In that exhibit there is a column for "Comments". The items which are not in dispute have nothing in the "Comments" column. The undisputed items total US$1,796,159.12. I award that sum. I record that the parties have agreed that I may award damages in both Australian dollars and in US dollars. This item is more appropriately awarded in US dollars.

3.5.3 Disputed Items

This leaves two items which remain unresolved. The first is a claim for US$79,750 for modifications to the plaintiff's present home. There is no dispute about the quantum of the cost of these modifications, or the need for them (Tr. p1112-1113). The second is a claim for US$360,000 for the additional cost of providing a suitable home for the plaintiff in the future. The parties agree that the quantum of this cost is US$360,000 as claimed; however the defendant submits that a deduction should be made for enhancement of his estate.

The defendant denies liability for the full amount of both items because, it is submitted, the plaintiff should be accommodated, (as from the agreed date, 6 February 1995), in a skilled nursing facility. However, the defendant did not deny that it was liable to pay some amount.

For the reasons which appear below, I am satisfied that the plaintiff's damages should not be calculated on the basis that he should be accommodated in a skilled nursing facility.

By agreement, these items are to be treated as a past expense even though modification work had not been completed by the agreed date.

I should record also that it was agreed that the plaintiff's pre-accident

home at Lemon Grove, Montecido, was unsuitable for the plaintiff after the accident; and that it was not appropriate to perform a retrofit to that home to make it suitable (Tr. p78, p1113). The additional sum of US$360,000 is the difference between the purchase price of US$660,000 for the plaintiff's present home at Monte Vista, Montecido, and the sale price of the former home at Lemon Grove, US$300,000. The plaintiff and the defendant jointly owned or own these properties. It is agreed that these sums also represent the values of the respective homes. It is agreed that it was necessary for the expenditure of the additional $360,000 to be incurred to provide the plaintiff with a suitable home.

It is the defendant's contention that the difference between the prices is not recoverable because it would result in a benefit to the plaintiff or his estate at the end of his life. Accordingly it was submitted that allowance for the present value of that benefit had to be made in the award. Further, as the property was jointly owned, the plaintiff could recover only his half share of the capital outlay, appropriately adjusted to make allowance for the present net value of that benefit. Further, the defendant submitted that a further allowance had to be made to cover the possibility that the plaintiff may be forced into a skilled nursing facility, at some time in the future. Calculations were prepared making, it was submitted, appropriate adjustments depending on whether the defendant would become so institutionalised within one year or 10 years.

In support of this contention, counsel for the defendant referred me to a number of authorities, which he submitted were all one way. First, I was referred to *Frankom & Anor v Woods* (Court of Appeal, New South Wales, unreported, 1 October 1980), where Glass JA, with whom Hope JA agreed, said that it is proper for the defendant to require the plaintiff to bring into account any capital gain which may enhance the value of his estate and which may have accrued to him in compensating him for his needs. In that case no such allowance had been made by the trial judge in respect of expenditure of $70,000 to adapt a house to meet the plaintiff's special requirements. The Court of Appeal held that no error had been made by the trial judge. Only

some of the improvements would have represented added capital value, viz., a pool, garage and airconditioning. Other improvements such as concrete ramps, special switches and the like would have represented liabilities. The Court found that only $25,000 of the expenditure would have represented a capital asset in the plaintiff's hands at present. The present equivalent of that sum over the plaintiff's lifetime was only $2,200; however it only had that value upon the assumption that the value of the additions was retained over the plaintiff's life. Having regard to the evidence concerning the life span of the shed, airconditioning and the pool, the Court held that it had not been demonstrated that any credit should be given. The defendant distinguished the actual result in that case on the following bases. First, the enhancement of value does not come from the cost of alterations. It was not suggested that the $79,750 spent on alterations added to the property's value. I note a similar approach was taken in *Marsland v Andjelic* (1993) 31 NSWLR 162 at 176.

Next the defendant referred to *Roberts v Johnstone* (1988) 3 WLR 1247. In that case the award of damages included a sum of £28,800 for the cost of purchasing and converting a bungalow suitable for the plaintiff's needs. The Court of Appeal held that the damages to be awarded should not be the net capital cost of the purchase, but the additional annual cost over the plaintiff's lifetime of providing the home; that the annual cost was to be taken at 2% of the net capital cost; that no reduction was to be made for any betterment not required to meet the plaintiff's needs; that the full capital cost of any conversion works to adapt the property were to be awarded save in so far as they enhanced the value of the property. The end result was that the plaintiff recovered £21,920 in respect of the purchase of the bungalow and £28,284 in respect of that part of the cost of converting it which had not enhanced its value. The facts were that the net difference between the capital costs of the pre-accident and post-accident homes was £68,500, and the cost of conversion was £38,284. This totalled £106,784 from which £10,000 was deducted because the plaintiff conceded that this represented the increase in value to the home brought about by the cost of the improvements, thus

reducing the total claim to £96,000. The trial judge reduced that sum, first by 10% to reflect the "Rolls Royce" elements, i.e. the new house was in a more favoured area, and was much pleasanter than it need be; and secondly he took one third off the sum so arrived at, £86,400, "as the increased charges element." The Court of Appeal held that no deduction for betterment should be made once it was established that the purchase of the new home was reasonable in the circumstances. The Court then applied the method of computation approved in an earlier decision, *George v Pinnock* [1973] 1 WLR 118, using 2% tables. The figure of 2% was chosen for much the same reasons, it was submitted, as the High Court had chosen 3% in *Todorovich v Waller* (1981) 150 CLR 402. Counsel for the defendant submitted that the appropriate discount rate was therefore 3%. It is instructive to consider the reasoning of the Court of Appeal. At pp1257-1258, Stocker, LJ, who delivered the judgment of the Court, said:

> "It seems to us, however, that where the capital asset in respect of which the cost is incurred consists of house property, inflation and risk element are secured by the rising value of such property, particularly in desirable residential areas, and thus the rate of 2 per cent would appear to be more appropriate than that of 7 per cent or 9.1 per cent, which represents the actual cost of a mortgage loan for such a property.
>
> We are reinforced in this view by the fact that in reality in this case the purchase was financed by a capital sum paid on account on behalf of the defendants by way of interim payments, and thus it may be appropriate to consider the annual cost in terms of lost income and investment, since the sum expended on the house would not be available to produce income. A tax-free yield of two per cent in risk free investment would not be a wholly unacceptable one. Mr McGregor, for the defendants, objects that if a rate of 2 per cent is adopted then the multiplier of 16 would be far too low and a substantially higher multiplier should be adopted... For our part we would reject this argument, since the object of the calculation is to avoid leaving in the hands of the plaintiff's estate a capital asset not eroded by the passage of time; damages in such cases are notionally intended to be such as will exhaust the fund contemporaneously with the termination of the plaintiff's life expectancy."

The Court then applied a rate of 2% to the full difference of £68,500 arriving at a figure of £1,370, which when multiplied by the multiplier of 16,

resulted in the amount of £21,920.

The defendant's figures follow the same general approach but the calculations are a hybrid of methods. Three per cent is used rather than 2% in accordance with *Todorovich v Waller* (supra). Hence the defendant calculated that 3% of $360,000 is $10,800 p.a. or $208 per week, which, using a multiplier of 700, arrives at a figure of $145,000, (assuming the plaintiff remains in the house for life). I do not consider that this is the correct method of calculation, because the method of calculation used in England has not been adopted in Australia. The difference in methods is explained in *Luntz, Assessment of Damages for Personal Injury and Death*, 3rd Ed, at pp267-268, and in the cases referred to, particularly *Lai Wee Lian v Singapore Bus Service Ltd* [1984] AC 729, at 738-741. The method used in *Roberts v Johnstone* (supra) did not depend on a calculation based on 2% discount tables. A figure of 2% of the sum of £68,500 was used as the multiplicand. Similarly, with the defendant's calculations, although they were converted to weekly figures by simple division of the product by 52, I am unable to understand the reasoning for this. It is one thing to use 3% discount tables; quite another to produce a multiplicand by the product of 360,000 x 3% ÷ 52. Consistent with Australian practice and authority, a calculation using 3% discount tables produces a substantially different result. Tables 6 and 7 at pp 555-556 in $Λυντζ$ can be used to demonstrate this. According to Table 7, the average life expectancy of a male aged 58 according to the Australian Life Tables 1980-82 is 18.71 years, which, as it happens, approximate near enough to the plaintiff's life expectancy according to the evidence in this case. According to Table 6, the value of the accelerated receipt of $10,000 to a female aged (x-3) on the death of a male aged x, where x is 58, and mortality is in accordance with Table 7, is $5,327 using 3% compound interest tables. Thus the value of the accelerated receipt of $360,000 would be $191,772, some $46,172 more than the defendant's calculation. A similar result may be obtained by using Table 1, which provides a means of calculating the present value of $360,000 in 18 years' time. I consider that this represents a more accurate base calculation than that

made by the defendant, assuming that the proper basis for the calculation of the loss is not the whole capital outlay, but the loss of income from the additional capital expended, or in terms of the annual mortgage interest payable if the additional capital to purchase the new house had not been available.

Additional support for the principle upon which the plaintiff is to be compensated is to be found in *George v Pinnock* (1973) 1 WLR 118 at 125; *Cadwallada v Pringle* (Supreme Court of the Northern Territory, Toohey J, unreported, 11 June 1985).

Counsel for the plaintiff pointed out that there were many reported and unreported decisions where no allowance was made for capital gains at the end of the plaintiff's life. It was submitted that the principle was not yet firmly established in Australia, and where recognition had been given to it, the Courts tended to make no allowance for it because other factors, such as deterioration, increased maintenance costs, moving costs and other costs offset the value of a capital gain which would not in any event be realised until many years into the future. This would appear to be so, but not because the principle was rejected; rather because the facts showed that compensating allowances had to be made, as in *Francom v Woods* (supra) and *Marsland v Andjelic* (supra), which cancelled out the deduction.

I accept the defendant's argument that the plaintiff is not entitled to recover a capital investment which will still be in existence at the time of his death (or at some earlier time when the property is realised) but is to be compensated for the fact that his money will be tied up in that investment until the capital sum is realized. I consider that the plaintiff is entitled to recover that sum which represents the cost of the money at a rate of 3% per annum, using 3% compound interest tables, plus an allowance for any additional costs which will reasonably be incurred in the future as a direct consequence of the purchase of a larger and more expensive home, such as additional electricity and cleaning costs on an ongoing basis. In this case, allowance for some but not all of those items has been separately made in relation to future expenses, and so it would involve duplication to consider

them under this head as well. However some items were not considered such as the probability of higher rates and taxes, or the equivalent property tax in California, for a more expensive property, higher insurance premiums for the same reason, extra realisation costs involved in the cost of realising the capital sum etc.

There is no evidence of what those items could amount to, but counsel for the defendant conceded that some allowance for these items should be made. I do not consider that any allowance is appropriate in favour of the defendant for betterment, i.e. for providing a better home in a more salubrious area, for the reasons given in *Roberts v Johnston,* (supra). I also accept the defendant's submission that, as the property is jointly owned with the defendant, the plaintiff can only recover his share of the loss.

I do not consider that the amount of $79,750 for additions should be discounted on the same basis. There is no evidence that this expenditure would enhance the value of the plaintiff's estate. The defendant did not submit otherwise. I consider that I must also make allowance for the contingency that the plaintiff will be forced to become a permanent resident at a secure nursing facility at some time in the future, in which event the house may be sold, and the normal vicissitudes of life. The reasons for this are discussed under the heading of the cost of future care in paragraph 3.6 below.

Adopting this approach and having regard to the base figure of $191,000 (rounded off) I allow an amount of US$188,000 calculated as follows:

	$US	$US
Base figure	191,000	
Add allowance for extra direct costs	2,000	193,000
Less 50% (defendant's share)	96,500	
Less contingencies	12,000	84,500
		108,500
Plus alterations		79,750
	TOTAL	188,250

which I have rounded off to US$188,000 to avoid duplication, and because the calculation is imprecise in any event.

3.5.4 Total Past Special Damages

Accordingly I allow for past special damages:

item 3.5.1		A$ 141,187.89
item 3.5.2	US$1,796,159.12	
item 3.5.3	US$ 188,000.00	US$1,984,159.12

3.5 Interest on Past Special Damages to date of trial

No claim was made for this by the plaintiff. I presume there are reasons for this I was not told about. As I have to hear further from the parties on another issue I will reserve this question until I have heard those submissions.

3.6 Future Care Costs

This is a major area of disagreement between the parties. It is agreed between the parties that if the plaintiff is cared for at home, the recurring weekly expense is US$3,954.76 (subject to an allowance for contingencies). The defendant submits that the value of the plaintiff's future care should be calculated on the basis that he is cared for in a skilled nursing facility ("SNF"). The plaintiff's total claim amounts to US$2,825,201. The defendant

concedes an amount of US$1,843,800 based on the caring for the plaintiff in a SNF for the rest of his life.

The areas of disagreement are:

(1) whether the plaintiff's care should be quantified on the basis that he is to be cared for at home, or on the basis that he is to be cared for in an SNF;

(2) What the differences in cost would be in real terms, especially taking into account, in looking at the costs of an SNF,

(a) whether any home services would become unnecessary, and

(b) whether any additional expenses over and above the SNF's charges would be incurred.

In considering these questions, it is necessary to bear in mind an important distinction. On the one hand, I have found that the plaintiff will not live in a SNF, although there is about a 30% possibility that he may ultimately be forced to do so. On the other hand, there is the question of the reasonableness of the amount of damages to be awarded.

In *Sharman v Evans* (1976-77) 138 CLR 563, Gibbs & Stephen JJ said, at 573-574:

> The appropriate criterion must be that such expenses as the plaintiff may reasonably incur should be recoverable from the defendant; as Barwick CJ put it in *Arthur Robinson (Grafton) Pty Ltd v Carter* (1968) 122 CLR 649 at 661, `The question here is not what are the ideal requirements but what are the reasonable requirements of the respondent', and see *Chulcough v Holley*, per Windeyer J (1969) 41 ALJR 336, at p338. The touchstone of reasonableness in the case of the cost of providing nursing and medical care for the plaintiff in the future is, no doubt, cost matched against health benefits to the plaintiff. If cost is very great and benefits to health slight or speculative the cost-involving treatment will clearly be unreasonable, the more so if there is available an alternative and relatively inexpensive mode of treatment, affording equal or only slightly lesser benefits. When the factors are more evenly balanced no intuitive answer presents itself and the real difficulty of attempting to weigh against each other two incomparables, financial cost against relative health benefits to the plaintiff, become manifest. The present case is however one which does to our minds allow of a definite answer; it is a case of alternatives in which the difference in relative costs is great whereas the benefit to the plaintiff of the more expensive alternative is one entirely of amenity, in no way involving physical or mental well-being."

This passage still states the relevant principles of law to be applied in this case. Nevertheless, even where there is a significant difference in the cost of the provision of

home care when compared with the costs of institutionalised care, the courts have awarded damages based on the higher cost of home care if there are significant health benefits to the plaintiff to be achieved by home care: see *Burford v Allen* (1993) 60 SASR 428 (Full Court); *Haylock v State Rail Authority of New South Wales & Anor* (Supreme Court of New South Wales, Newman J, 22 October 1992, unreported); *Government Insurance Office New South Wales v Mackie* (1990) Aust Torts R 81-053 (Court of Appeal, NSW). Indeed, there appears to be a trend in Australian medical opinion and community attitudes towards treating institutionalised care as a last resort: see *Government Insurance Office New South Wales v Mackie,* (supra), at 68, 212; *Burford v Allen* (1992) Aust Torts R 81-184 at 615-616; *Crossman v Le Fevre & Port Adelaide Community Hospital Incorporated* (1994) 179 L.S.J.S. 329 at 338-9 per Matheson, J.

It was submitted on behalf of the plaintiff:

1. There were significant health benefits to the plaintiff by his remaining at home, apart from one of mere amenity.
2. No alternative SNF existed, or was proven to exist, which could appropriately and adequately care for the plaintiff, and would be likely to accept him.
3. Alternatively to 2, if such an SNF did exist, the difference in costs was marginal.

The defendant argued the contrary position. In my opinion the weight of the evidence in this case so favoured the plaintiff that those issues should be resolved in favour of the plaintiff, with the consequence that the plaintiff's damages should be assessed on the basis of a cost of US$3,954.76 per week. In order to explain how I have reached this conclusion it will be necessary to discuss the evidence in some detail.

The starting point is that all the evidence is one way that the present regime of home care is ideal or almost so, for his needs. About the only criticism directed to the status quo is the possibility of some difficulty evacuating him from the home in case of fire. Besides being an unlikely risk, alterations to the house were being made to accommodate this possibility.

The plaintiff's care-givers were all of the opinion that there were disadvantages to the plaintiff's future health and well-being if he were to live in an SNF. Doctor Djergaian's opinion was that the plaintiff needed individualised care to reduce the possibility of medical complications such as contractures, skin problems, infections, increased pain, and a decline in his cognitive functions. Whilst each of these factors is important, I consider that the

possibility of a decline in cognitive function is especially real, and moreover, likely. Doctor Djergaian, in his statement Ex P27, says that the plaintiff needs stimulation, and if left alone, he would hallucinate; if left in an institution, he would become more and more disoriented, need medication to keep him calm which would exacerbate his condition, make him more difficult to treat, and less responsive to his treatment. In evidence Dr Djergaian made the point that he would be both under stimulated and over stimulated in an SNF, would lose the benefit of the close supervision and attention the defendant is able to provide to him, which is not only important to prevent problems arising, but to provide significant value and sense of purpose and quality in his existence which would be lost if all she could manage was intermittent visits. Doctor Brooks, a psychologist, also thought the plaintiff would become more depressed and his mental functioning would deteriorate and he would become a management problem. Professor Miller, the defendant's expert, acknowledged the danger of over stimulation and the importance of appropriate stimulation to the retention of the level of cognitive functioning that the plaintiff presently enjoys. He qualified this by saying that there is a very wide latitude as to what stimulation would be appropriate to maintain his status. Nevertheless he agreed that it would be important to the plaintiff how others reacted to him and that there were others who could discuss things with the plaintiff of which he had some understanding. He considered that the plaintiff would soon adjust to his new environment, and having seen the SNFs suggested that they would appear to him to be suitable. He agreed that the special relationship between the plaintiff and his wife was important to his cognitive functioning being maintained, but believed this could be done equally well at either of the suggested SNFs. On these issues, I prefer the opinions of Dr Djergaian and Dr Brooks, for the following reasons. Doctor Djergaian and Dr Brooks have had more intimate and regular contact with the plaintiff. Professor Miller saw the plaintiff for about an hour at home and at a time when conditions were ideal. I formed the impression that Professor Miller under-estimated the seriousness of the plaintiff's depressive illness, and that his opinions were coloured by the cost considerations involved in full-time home care.

I heard evidence from Mrs Tavenan, from the Santa Barbara Convalescent Hospital and from Ms Hillis and Mrs O'Dell - Bergstrand from Mission Terrace Convalescent Hospital, and as well, undertook a view of both of these establishments. Other witnesses, including Professor Miller, gave evidence as to their knowledge of those establishments. The most

striking matters in relation to both SNFs is that they were primarily institutions for people much older than the plaintiff; many of the patients were obviously senile; neither institution could provide the constant personalised care to the plaintiff who would have to share the CNAs with other patients. Both institutions had some noise problems, of the kind which could well be upsetting to the plaintiff. I formed the strong impression that neither SNF would be able to provide the plaintiff with the level of stimulation needed to maintain his present cognitive levels. Indeed, the defendant conceded that it would be reasonable for the plaintiff to have additional CNA support outside of that routinely provided by either institution, and allowance for the extra cost of that care was provided for in the defendant's calculations, in order to ensure his mental well-being.

Both institutions were rather depressing places to visit, particularly having regard to the type of patients they were caring for. Of course, any visual impression I formed is not important - the plaintiff is blind - but it is hard to see how the plaintiff could be appropriately stimulated by the other patients, most of whom would have nothing in common with him, nothing to offer him, and would, if anything, be depressing to have around him. Both institutions were a fair distance from the plaintiff's present home and would make it difficult for him to have the attention he enjoys from the defendant on a regular basis. The comparison between the status quo and the defendant's proposal was like comparing a new car which meet the buyer's requirements to a secondhand one which had been altered, patched, repaired and "tarted up" - in order to meet those requirements, but which nevertheless still did not make the grade. I consider that there are significant benefits to the plaintiff's mental and cognitive condition if he were to remain at his home.

The preponderance of the evidence also favours the conclusion that there are also other benefits to the plaintiff's health should he remain at home. I have referred to Dr Djergaian's opinion as to his susceptibility to complications such as contractures, skin problems and infections. He considers that the plaintiff has a low level of complications for his condition, and if they commence, warns that there will be a general downhill slide; the more complications he experiences, the longer he will stay in bed, the longer he is in bed, the more complications he will get. In order to avoid those complications, the plaintiff needs much time and patience devoted to him by staff, and this would not be available in an SNF. It is important in his case, I find, that the plaintiff's needs are fully understood by CNAs who are

sympathetic to them and can respond promptly and appropriately. Without in any way denigrating the staff at either of the two institutions I have named, it is almost self evident that this need is best met by his existing regime. He presently has his own CNAs who are completely familiar with his case - which is in itself a complex one - and with whom he has a satisfactory personal relationship. In both SNFs he would be required to share the CNAs with other patients and would not necessarily have the same CNAs each day. There is less room for the defendant's personal supervision of the CNAs which, on the evidence, has been an important factor in the success of his present regime. There is, in my opinion, a much higher risk of complications developing in an SNF.

Professor Miller, the defendant's medical expert, agreed that, leaving aside financial implications, the plaintiff would be better cared for in a home setting with interested family members, in that he would receive personal and individualised attention, additional stimulation and fewer periods of being left alone. However he could see no real benefits to the plaintiff's health by that course. I prefer the plaintiff's witnesses to the evidence of Professor Miller.

There are additional complications which I should mention briefly which also point to the undesirability of his staying in a SNF. First, there is the problem of his temperature control, which requires the plaintiff to have his own room and for that room to be heated to a higher than normal temperature and to be maintained at that temperature. Neither SNF had a room capable of providing this degree of temperature control. Consequently it would be necessary for some form of heating to be installed. This is not a simple problem to overcome in a large facility designed to provide care to a large group of people; it is more than simply installing a room heater. Portable space heating devices are prohibited by para 13.5.2.2 of the Life Safety Code which, by the law of California, applies to SNFs (Ex P70). The Code would not appear to prohibit electrical wall-type heaters, which may be a solution if they are thermostatically controllable. However Ms Hillas' evidence was that Mission Terrace Convalescent Hospital would not accept the plaintiff because it did not have the capacity to deal with the plaintiff's hypothermia (Ex P76, p1270-1271), although I suspect there were other reasons as well. Mrs Tavenan did not indicate that this would be a problem, but neither did she say it would not be a problem. I am not satisfied, on the evidence, that this problem could be satisfactorily overcome. Secondly, neither facility would accept a patient except on

the recommendation of the patient's physician. It is clear that the plaintiff's physician, Dr Djergaian, is not prepared to make this recommendation at least, at the moment. Neither facility were experienced in dealing with brain damaged people with complications as severe as the plaintiff.

Both SNFs had problems in the past complying with California law relating to the care of their patients. Having regard to the stringent conditions under which these institutions are licensed and the means adopted to enforce those conditions, it is not surprising that there would be occasional slip-ups. Nevertheless, the nature of the problems experienced by these institutions indicate that the plaintiff is likely to have an added risk to his health, which although perhaps not great, is nevertheless more easily avoidable in his present situation. One SNF had failed to maintain acceptable standards of nutritional status, such as body weight and serum protein levels, for example. It is probably fair to observe that, due to the large numbers of patients and staff involved in any institutional care facility, errors are bound to occur from time to time, and of course, mistakes could also occur in the plaintiff's home environment. In my opinion, serious mistakes are less likely to occur in the plaintiff's present environment because the level of supervision he has at home is better than he could be given in any SNF.

The next matter is that there is no evidence that either of these SNFs would in fact accept the plaintiff as a resident, and the evidence of Drs Djergaian, Clarke and Ross is, that to their knowledge, there is no suitable facility in the Santa Barbara area. Each of these medical specialists have lived and worked in the area in recent times for a considerable period. Doctor Djergaian said that the plaintiff needs to be taken through all his functional activities with meticulous attention, and this takes a lot of time and patience. His opinion was that this is necessary to enable the plaintiff to be as active as he is capable of being. In an SNF, the staff would not have the time to do this; they would tend to do things for the plaintiff, rather than assist the plaintiff to do them himself, with the result that the plaintiff would become progressively more dependent, and this would be a cause for significant decline in his function. I accept this evidence, and I prefer it to the opinion expressed by Professor Miller. The defendant has an onus of showing that appropriate institutional care is available, or will become available in the foreseeable future: *GIO (NSW) v Rizkella* (Court of Appeal, New South Wales, 14 March 1993, unreported). I am not satisfied that the defendant

has discharged its burden of proof on this issue.

There is a possibility that, at some future time, the plaintiff's condition will deteriorate to such a degree that home care will no longer be appropriate for him on a full-time basis. Professor Miller said that there is more rapid progressive deterioration of brain function after such severe injuries as the plaintiff suffered than in a normal person. He said that, by the time the plaintiff reached his late 60s, there would be substantial rapid deterioration. The effects upon him would be greater difficulty in balance and in mobility, more behavioural problems and more problems with incontinence. Consequently the plaintiff would need to have more than one person available to help move him in and out of bed, or into his wheelchair etc., so that within 10 years, he would not be able to be cared for at home without several attendants at the one time. (P76, pp1356-1357). Dr Djergaian conceded there was a possibility that the plaintiff may become institutionalised in the future, but related this to the health of the defendant rather than to deterioration in the plaintiff's condition (P76, p793-794). I think it is likely that as the plaintiff grows older, there is an increasing risk that he will not be able to be properly cared for at home, given the extent of all his health problems. It is not possible to arrive at any precise age at which it is probable that this will occur in the plaintiff's case. The plaintiff may never significantly deteriorate given his present and likely future level of care. I do not consider that I should accept Professor Miller's opinion as establishing that this would probably occur within 10 years. First, Professor Miller's opinion must be based on experience gained from institutionalised patients who have had the added risks which the plaintiff's caregivers are largely able to avoid. Secondly, any deterioration may be gradual rather than rapid, and consequently may be able to be coped with by adjustments made to his regime. Thirdly, it is common knowledge that mechanical lifting devices are available for transference from beds to wheel chairs, and special chairs exist for showering etc. Doing the best I can, and taking into account his disabilities, the risks he faces in the future, the level of care available to him, and all the circumstances, I consider the risk to be in the order of 30%, and to the extent that there is a lower cost in institutionalised care, I must make some appropriate allowance for this, bearing in mind that the time when this is more likely to occur, if at all, will be later rather than sooner.

I turn now to consider the comparative costs of home care and care in an SNF. Home

care must include not only the actual costs involved in providing staff and equipment. The allowances for the cost of future gratuitous services, alterations to the home, the cost of sustenance which is provided for by an SNF as part of its cost structure, the allowance for loss of use of the money invested to provide the home, must also be taken into consideration. The cost of care in an SNF must likewise have added to it the cost of extras which the plaintiff will have to bear, such as part-time CNAs, and extra medical costs, and the cost of future gratuitous services, but at a lesser level. There are also problems in evaluating some items. For example, if the plaintiff is to be encouraged to visit his home on a regular basis, at least the alterations, if not the whole or some part of the claim for loss of use of the money in providing a suitable home, would appear to be still necessary.

Both parties have prepared cost summaries based on the actual average recurring weekly cost. The major difference in the plaintiff's figure as opposed to the defendant's is the allowances made for extra CNA care. The plaintiff argues for 8 hours per day US$896 per week; the defendant 2 hours per day, US$224 per week. On the plaintiff's figures, the cost difference is between US$404 to US$677 per week. On the defendant's figures, the difference is between US$1458 to US$1684 per week. Having regard to the various activities which the plaintiff's regime of care requires him to perform throughout the week (attendances at the Braille Institute, physical therapy with David Dallmeyer, swimming, and recreational outings), I consider the plaintiff's estimate to be generally more accurate than the defendant's. To this must be added the difference in the value of gratuitous services. The plaintiff's claim amounts to US$11 per week for Dr Rosecrance and US$1250 per week (approximately) for the defendant. The defendant denies liability for Mrs Rosecrance's gratuitous services, and says that if some figure is allowed, it would be no more than US$70 per week. The defendant does not dispute the claim of US$11 for Dr Rosecrance. Because of those differences, it is necessary that I reach findings in relation to the plaintiff's claim for gratuitous services before I am able to make a final cost comparison. My conclusions on this aspect of the plaintiff's claim is dealt with in paragraphs 3.7 and 3.8 below where I find that the weekly recurring value of gratuitous services if the plaintiff remains at home is $431 per week, and if he is institutionalised, $179 a week, a difference of $252 per week. Thus the overall difference in costs is in the order of $656 to $929 per week, plus the value of the plaintiff's sustenance, (probably about $50) a not inconsiderable amount. However, even if

the evidence did establish that appropriate institutional care is or will become available in the future, I am satisfied, having regard to the difference in costs, and having regard to health benefits which accrue to the plaintiff, that it is reasonable for the plaintiff to remain at home under his existing regime.

The plaintiff's figure of US$2,825,201 needs to be adjusted to allow for contingencies. The first contingency is that of mortality. The actuarial evidence of Mr Conger (Ex P64 p6) does not clearly state that he has made allowance for this factor, but a comparison with the tables in *Luntz* points to the conclusion that his multiplier of 714 (approximately) already has made allowance for mortality. The second contingency is that the plaintiff has, as I have found, a 30% chance of becoming institutionalised, in which case, he will be cared for at a lower cost, which, (ignoring gratuitous services for these purposes) results in a saving in the order of between US$404 to US$677 per week, plus sustenance costs. Having regard to these factors I consider that a fair and reasonable award for this head of damages is US$2,650,000.

3.7 Past Gratuitous Services

The plaintiff's claim under this head falls into two broad categories: first, claims in respect of services provided by his children; secondly, claims in respect of services provided by the defendant.

3.7.1 Claims in respect of services provided by the plaintiff's children

First, there is a claim in respect of past services provided by Dr Rosecrance. The defendant concedes both the claim and the quantum of claim (Ex P77). The plaintiff concedes an error in the quantum of the claim in the defendant's favour. An amount of $7,900 of the total of US$35,630 is Australian dollars. The plaintiff is prepared, after allowing for an exchange rate of 72¢US per $1A, to reduce the overall claim to US$33,418. I see no reason why I should not accept the plaintiff's figure.

Next there are claims in respect of Anne and William Rosecrance's services. The defendant concedes these claims and the amounts thereof, being US$4,187.05 and US$9,860.50 respectively (In the case of William Rosecrance, notwithstanding the defendant's concession, the plaintiff has reduced the claim to allow for the fact that part of the claim was calculated in $A). I consider that these claims should be allowed.

I therefore award a total of US$47,465.55 calculated as follows:

re Dr Rosecrance	US$33,418.00
re Anne Rosecrance	4,187.05
re William Rosecrance	9,860.50
	US$47,465.55

3.7.2 Claims in respect of past services provided by the defendant

The defendant's submission, in short, was that no amount should be awarded under this head for past services, and I was referred to a number of Australian authorities by both parties on this topic. It is necessary to consider those authorities in some detail.

The starting point is *Donnelly v Joyce* [1974] 1 QB 454 at 461-462, where the Court of Appeal held that, where gratuitous services were provided to the injured plaintiff, (in that case, the plaintiff's mother), the claim is not in respect of a loss by the mother; it was the plaintiff's loss:

> "The question from what source the plaintiff's needs have been met, the question who has paid the money or given the services, the question whether or not the plaintiff is or is not under a legal or moral liability to repay, are, so far as the defendant and his liability are concerned, all irrelevant. The plaintiff's loss, to take the present case, is not the expenditure of money to buy the special boots or pay for the nursing attention. His loss is the existence of the need for those special boots or for those nursing services, the value of which for purposes of damages - for the purpose of the ascertainment of the amount of his loss - is the proper and reasonable costs of supplying those needs." (at 462)

This statement has been approved by the High Court of Australia: *Griffiths v Kerkemeyer* (1977) 139 CLR 161, especially per Stephen J at 173-181; per Mason J at 191-194; *Nguyen v Nguyen* (1990) 169 CLR 245 at 261-2 per Dawson, Toohey and McHugh JJ; *Van Gervan v Fenton* (1992) 175 CLR 327.

Despite the principle that the plaintiff's loss is occasioned by the existence of the need for the services, the majority of Australian judicial opinion favours the conclusion that where the need has been satisfied by the defendant, the plaintiff cannot recover: see the authorities referred to in

Luntz, Assessment of Damages for Personal Injury and Death, 3rd Ed, p219 note 17. The learned author is critical of this result, which he submits is anomalous. In England, the House of Lords, in *Hunt v Severs* (1994) 2 All ER 385, has held that damages in these circumstances is not recoverable. Both the trial judge and the Court of Appeal had allowed the claim, by applying the reasoning of Megaw LJ in *Donnelly v Joyce* (supra). The leading speech in the House of Lords was that of Lord Bridge. His Lordship acknowledged that there were already established exceptions to the principle which prevents a plaintiff from double recovery, viz., where the plaintiff is insured against the loss, and "the fruits of the benevolence of third parties motivated by sympathy for the plaintiff's misfortune", (at p389), but in his Lordship's view, the considerations of public policy which allow these exceptions do not apply where the tortfeasor is the person who has satisfied the loss. His Lordship reviewed the relevant English authorities, and in particular, the passage in the judgment of Megaw LJ in *Donnelly v Joyce* (supra), which I have referred to above, as to which he said:

> "With respect, I do not find this reasoning convincing. I accept that the basis of a plaintiff's claim for damages may consist in his need for services but I cannot accept that the question from what source that need is met is irrelevant." (p393)

His Lordship concluded that the view of Lord Denning MR in *Cunningham v Harrison* [1973] 1 QB 942 correctly stated the law in England, viz., that the injured plaintiff who recovers damages under this head holds them upon trust for the voluntary carer. He said, at p394:

> "By concentrating on the plaintiff's need and the plaintiff's loss as the basis of an award in respect of voluntary care received by the plaintiff, the reasoning in *Donnelly v Joyce* directs attention from the award's central objective of compensating the voluntary carer. Once this is recognized it becomes evident that there can be no ground in public policy or otherwise for requiring the tortfeasor to pay to the plaintiff, in respect of the services which he himself has rendered, a sum of money which the plaintiff must then repay

to him."

At p395 his Lordship referred to the Australian authorities on this topic:

> "I add a short postscript with reference to a number of Australian authorities which were helpfully drawn to your Lordships' attention. The decision of the High Court of Australia in *Griffiths v Kerkemeyer* (1977) 139 CLR 161 adopts in substance what I may call the principle of *Donnelly v Joyce*. Since then there has been a significant number of Australian decisions, both reported and unreported, rejecting claims by injured plaintiffs to recover the value of gratuitous services rendered to them by defendants. The reported decisions to this effect by single judges are *Gowling v Mercantile Mutual Insurance Co Ltd and Gowling* (1980) 24 SASR 321, *Jones v Jones* [1982] Tas R 282, *Gutkin v Gutkin* [1983] 2 Qd R 764 and *Maan v Westbrook* [1993] 2 Qd R 267. To the like effect are the decisions of the Full Court of the Supreme Court of Western Australia in *Snape v Reid* (1984) Aust Torts Rep 80-620; and of the Full Court of the Supreme Court of Tasmania in *Motor Accidents Insurance Board v Pulford* (1993) Aust Torts Rep 81-235. The only contrary decision is that of the Court of Appeal of New South Wales in *Lynch v Lynch* (1991) 25 NSWLR 411. In this case the court's reasoning was expressly related to the circumstance that the claim arose out of an accident which was the subject of a particular statutory compulsory insurance scheme. I do not think it would be helpful to encumber this opinion with a detailed examination of the case. I am content to say that I agree with the criticism of the decision by the Full Court of the Supreme Court of Tasmania in *Motor Accidents Insurance Board v Pulford*, who declined to follow it."

The House of Lords overruled *Donnelly v Joyce* (supra) and preferred *Cunningham v Harrison* (supra). I am bound by the High Court to apply *Donnelly v Joyce*. *Cunningham v Harrison* (supra) was rejected by the High Court in *Griffiths v Kerkemeyer* (supra) (at 177, 193). But this does not necessarily dispose of the problem. Should Megaw LJ be taken too literally when he says that the question of the source of meeting the plaintiff's needs is irrelevant? Suppose the defendant was not the plaintiff's wife, and the insurer had paid the plaintiff's wife to provide him with the services he needed? Would it be just to make the insurer pay twice? I think not. I consider that the law would say there can be no double recovery, either because the law would treat the payments as being made by the insurer on behalf of the

defendant in reduction of his liability, or because the law would treat the insurer as the real defendant, and give credit for the amount so paid. It would not matter that *Griffiths v Kerkemeyer* damages are not special damages, but are part of the plaintiff's general damages. If a payment is made by a defendant to the plaintiff on account of his liability, justice requires that credit will be given even if the damages are at large. I disagree with Powell J in *In the matter of GDM and the Protect Estates Act 1983 (NSW)* (1992) Aust Torts Rep 81-190, at 61,689, where his Honour said "it is irrelevant that the services may have been provided, or even paid for by the relevant defendant." Such a broad statement cannot be right.

It was submitted by the plaintiff that, when there is an insurer, (or a body under a statutory scheme which provides indemnity to the defendant - as in the Northern Territory) the solution can be found in treating the insurer as the real defendant. Reliance was placed upon *Lynch v Lynch* (supra); but the submissions went further - the plaintiff argued it did not matter that the insurance is compulsory, or that in some situations but not others, the plaintiff could sue the insurer directly. In *Lynch v Lynch* (supra), Clarke JA (with whom Gleeson CJ and Hope AJA agreed) said at 419-420 in the passage I have italicised:

> "Here there are compelling considerations. On the one hand there is difficulty in accepting a principle pursuant to which A, to whom services are provided by her mother, who is not the defendant, is awarded $X and B, whose services are provided by her mother who is the defendant, is awarded nothing. In both instances the plaintiffs are blameless and their needs are, as I assume, identical. On the other hand if recovery is permitted the defendant is, in theory, required to pay, in effect, twice - once for the cost of the services and once in the labour expended in performing the services.
>
> *The reality is, however, that the second alternative is only valid where the plaintiff recovers against an uninsured defendant.* In the particular context of a compulsory insurance scheme, and when claims against an uninsured defendant who renders gratuitous services could be regarded as quite exceptional, the considerations of policy in favour of allowing the claim far outweighs those that tell in favour of rejecting it."

It was submitted that the considerations of policy are no different whether there is a compulsory insurance scheme or whether the defendant has insurance under a private policy, or whether the defendant is entitled to be indemnified under a scheme such as has been established in the Northern Territory under the *Motor Accidents (Compensation) Act* 1979 (NT). In each case the need is the same from the plaintiff's point of view. In each case the need is not met by someone intending to do so in reduction of the insurer's liability, but in order to meet the plaintiff's need. This analysis is consistent with the approach taken by the law in relation to collateral benefits: *c.f. National Insurance Co. of New Zealand Ltd v Espagne* (1961) 105 CLR 569. Further it was submitted that there is nothing anomalous in treating the insurer as the real defendant. There are numerous instances where the courts have already done so where the justice of the occasion so requires: see *O'Neil v Acott* (1988) 59 NTR 1 (substituted service on insurer); *Dalywater v Dalywater* (1984) 30 NTR 14; *Treiguts v Tweedley* [1959] VR 544; *Albrecht v Byers* [1975] Qd R 403 (failure by insured to answer interrogatories); *Bourke v Kecskes* [1967] VR 894 (whether prejudice to defendant's insurer was suffered); *McCann v Parsons* (1954) 93 CLR 418 (right to a new trial depended upon defendant's insurers having discovered fresh evidence); *King v Wilkinson* [1957] SR (NSW) 444 (right of insurer having conduct of defence to draw to the court's attention the defendant has no real interest in the proceedings and to call evidence to contradict the defendant's admissions); *Gurtner v Circuit* [1968] 2 QB 587; *Bradvica v Radulovic* [1975] VR 434 (right of the insurer to apply to be joined as a defendant where insurer has no right to take over the conduct of the proceedings brought against the insured).

Alternatively, the plaintiff submitted that the right to an indemnity granted to the defendant pursuant to s6 of the *Motor Accidents (Compensation) Act* 1979 (NT) was analogous to the compulsory third party insurance scheme which the Court of Appeal considered in *Lynch v Lynch* (supra), and that I should follow that decision. Pursuant to s40 of the Act, the Territory Insurance Office is entitled to take over the conduct of the

proceedings brought against the defendant. Section 40A would have required the plaintiff to sue the Territory Insurance Office and not the defendant, if the vehicle in which the plaintiff was a passenger and the defendant was driving, was uninsured. I was referred to the reasoning of Clarke JA at 420:

> "In conclusion I should emphasize the fact that I have considered the problem in the context of a compulsory insurance scheme. In that context there can be no question that a plaintiff who is compensated under the *Griffiths* principle is doubly compensated when the provider of the services is the defendant. That plaintiff receives no more and no less than she would if those services had not been rendered by the defendant. In this case if the plaintiff had sued the Government Insurance Office (as she was entitled to), or if the vehicle had been uninsured and was being driven on a public street, and the Nominal Defendant had been sued, then there could be no question of double payment or of over compensation. It is true that it may seem unfair that an uninsured defendant should be required to pay for services which she renders but that is such a remote possibility that it is preferable to accept that anomaly rather than provide the insurance fund with a benefit at the expense of the plaintiff."

The statutory scheme in the Northern Territory is that all motor vehicles are required to be registered if driven upon a public street. Section 45 of the *Motor Vehicle Act* requires the Registrar of Motor Vehicles to collect "compensation contributions" at the time of registration or renewal of registration. Section 46 requires the Registrar to pay the compensation contributions to the Territory Insurance Office, which is charged, pursuant to s5 of the *Territory Insurance Office Act* 1979 (NT) to administer the motor accidents compensation scheme. The Office is obliged to apply the contributions so received only for the purpose of meeting the obligations of the Office under the scheme or for meeting its operational costs in relation to the scheme or for the promotion of road safety: s23(2) of the *Territory Insurance Office Act* 1979 (NT). The Office is a statutory incorporation, generally under the control of the Minister (s7(1)). Its moneys and debts owing to it are the property of the Territory (s22A), and its surplus funds are, subject to ministerial direction, to be paid either into consolidated revenue or into an appropriate account maintained under the *Financial Management Act*

1995 (NT) (s26). There can be no doubt that the legislation establishes an identifiable pool of funds out of which claims arising from motor vehicle accidents are to be met, under a scheme controlled and run exclusively by the Office which is a statutory corporation subject to Ministerial control. It appears to be similar in its broad scope to the scheme referred to in *Lynch v Lynch* (supra) except that, in general, where actions still lie for damages at common law, they are not brought against the Office, but against the defendant driver unless the vehicle is uninsured or there are other exceptional circumstances.

On the other hand, the defendant relied on a number of decisions of other Australian Courts to the general effect that, at least in the case of *Griffiths* damages up to the date of trial, there could be no recovery if the defendant provided the services. In *Snape v Reid* (unreported, 25 May 1984 digested in [1984] Aust Torts Reps 68,644 the Full Court of the Supreme Court of Western Australia disallowed a claim for past services rendered by the defendant because the plaintiff suffered no loss and the tortfeasor had mitigated the damage he caused. In *Motor Accidents Insurance Board v Pulford* [1993] Aust Torts Reps 62,410, the matter was considered by the Tasmanian Full Court. Cox J followed the line of authorities which culminated in *Snape v Reid* (supra), and distinguished *Lynch v Lynch* (supra) on the basis that the plaintiff did not have a right to sue the Statutory Board established as the insurer under the relevant Tasmanian legislation in respect of the defendant's liability.

Underwood and Wright JJ found it unnecessary to decide the issue, although Wright J referred to *Lynch v Lynch* (supra) as "a pragmatic and eminently sensible solution" (p 62, 433). More recently, in *Kars v Kars* (Court of Appeal, Queensland, unreported 8 September 1995) Davies JA, in what was obiter dicta, expressly disagreed with *Lynch v Lynch* (supra) insofar as past services is concerned on the basis that the *Queensland Act* provided an indemnity to the insured defendant "against all sums for which he shall be legally liable by way of damages":

> "Those sums must include the sum needed to satisfy the need for care. But because the defendant has provided services which, to the extent of that provision, have discharged his liability to the plaintiff, his right to indemnity from the insured should to that extent, be satisfied by payment of him of the value of those services. If that is so then the policy underlying the principle is satisfied in this case also by reducing the damages. It is one thing to say that the plaintiff does not have to show that her need is or may be productive of financial loss. It is quite another to say that the plaintiff should be entitled to recover a sum of money to enable her, if she wishes, to compensate a defendant care giver where that defendant is entitled to recover from his or her insurer the value of the care give."

Shepherdson J also came to the same conclusion. His Honour held that the damages awarded are held on trust for the voluntary caregiver, but appears to have overlooked, with respect, High Court authority to the contrary which I have mentioned above. As to *Lynch v Lynch* (supra), his Honour declined to follow it.

Lynch v Lynch (supra) has also been criticised by Professor Fleming in a note in 66 ALJ 388-389. Professor Fleming makes two points; first that the only justification for the *Griffiths* principle is that it enables the plaintiff to recompense the donor of the services. *Griffiths* is therefore "a surrogate for any direct claim which the law denies the donor against the defendant. But where the donor and the defendant are one and the same, and where it would be against sound policy to enable a defendant to be repaid for her gratuitous help by, in effect, her own liability insurer, this rationale disappears." Secondly, he expresses doubts that the principle in *Lynch v Lynch* (supra) could be confined to compulsory insurance schemes.

Professor Harold Luntz, in an article `Voluntary Services Provided by the Defendant' (1995) 2 Torts Law Journal 80, concludes that, as a matter of principle, no damages should be awarded where the need has been met or will be met by the tortfeasor, although there is no objection to allowing the plaintiff damages for the value of the contingency that the needs will in fact have to be met by engaging someone else other than the defendant. As a matter of policy, he concludes that, as there is no legal obligation upon the

plaintiff to pay the defendant, the aim should be to have the money pass directly from the insurer to the defendant. He argues that the solution is that the plaintiff should not recover damages in relation to this need, but the defendant should be entitled to be indemnified by the insurer direct. He concludes that in those jurisdictions where such claims are unaffected by statute, "there can be no doubt that an insured may recover from the insurer payments already made by the insured in discharge of such liability. In principle there can be no difference between the discharge of the liability by the rendering of services instead of the payment of money." (p91) In a subsequent article (1995) 2 Torts Law Journal 184, Professor Luntz acknowledged that his solution could have the paradoxical effect of apparently making the defendant worse off when the plaintiff is guilty of contributory negligence, but concluded that in the family situation, "this is probably not the reality and this solution should be adopted despite the paradox."

Other academic writers have reached different conclusions.

Laura C H Hoyano, `The Dutiful Tortfeasor in the House of Lords' (1995) 3 Torts Law Rev. 63 submitted that the loss should be located in the plaintiff so far as the tortfeasor is concerned, but recognition should be given to the existence of secondary losses which arise between the plaintiff and the caregiver. She argues that if the plaintiff had paid for the services there would be little doubt that the plaintiff could recover the cost; but "the location of the loss in the plaintiff should not be made to depend on the readily manipulated device of a contract, which was rejected as artificial, and indeed `repulsive', by the English Court of Appeal in *Cunningham v Harrison* and *Donnelly v Joyce*." (p68) She concludes that "the primary purpose of the awards is not, as the House of Lords viewed it, to provide recompense for the caregiver, but rather to place the plaintiff in funds to meet the costs of the necessary services created by the tort" (ibid). Matthews and Lunney, "A Tortfeasor's Lot is Not a Happy One?" (1995) 58 MLR 395 argue that although the policy considerations are weaker than in the case of third party provision of services, the plaintiff should still be able to recover for the value of pre-trial services provided by the tortfeasor:

> "In most cases where caring services are provided by a tortfeasor, the tortfeasor will be a relative of the plaintiff who is sacrificing the opportunity of paid employment to provide the care. To deny the plaintiff a claim for the value of these services does not prevent double recovery, but instead reduces the family income pool so as to penalise the plaintiff and carer/tortfeasor."

The authors also note that if *Hunt v Severs* (supra) is correct and if the plaintiff were to refuse to accept the defendant's gratuitous services, the possibility is opened of an argument that the plaintiff has failed to mitigate, and the end result of their Lordship's decision will be to encourage enforceable contracts for the provision of services by the tortfeasor.

The conclusion that I have reached is that the result in *Lynch v Lynch* (supra) is correct and that the plaintiff can recover pre-trial *Griffiths* losses. First, *Hunt v Severs* (supra) is contrary to binding High Court authority and cannot be followed. Secondly, the arguments based on double recovery by the plaintiff cannot be correct because both *Griffiths v Kerkemeyer* (supra) and *Van Gervan v Fenton* (supra) have authoratively decided that there is no legal obligation on the successful plaintiff to reimburse the caregiver for the value of the services provided and no trust is implied. Thus, arguments based on a potential windfall gain to the plaintiff have been authoritatively rejected. If this is so rejected with third party caregivers it must also be so if the caregiver is the defendant. Nor, in reality, does the defendant pay twice - once in kind and the other by money. The reality is that the defendant does not pay at all because the defendant is entitled to a statutory indemnity to be met out of the pool of funds set aside by Parliament to meet claims. The suggestion of Professor Luntz that the defendant may be entitled to a direct indemnity from the insurer for the services provided, shows that the insurer is no worse off if it is the plaintiff who is allowed to recover and not the defendant where the plaintiff has so recovered. Further, the opinion of Davies JA in *Kars v Kars* (supra) and of Professor Luntz's that the services are a *pro tanto* discharge of the defendant's obligation is not universally true as a proposition of law. Whether or not a payment, be it in cash or kind, amounts to a discharge of the defendant's obligation to the plaintiff depends

upon the intention of the parties. A payment does not discharge the defendant's obligation unless the defendant made the payment intending to discharge her obligation and the plaintiff accepted the payment intending to receive it as such or knowing that that was the defendant's intention: see *Verschuuren v Tom's Tyres Corporation Limited* (1992-3) 86 NTR 1 at 5-6. If the law were otherwise, whenever a defendant wife supported her plaintiff husband with her wages or met his medical expenses out of her own pocket, the value of these payments would have to be brought into account. In this case, I find as a fact that the services were provided gratuitously because of the love of a wife to her husband, and were not intended to be made by the defendant in diminution of her legal liability to the plaintiff. The services would have been provided irrespective of whether or not the plaintiff had a right to recover damages whether from the defendant or anyone else. This conclusion is consistent with the reasoning in *National Insurance Co of New Zealand v Espagne* (supra) at 573; 598-599. In *Graham v Baker* (1961) 106 CLR 340, at p345 Dixon CJ, Kitto and Taylor JJ acknowledged that if sick pay had been an independent benefit secured by past services, there would be something to say for not taking it into account. But the Court characterized sick pay as wages, and held that there was no financial loss. (p 347) Whenever gratuitous services are performed by any relative, friend or member of the family of an injured person it could be said that there was no financial loss. There is no distinction in principle whether the service is rendered by the defendant and any other third person. The principle in *Graham v Baker* (supra) is therefore distinguishable. The loss in this case is the plaintiff's incapacity to look after himself *Griffiths v Kerkemeyer* (supra) at 192; *Van Gervan v Fenton* at 332, 347. *Blundell v Musgrave* (1956) 96 CLR 73 is not inconsistent with the result because the plaintiff in that case was obliged to repay the Navy for the treatment he received; that was not a case of a gift at all, and the existance of the legal obligation to repay demonstrated conclusively that the value of the treatment was not intended to be given in diminution of the defendant's liability. The difficult questions which arise when there is more than one defendant, or where the plaintiff is

guilty of contributory negligence, are more adequately adjusted in my opinion by allowing the plaintiff to recover the loss. Further, the policy questions which arise favour this result. The law should encourage and not discourage family members who may be defendants to provide assistance to the injured plaintiff; nor should it place "a premium on astuteness", to adopt Gibbs' CJ expression in *Griffiths v Kerkemeyer* (supra) at 168, by forcing plaintiffs to enter into contracts with their tortfeasors or by encouraging them to seek assistance only if the family member is not the tortfeasor, and at the same time run the risk of an embarrassing defence of failure to mitigate. Moreover the distinction which some of the authorities draw between past and future claims for gratuitous services has about it an air of unreality. In *Kars v Kars* (supra) Davies and McPherson JA held that the plaintiff is entitled to make a full recovery in relation to future care even if the evidence is that the defendant will be providing the care. They considered they were bound by *Van Gervan v Fenton* (supra) to reach this conclusion. Shepherdson J dissented; he would not have allowed anything in respect of the period of future care which the defendant would have provided. Cox J in *Motor Accidents Insurance Board v Pulford* (supra), at 62, 418-419 decided that so far as future care is concerned, *Van Gervan v Fenton* (supra) decided this question, and no allowance is to be made for the possibility that the defendant tortfeasor may meet this need in the future. In *Snape v Reid* (supra), which was decided before *Van Gervan v Fenton* (supra), the Court did reduce the future damages to take into account the possibility. Professor Luntz, as I have noted, originally accepted the *Snape v Reid* solution, (1995) 2 Torts Law Journal 80 at 87 footnote 46, but later changed his mind and is in line with *Kars v Kars* (supra): (1995) 2 Torts Law Journal 184 at 187. If it is correct to make no allowance for the contingency that the defendant will continue to provide voluntary assistance in the future, it is hard to see on what basis the plaintiff is disentitled to an award in respect of past gratuitous services. The High Court has been at pains to emphasize that the award is not in respect of services - it is in respect of the need of the plaintiff for the services. Accordingly I consider that the plaintiff, (at least in a case where

the defendant is indemnified under a compulsory scheme such as that provided by the *Motor Accidents (Compensation) Act* 1979 (NT) is entitled to an award in respect of his need for gratuitous services whether they were performed by the defendant or not and whether or not they are in respect of past or future needs.

I turn now to consider the quantum of the claim in respect of the plaintiff's past needs. These are to be valued at the market cost, generally speaking, unless those costs are too high to be reasonable: see *Van Gervan v Fenton* (supra), at 334. To the extent that some of the services provided for by the defendant as the plaintiff's spouse existed before the accident, this is to be ignored: *Van Gervan v Fenton* (supra), at 338; and per Gaudron J at 347ff. Most of the figures have, fortunately, been agreed. I observe in passing that some of the items sound also in the nature of damages recoverable under the principle in *Wilson v McLeary* (1961) 106 CLR 523, but the defendant rightly did not seek to argue that there was any difference in principle. The first difference between the plaintiff's and defendant's figures relates to the services the defendant provided to the plaintiff at the Santa Barbara Rehabilitation Institute. The plaintiff claims 4 hours at $15 per hour for 346 days. The defendant claims the plaintiff should be compensated at the rate of 4 hours at $10 per hour for 218 days. The number of days is a matter of calculation. The defendant's calculation is correct. I prefer the defendant's submission as to the rate. Accordingly for the period up to the time the plaintiff was discharged home on 1 June 1990 I allow US$28,550 plus US$25,000 for the expenses incurred, a total of US$53,550.

As to the period at which the plaintiff was at home from 1 June 1990 until the agreed date of 6 February 1995, the plaintiff contends for 6 hours a day at $29.75 per hour whilst the defendant contends for 1 hour a day at $10 per hour. The evidence establishes in my opinion that the plaintiff's needs required the defendant's services for at least 5 hours per day. As to the rate, the plaintiff's claim is based on the commercial cost of a case manager. The defendant's figure is based on the commercial cost of a social worker. Dr Djergaian in his statement of 7 December 1994, Ex P41, stated that if the

defendant were not providing her services it would be necessary to employ a case manager and her services should therefore be valued as a case manager. Although Dr Djergaian was not cross-examined on this point, I am unable to accept this evidence as a basis for valuing the defendant's services. The question is not to be determined by reference to the employment of a replacement, but by reference to the actual value of the defendant's services. The defendant is not a trained CNA, nurse or case manager and there is no evidence of what a case manager might do, if employed, by which I can make a comparison with what the defendant does. Some of the duties performed by the defendant are supervisory in nature; others are simple tasks which could be done by a housekeeper; others are organisational tasks; others are the sort of tasks done by CNAs, or by social workers. There is no real category of employment from which a market rate can be ascertained. There is evidence of rates for nurses' aides in the United States (US$16 per hour); social workers (US$10.02 per hour); case managers (US$29.75 per hour); Dr Rosecrance's services ($11 per hour). There is no evidence of rates for housekeepers, but I would expect that menial work is paid at a lower rate than skilled labour. The defendant submitted that because the CNAs came from an agency which already provided supervision, what the defendant did was not done out of the plaintiff's need, but because the defendant chose to do it. I do not accept this analysis of the evidence, which was overwhelming to the contrary. However, bearing in mind that the defendant has a full time job as well as 24 hour a day care provided by CNAs and having regard to what the defendant in fact does for the plaintiff I am unable to accept that the plaintiff's needs require the defendant's services for the 6 hours a day. I consider 5 hours a day is reasonable. I find that about half of the defendant's work is supervisory, about a quarter is that done by a CNA, and about a quarter is purely of a domestic nature. The rates quoted above (except Dr Rosecrance's) all have overhead and profit components in them, and are at best a guide. Doing the best I can I consider that a fair and reasonable rate overall would be US$12 per hour. Accordingly, I would allow the amount of US$12 x 1711 x 5, viz US$102,660 for this aspect of the claim.

3.7.3 Summary and Interest

To summarize, I award the following:

Past services by the plaintiff's children (see 3.7.1)	47,465.55
(a) period up to 1/6/90	53,550.00
(b) period up to 6/2/95	102,660.00
	US$203,675.55
In addition, I allow interest thereon. The defendant conceded that interest was allowable at the rate of 5% p.a. This was the rate claimed. Interest on US$203,675.55 @ 5% for 6.75 years is	68,740.50
TOTAL	**US$272,416.05**

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3.8 Future gratuitous services

3.8.1 Dr John Rosecrance

It was agreed that, if the defendant continued to provide gratuitous services to the plaintiff, Dr Rosecrance would provide additional gratuitous services the value of which is agreed at $11 per week.

I accept that the defendant is likely to continue to provide her services in the future, and if she does not, for any reason, the like services will be performed by Dr Rosecrance. The plaintiff claims that the hours performed weekly will amount to 6 hours a day, or 42 hours per week. For the reasons already expressed I find that the weekly value of the defendant's future services is 35 hours @ US$12 per hour, or US$420 per week.

The next question is the appropriate multiplier. The defendant contended for 700; the plaintiff's multiplier is a little over 714. I accept the plaintiff's figure. On this basis, the value of the future gratuitous services before allowing for contingencies is in the order of US$299,800.

As I have previously said (see para 3.6 above) there is a 30% chance that the plaintiff will require institutionalized care in the future. On the other hand, I accept that some future gratuitous services are likely to continue to be required irrespective of whether or not the plaintiff is institutionalized. I would allow 2 hours per day at $12 per hour ($168 per week) by the defendant, as well as $11 per week by Dr Rosecrance, a total of $179 per week. Bearing in mind all of these matters, I allow a total of **US260,000** for future gratuitous service.

3.9 Past loss of earnings

This is divided into four claims:

(a) Past wages lost.

(b) Past loss of income from writing grants.

(c) Past loss of income from consultancies.

(d) Past loss of income from publishing books etc.

3.9.1 Past wages lost

The amount claimed, including interest, is US$227,686. This figure is agreed, and accordingly I allow that sum.

3.9.2 Past loss of income from writing grants

The evidence is that up to the time of the accident, the plaintiff had not earned any income from writing grants. The plaintiff led evidence from which I was asked to infer that the plaintiff had the capacity to earn income from this source and in all probability would have exercised it to supplement his salary.

The correct approach to be adopted is, in my opinion, to be found in the following passage from the joint judgment of Deane, Gaudron and McHugh JJ in *Malec v J.C. Hutton Pty Ltd* (1990) 169 CLR 638 at 642-643:

> *''Assessing Damages for Future or Potential Events*
> When liability has been established and a common law court has to assess damages, its approach to events that allegedly would have occurred, but cannot now occur, or that allegedly might occur, is different from its approach to events which allegedly have occurred. A common law court determines on the balance of probabilities whether an event has occurred. If the probability of the event having occurred is greater than it not

having occurred, the occurrence of the event is treated as certain; if the probability of it having occurred is less than it not having occurred, it is treated as not having occurred. Hence, in respect of events which have or have not occurred, damages are assessed on an all or nothing approach. But in the case of an event which it is alleged would or would not have occurred, or might or might not yet occur, the approach of the court is different. The future may be predicted and the hypothetical may be conjectured. But questions as to the future or hypothetical effect of physical injury or degeneration are not commonly susceptible of scientific demonstration or proof. If the law is to take account of future or hypothetical events in assessing damages, it can only do so in terms of the degree of probability of those events occurring. The probability may be very high - 99.9 per cent - or very low - 0.1 per cent. But unless the chance is so low as to be regarded as speculative - say less than 1 per cent - or so high as to be practically certain - say over 99 per cent - the court will take that chance into account in assessing the damages. Where proof is necessarily unattainable, it would be unfair to treat as certain a prediction which has a 51 per cent probability of occurring, but to ignore altogether a prediction which has a 49 per cent probability of occurring. Thus, the court assesses the degree of probability that an event would have occurred, or might occur, and adjusts its award of damages to reflect the degree of probability. The adjustment may increase or decrease the amount of damages otherwise to be awarded. See *Mallett v. McMonagle* [1970] AC 166 at p174; *Davies v. Taylor* [1974] AC 207 at pp212, 219; *McIntosh v. Williams* [1979] 2 NSWLR 543 at pp550-551. The approach is the same whether it is alleged that the event would have occurred before or might occur after the assessment of damages takes place."

Where, as in this case, the plaintiff has never earned income from a particular source, has no history of having taken any steps to earn income from that source, and cannot himself be called to give evidence, that does not necessarily mean that no allowance can be made. It may be possible to draw inferences from the course commonly taken by others in a similar position to that of what the plaintiff might have become in the future and from what is known of the plaintiff as a man - his energy, interest in money etc., whether this would be consistent with the pattern of his life-style, and other relevant factors. Of course, what must be assessed is the value of the loss of the

chance the plaintiff had to earn income from this source; and this involves an assessment of the degree of probability of the events occurring and the value in money terms of that lost chance.

The plaintiff called a number of witnesses to establish a picture of what the plaintiff had become, what the future held for him, what sort of a person he was, and what others following similar career paths as he might reasonably have been expected to follow did in order to supplement their university salaries.

As to the plaintiff, I have already recorded some of my findings under section 3.1. It is now necessary to supplement those findings in some detail; these findings will become relevant to a number of the remaining heads of damage.

As previously mentioned, at the time of the accident the plaintiff held the position of Associate Professor at the University of Nevada. Evidence was given by Professor James Richardson, Professor of Sociology and Judicial Studies, Director of the Centre for Justice Studies, and Director of the Master Judicial Studies Degree Program at the University of Nevada. Professor Richardson did not know the plaintiff personally, but was familiar with the plaintiff's academic history and writings, and of his reputation at the University amongst other faculty members. He was familiar with the system of promotions at the University. He considered that the plaintiff had at least a 75% chance of promotion to a full professor by 1990 and a 100% chance of such promotion by 1991. Promotion would mean that the plaintiff would be expected to take a turn for a couple of years in the departmental chair and he may also, if interested, have become involved in directing a centre at the university; but this is not compulsory. A number of full professors refuse to do any committee work or administrative work because they are busy with research and writing, and if this is the course they prefer, they are not penalized or discouraged. Indeed it appears from his evidence that professors usually choose either a career path in administration or avoid it

completely, if their main interest is in research and writing. Nevertheless, as administrative work is not well paid and unpopular, Professor Richardson thought that the plaintiff, whilst he would do his best to avoid it, would be likely to have succumbed to pressure to take a turn as Departmental chair for a couple of years at some stage of his career.

Evidence was also given by Professor Ken Peak, a professor in the Department of Criminal Justice at the University of Nevada, who was responsible for hiring the plaintiff at the time the plaintiff first joined the University. Professor Peak knew the plaintiff well. They worked in the same department and his office was adjacent to the plaintiff's. In his opinion the plaintiff would have become tenured in 1989, and made a full professor by not later than 1991.

I accept these opinions. I consider that the plaintiff's chances of becoming a full professor by 1991 were close to 100%. I find also that the plaintiff was not interested in a career as an administrator. His interests lay in teaching, research and writing. I find that, apart from the probability of having to serve for a couple of years as faculty chair, there was a very high degree of probability that the plaintiff would have pursued his interests in teaching, and in research and writing, and I also find that there was a very high degree of probability that he would have become tenured, and therefore secure from dismissal (except for improper conduct), by at least 1989 or 1990. At that time I consider it highly probable that the defendant would have given up her teaching job, and lived with the plaintiff in Reno.

I turn now to the subject of "writing grants". Academics must publish or perish, as the saying goes. This means research, and publishing the results thereof. The University of Nevada is both a research and teaching university; i.e. it expects and encourages its staff to carry out research and publish the results. Research costs money, and this is obtained in America by seeking grants from large Federal funding agencies, such as the National Science Foundation, the National

Institute of Health or the National Institution of Justice which receive federal money to fund research. These agencies call for "requests for proposals", which invite applications for funding to carry out research into specific topics. Sometimes agencies consider applications for research on any topic suggested to them by an applicant. The applications are reviewed anonymously by a panel of experts, who decide which applications are to be given funding, and how much. Universities facilitate applications by their academic staff in various ways; by passing on information about request proposals, by holding workshops between staff and representatives from funding agencies and by providing the labour to assist the academic to make his application. Usually the labour force will be post graduate students at the University. This labour force is paid for by the university through the grant system. Each university negotiates an indirect cost recovery rate with the federal government or the funding agency. If that rate was, for example, 43.5%, a request for a grant for $100,000 is really a request for $143,500. The additional $43,500 goes to the university. Some of this is returned to the applicant to buy books, journals etc. Of the remainder, one half goes to the applicant's graduate school, and largely provides the funds which the graduate needs to finance research. Some of that money is used to help people make their applications for grants, or "write grants", and is called "seed money". The indirect cost recovery money is used to pay for the work of the post-graduate students. The grant itself goes to the university which pays a percentage of it to the applicant, and he then carries out the research. Each application must include what is called a "budget". Most academics need assistance to prepare the budget, which, as its name implies, is a financial analysis of the research costs. The university is able to provide this assistance with experienced people who are familiar with the technical requirements and the accompanying paperwork which has to be attended to.

As can be seen, this system provides a strong incentive for

universities to encourage their academics to write grants, because it is through writing grants that the university itself is able to generate significant funding. The University of Nevada receives between US$65 to US$70 million per annum in external funding through this system, and this means the university is able to produce more graduates at the Ph.D. level. The financial attraction to the applicant is also strong. Through grants, he is able to supplement his income and receive financial reward for his research.

Grants are made to nearly every faculty at the University of Nevada and in the areas of psychology, and criminal justice, grants are available. The policy of the University is that an academic may add up to 50% of his base salary out of the grant money to his salary. An academic's teaching load leaves a lot of free time, which the academic is expected to utilise in research. In addition to writing grants, other external institutions and agencies, including governments and private enterprise, approach universities to carry out research work. The process is much the same as it is with writing grants. A proposal is written in response to the approach, a fee is negotiated, and the money is paid to the University. Again, the academics are permitted to supplement their salaries by up to 50% of their base salary from fees thus earned. However, the monies distributed to academics from each of these sources cannot exceed 50% of the base salary: see Ex P45, and the evidence of Professor Richardson.

In addition, academics are free to do external consultancies. The University's policy permits each academic to do one day's consultancy per week during the course of the academic year so long as their teaching duties are cared for. Fees earned through external consultancies are paid direct to the academic, are not distributed through the University, and are not subjected to any financial limits.

In the present case, the plaintiff had been given a seed grant for the trip which brought he and the defendant to Australia when the accident occurred. He was given this grant with the expectation that he

would "write a larger grant" to a federal funding agency. Professor Richardson said (P76, p439-441):

> ..."my sense is that he (the plaintiff) was on track. People at our university are now being encouraged much more forcefully than was the case in the past to do this sort of thing. I've turned in a lot more grants in the last two or three years than I had done in the eighties. It's expected.
>
> We're rewarded for it. We have people to help us do it so it's become much more the norm for people ...
>
> And my sense is that Professor Rosecrance, given his really phenomenal record - the way you gather the data to write those articles is to do research. And while it's obvious that he had found a way to gather a lot of data and write a lot of articles without having money, once you build the record, you can get the money.
>
> ... the easiest way to predict in a way that people are going to be productive in the future is that they've been productive in the past ... I've seen a number of people start to get into the productivity vein, get used to doing that. That's how you spend your weekends, by the way, you write these articles nights and weekends, you write the grants the same way. You get in that track and you continue. You get - it gets to be habitual in a sense. You learn how to do it and particularly if your institution is trying to help you do it, then it becomes a much easier thing to do."

Professor Richardson's evidence was that there was a great deal of interest in the plaintiff's field, and that the National Institute of Justice and a number of other agencies had made funds available for research into areas involving Criminal Justice, and the social problems associated with gambling. Usually grants are for 2 or 3 years and once a person has succeeded in getting a grant, that fact makes it more likely that he will succeed in obtaining further grants: *success breeds success*.

Professor Peak gave evidence that the Criminal Justice field was

"pretty lucrative" so far as consultancies were concerned. He did consultancy work for a company in Denver doing "police department studies", and with the State Department of Investigation. His opinion was that there was significant world-wide interest in gaming sociology, and he expected that the plaintiff would have "done pretty well". He mentioned that the seed grant was to enable the plaintiff to research federal regulation of the gaming industry, that the plaintiff had developed an international reputation, and had been invited to lecture at Harvard, which he states was `a big, big feather in our cap to have a faculty member invited to go back there to lecture." (P76 p558-559). He felt that the plaintiff "could have gone about as high in (the areas of consulting or grant writing) as he would have wanted to or would have liked to given a rapid growth of his reputation", but conceded that the competition for grants was tough, it was harder to get grants if you were not a full professor, and only a few grants had been made to faculty members so far. Consultancy work also involves overheads that the member has to bear.

Professor Eadington, professor of economics and Director of the Institute for the Study of Gambling and Commercial Gaming at the University of Nevada gave evidence, that since 1988 there had been an imprecedented spread of legal casino style gambling in the United States. In 1988 only 2 States had legal casinos; now there were 22 and about 12 other States were considering legalising casinos. He confirmed that in 1988, the plaintiff was one of a handful of academics in the world expert in the social impact of gambling. Professor Eadington had increased his own income from consultancies from US$30,000 in 1991 to US$105,000 in 1994. Most of his consultancies had come from research into regulation or legalization of gambling that was of interest to regulating bodies or private sector companies. He attributed demand for his own services through having an established reputation, being known in the industry, and from his published writings. His evidence generally supported the plaintiff's case that the plaintiff's was a rapidly growing field, that people with established reputations were in demand for consultancies from the late 1980s onwards, that in 1988 the plaintiff was one of only of a small number of experts with

such reputations and that the interest in the plaintiff's area was world-wide. He knew the plaintiff and his work. His opinion was that it was quite likely that the plaintiff's expertise would have been in heavy demand for consultancy work. The diversity of opportunities for well paid consultancies and the extensive nature of those opportunities were dealt with in Ex P55. It is clear that Professor Eadington believed that the plaintiff was well placed to reap significant financial rewards from consultancy work.

Evidence was also given by Professor I Nelson Rose, Professor of Law at Whittier Law School, Los Angeles, who had degrees in political psychology (or social psychology). He also was an expert in gambling studies. He knew the plaintiff personally, and was familiar with the plaintiff's work and reputation. He confirmed the explosion of the interest of gambling that swept the United States from the late 1980s to the present. He stated that the opportunities to earn income from consultancies in this area was limited only by the time the individual had available, and, by the individual's ability to sell himself. Professor Rose receives at least one serious offer a week. His evidence generally supported that of the other witnesses. He gave details of the numerous paid projects he had been involved in, and the rates chargeable in the industry etc, which it is unnecessary to dilate upon (see generally Ex P60). He believed the plaintiff was well placed to have profited from these opportunities as well as from the field of probation. The witness stated that he earned in an average year about US$60,000 (pre-tax) from consultancy work.

I find that the plaintiff had the capacity to earn income as a consultant in the fields of gambling sociology and probation and parole, that his services as a consultant were likely to be in significant demand, that he had the capacity to earn income writing grants, and that because he had the time, interest and energy to do so, he was likely to exercise these capacities. I find that the fact that grant writing advantaged the University, and that the University encouraged grant writing were added reasons why the plaintiff was likely to exercise his earning capacity in grant writing. I find also that the plaintiff was likely to obtain grants because he was an acknowledged leader in

this field, and the federal government agencies responsible for making grants were likely to be interested in awarding grants to him in the areas of his interest in probation and in gambling studies. I find it more likely that the plaintiff would have obtained significant grants after he became a full professor in about 1989 or 1990. I do not consider that the plaintiff would have been successful in obtaining grants other than seeding grants prior to then because of the time still needed to be devoted to finalisation of the publication of his book *Probation and Parole*, the fact that he was not yet a fully tenured professor, and the amount of time he needed to spend away from the University travelling back and forth to Santa Barbara. After that time, I consider it is reasonable to expect that he would have had a strong chance of obtaining grants once he obtained his full Professorship and his book had been published. I consider it likely that in the years after 1989-90, the plaintiff's income from grant writing would have steadily increased because success in obtaining grants usually increases the probability of further grants, interest in the plaintiff's areas increased heavily during this period, the plaintiff had a strong work ethic and was devoted to research and writing, and from continued encouragement and pressure from his University. His work had already been published in major respected academic journals and I see no reason why this would not have continued. The most that the plaintiff could have earned from this source is 50% of his base salary, or between $18,400 in 1989-90 and $28,800 in 1994-5. However I do not consider it likely that the plaintiff would have successfully exercised his capacity to the maximum level. The plaintiff was likely to earn income from consultancies which would have left less time to devote to grant writing and completing the necessary research. The level of interest from federal funding agencies was not as strong in his areas of research than in other areas of research, such as in physics and chemistry. The growth of interest in gambling studies resulted in a growth in the number of academics researching that area which would have meant more competition for funding. The plaintiff's prolific writing history suggests he would have been likely to want to publish more books or at least update hist text-book when it became published. This is not

necessarily incompatible with the research undertaken from grant writing, but there is not a complete overlap in these activities. Allowance must also be made for the plaintiff's interest in travel, attending conferences and seminars, guest lecturing, holidays and the usual vicissitudes of life, and for a period of 2 years when he would probably have undertaken administrative duties.

The plaintiff's claim for grant writing is set out in Table 5 of section G of his counsel's written submissions. The claim in my opinion is modest and realistic. It begins with a modest amount of $2,000 in 1988/9 and ends with amounts of $12,000 in 1993/4 and $7,153 to the 31 weeks available in 1994-1995 (i.e. the rate for 1994-1995 is $12,000 p.a.) The amount in 1988-1989 would represent a seeding grant. I consider the plaintiff's claim is a reasonable estimate of the plaintiff's prospects of earning income from this source, (except that I do not think allowance has been made for the period of time the plaintiff would have spent in administration) and I reject the defendant's submission that only a nominal amount should be awarded. The total amount claimed under this heading is $49,153 pre-tax. After deducting income tax the amount is reduced to $31,949. I think it is likely that the plaintiff's administrative duties would have made some impact on his ability to earn in the first two years, which might have delayed his earning as much as was claimed in later years. I have therefore reduced the claim overall by $10,000. This reduces the gross claim to $39,153 pre-tax. Allowing for tax at the applicable rate in the United States at an effective rate of 35%, I allow the sum of $25,450.

3.9.3 Past loss of income from consultancies

I find that the plaintiff was likely to be in heavy demand for consultancy work. Experts who are in heavy demand are those with established reputations, which in turn depends on on-going publication of research findings. The plaintiff had already an impressive record as a writer. This was soon to be further enhanced by the publication of his text book, *Probation and Parole*. He was a member of a very small group of academics expert in the area of gambling studies. He was acknowledged amongst other prominent experts, such as Professor Eadington and Professor Rose. His

reputation had reached Australia. Professor Dickerson, associate Professor of the Department of Psychology at the University of Western Sydney MacArthur, head of that University's psychology department, and Executive Director of the Australian Institute for Gambling Research gave evidence that the plaintiff had delivered a paper at the 1986 conference of the National Association of Gambling Studies held in Sydney and had been invited to deliver a further paper at the 1988 conference held in Canberra. Professor Dickerson was familiar with the plaintiff's work and confirmed the plaintiff's status as one of a small group of international experts on gambling studies. After the accident, the National Association honoured the plaintiff with a speech called `The Rosecrance Address' delivered in his honour by Associate Professor John O'Hara. Professor Dickerson confirmed that interest in gambling studies in Australia had also grown and that the research centre had in recent times obtained $500,000 in research contracts. I find that there was heavy growing international demand for consultancies in the plaintiff's field during the period 1988 up to the date of trial. I accept the evidence of the plaintiff's witnesses that the demand in the last 2 or 3 years before trial for consultants was of a nature that the leading experts in this field were unable to accept all of the invitations offered to them. I find that the plaintiff was well placed to have profited from the opportunities which existed, and that it was extremely likely that he would have been in heavy demand for well paid consultancy work. The rates charged by Professor Eadington and Professor Rose were US$200-US$250 per hour over this period. Because of the growth of interest, I find that potential income growth over the period between 1988 to 1994 was likely to rise from a relatively modest level to relatively high levels. I accept also the evidence of the plaintiff's witnesses as to the diversity of the opportunities for consultancy work for the plaintiff ranging from giving expert evidence before regulatory bodies and in court proceedings, advising legislatures, advising government agencies, advising commercial enterprises, as speakers at academic and professional conferences and conventions, and in providing advice to other professionals involved in the same fields but in different disciplines.

The plaintiff submitted that a reasonable value for this loss of opportunity would be to parallel the income earned by Professor Eadington, although to be fair to the plaintiff's counsel, this argument was based on a number of different considerations including the rates charged by both Professor Eadington and Professor Rose, an analysis of the time likely to be available to the plaintiff to do consultancy work and other factors. The defendant submitted that this aspect of the claim was too speculative to award more than a very modest, almost notional, sum. The defendant characterized Professors Eadington and Rose as "money-making machines", and submitted that the plaintiff's interests lay in teaching and in research and writing. Therefore, so the argument went, the plaintiff was unlikely to have pursued opportunities to any significant degree.

I accept that the plaintiff enjoyed teaching and was a popular and well respected teacher. I accept also that he spent time outside the lecture room with his students. However enjoyable this may be, teaching undergraduates cannot provide the intellectual satisfaction that an academic, engrossed in his field, must find. The plaintiff obviously was not satisfied only with teaching, as his record as a researcher and a writer shows. I think that the plaintiff, like most human beings, had his fair share of human vanity and interest in money-making. Consultancy work provided an avenue not only for the satisfaction of those traits but was part of the baggage of accomplishments field leaders need to collect to enhance their own reputations. In addition, consultancy work provides further learning and research opportunities. The experience of the practical application of academic thought to the real world is in itself a learning experience. Consultancies were often multi-disciplinary, requiring the consultant to work in conjunction with experts from related disciplines in the field, e.g. economists, lawyers, psychologists and sociologists. The plaintiff, according to Professor Eadington, understood the basic economic factors, for example. Multi-disciplinary consultancies would give the plaintiff an opportunity to enhance his knowledge of these related disciplines. Consultancy opportunities existed also in presenting papers at conferences and conventions. The

plaintiff had already given papers in Australia and London. For these reasons I find that it is highly probable that the plaintiff would have accepted the opportunities likely to be offered him to earn money as a consultant.

As to the amounts the plaintiff could well have earned I accept that he might have earned as much as US$100,000 pre-tax per annum by 1994, and amounts similar to Professor Eadington in 1991 ($31,000) 1992 ($75,000) and 1993 ($90,000). One hundred thousand dollars represented 400 hours @ $250 per hour, or in other words, an average of 7.7 hours a week at $250 per hour. The plaintiff had one free day a week for consultancy work during the academic year. The plaintiff had a "B" contract which in effect gave him 3 months per annum when he was not required to teach classes, and even during the academic year, his teaching load was not heavy, and since 1988 teaching loads have generally lightened at his University.

I consider that $100,000 p.a. gross is the maximum amount he could have been expected to earn in a given year. I expect that not every hour needed to be spent on a consultancy is chargeable. The plaintiff, as I have found, would have spent time on writing grants and other research work. The plaintiff's full domestic life which I have referred to earlier in paragraph 3 (his enjoyment of the race track, dinner parties, conversation with friends, travel, active physical life, time spent with his wife - family etc) would also have been a significant limiting factor. In the period he was expected and likely to have shouldered administrative duties, he would have had even less time for consultancy work. Allowance must also be made for the ordinary vicissitudes of life, (sickness, etc., which may otherwise have intervened) time for holidays etc.

The plaintiff's estimates are contained in Table 6 of Section G of the plaintiff's written submissions. They begin with a figure of $5,000 for the year 1989-1990, and thereafter increase gradually up to $30,000 for the year 1991-1992. In the years thereafter they are the same as that earned by Professor Eadington. I note on the other hand that Professor Rose's pre-tax earnings averaged $60,000 p.a. although his gross earnings were about $100,000 p.a. over the years 1991-1994. Professor Rose was able to claim a

lot of business deductions which accounted for the pre-tax differences between his earnings and Professor Eadingtons. I do not know if Professor Rose was in a peculiar position to claim deductions or if Professor Eadington failed to claim legitimate business deductions. The impression I gained is that Professor Rose capitalized on his deductions whilst Professor Eadington charged out most of his overheads as disbursements. It is not clear to what extent, if any, either Professor spent time on grant writing. Both professors were regarded as world leaders of long standing and more senior than the plaintiff. I do not consider that I can make direct comparisons with the earnings of these gentlemen, except to say that I am able to find that the maximum potential for the plaintiff was $100,000 p.a. gross. From this I expect some business deductions would have been allowable. Although I am unable to say with any accuracy to what extent, I expect that the figure would have been about 10%, having regard to the probability that most overheads could have been charged out as a legitimate disbursement. I think the plaintiff's figures are inflated. I think that in the years 1989-90 to 1990-91 the plaintiff would have earned little income from consultancy work because he was not yet a tenured full Professor, he still had to complete the publication of *Probation and Parole*, I expect he would have had fewer opportunities than world leaders such as Professors Rose and Eadington whose capacities were not as yet fully extended, I expect he would have undertaken his share of administrative work for a couple of years as soon as he became a full Professor, and because I expect his initial efforts would have been directed towards grant writing. In addition I must allow for the possibility that he would have devoted time to write a revision of his text book and possibly to have written a second book - see para 3.9.4 below. I allow only modest sums for each of these years: 1988-1989 $1,000; 1989-1990 $2,000 and 1990-1991 $3,000. Thereafter I expect his chances of capitalising on this area of his potential earning capacity would have increased significantly and expediently over each passing year as he had more time to devote to this, his reputation grew, he had obtained his full Professorship with tenure (and a more settled lifestyle, his wife having joined him in Reno

with consequently much less travelling to and from Santa Barbara), the explosion in interest in his field began to take effect, and the world leaders became swamped with opportunities all of which they could not accept. In the year 1991-2 I allow $10,000; in the year 1992-3 $20,000, and in the year 1993-4 $40,000. By the time of the accident I estimate his chances as being able to earn at the rate of $50,000. These figures total:

1988-89	1,000
1989-90	2,000
1990-91	3,000
1991-92	10,000
1992-93	20,000
1993-94	40,000
1994-95 (31 weeks @ $50,000 p.a.)	29,808
	105,808

I deduct 10% for overheads, leaving a pre-tax figure of $95,227. After deducting tax at 35%, this leaves a net figure of **$61,898**. I allow that amount.

3.9.4 Past loss of income from book writing

The plaintiff, before he left Australia, had entered into a contract with Brooks-Cole Publishing Company, California, for the publication of his textbook *Probation and Parole*. Brooks-Cole Publishing Company is a publisher of college textbooks. The plaintiff's book had reached the stage where a revised draft had already been received by the publishers. The contract to write the book was signed on 1 September 1987. The first draft was received on 18 May 1988 and the revised chapters were received on 15 June 1988. The publishers sought reviews from teachers in the field likely to prescribe the work as a core text. The reviewers were supportive, but indicated certain changes that were needed, including a further chapter to the book to cover an area not dealt with. This was the stage at which the book had reached by the time of the plaintiff's accident.

Mrs Claire Verduin, a senior editor of Brooks-Cole Publishing

Company gave evidence that she was in charge of the publication of the book. She said that the plaintiff was about one year ahead of the schedule the publishers expected the plaintiff to have kept - in itself a most unusual achievement. She had been involved with the publication of *Gambling Without Guilt* and expected from her experience of the plaintiff that the book would have gone into production between November 1988 and February 1989 and would have been published in approximately October 1989. Mrs Verduin gave evidence as to the expected sales figures, and royalty rates payable. The expected sales figures are based on data gathered about the number of students enrolled in the discipline, the reaction of the reviewers, whether the text meets curricula guidelines, other texts already in print or expected to be in production from other publishers, sales figures for like texts etc. Mrs Verduin conceded that there was a large degree of speculation involved in estimating the demand for a book. She acknowledged that her expectations in respect of *Gambling Without Guilt*, which went through a similar process, were significantly under achieved. However that work was not designed as a core text, where as the risks were less in a book such as *Probation and Parole*. Accordingly to Mrs Verduin *Probation and Parole* was expected to sell between 7,500 and 18,000 copies in the first five years and would have returned between $23,350 to $55,500 for the first edition. Notwithstanding the elements of speculation involved, I accept her evidence as a fair estimate of the likely earnings in royalties to the plaintiff between October 1989 and October 1994.

Mrs Verduin gave evidence that there was a significant probability that a core text having this measure of success would be revised. The publishers records indicate that 58% of similar texts were revised in the period 1979-91. Whether or not a text is revised depends upon many factors including the success of the first edition, as well as the interest in the author to prepare a revision. Her expectation was that a revised edition would probably have earned royalties to the

plaintiff between $30,355 - $72,150. She considered that the plaintiff had the capacity and opportunity to write at least one further core text in the field of corrections, which she considered would have had even wider potential than *Probation and Parole*, with similar probabilities of a revised edition. The timing of the further text is speculative but I consider it would have been extremely unlikely to have occurred before 1995, even allowing for the plaintiff's extraordinary diligence. Otherwise, I accept Mrs Verduin's evidence.

So far as pre-trial losses are concerned I allow the sum of $39,420 gross from royalties earned from the first edition. This is the average of the expected royalties, which I consider to be a reasonable estimate of the possibilities. I should record that the evidence is that *Probation and Parole* will now never be published, despite efforts by Dr Rosecrance and the publishers to find another author to complete it. I consider that on the evidence if a revised edition is to occur, that it would not have been published before October 1995 at the earliest. I therefore make no allowance for the revised edition or a second core text under this head. From the sum of $39,420 tax at 35% must be deducted. This leaves a net sum of **$25,623**. I award this amount.

3.9.5 Summary of past losses and interest to date of trial

In summary, for past losses I have awarded the following:

(a)	Past wages, including interest	US$227,686
(b)	Grant writing	25,450
(c)	Consultancies	61,898
(d)	Royalties	25,623
	TOTAL	**US$340,657**

In addition, the plaintiff is entitled to interest on items (b), (c) and (d). The amounts were in respect of earnings progressively

received over the period 1988 to 1995. The approach of both parties was that I should allow interest at a lower rate (5%) over a notional period of 6 years 8 months rather than the rate usually allowed for these kind of losses to reflect the fact that the losses were notionally spread over the whole period. The rate chosen by the parties, 5%, presumably reflects two other factors. Firstly, that interest rates have declined since the late 1980s; second that most of the losses in respect of items (b) and (c) were incurred at the latter part of the period rather than being uniformly spread. Having regard to the approach of the parties, it is not for me to differ. Accordingly I award interest on items (b), (c) and (d) ($112,971) calculated at the rate of 5% over 6 years and 8 months. This totals $37,657. Accordingly I award that sum by way of interest. The total of these sums is therefore **US$378,314**.

3.10 Loss of Future Earning Capacity

There is no dispute that the plaintiff's present net salary and tax free health insurance benefits were worth $39,121 per annum, if he were a full professor. In addition, in the future the plaintiff could expect to obtain merit increases, which would have increased his base salary. Merit increases are based on an overall evaluation of each academic which is designed to reward productivity. Professor Richardson believed that based on the plaintiff's past record of productivity, the plaintiff would have averaged merit increases of 7% per annum in most years between 1988 to 1995. (see also Ex 43). This is a favourable contingency.

So far as the future grant writing is concerned, the value of the plaintiff's lost opportunity to earn income from this source was US$12,000 p.a. gross as at the agreed date in February 1995. This translates to a net figure of US$7,800 per annum. I see no reason to adjust this figure for the future.

As to future consultancies, I have assessed the value of the plaintiff's lost opportunity from this source at US$50,000 per annum

gross from which must be deducted overheads (10%) and tax (35%). This results in a figure of $29,250 per annum. I see no reason to adjust this figure for the future. There is a good chance, in my opinion, that the plaintiff would earn more than this by increasing his workload in the future which is not entirely offset by the chance that the plaintiff would have spent more time on other interests, and the chance that the demand for work in his fields may return to lower levels.

The total of these figures is US$76,171 p.a., or US$1,464.83 per week net. The plaintiff submits that I should project these figures to age 72; the defendant concedes age 68. The argument in favour of age 72 is that the plaintiff came to academic life late in life; he was likely to achieve at the highest level internationally; he was a fitness enthusiast in good health at the time of the accident; there were no known factors then affecting his life expectancy; there is no compulsory retiring age. I consider that it is reasonable to project the figures to age 72, particularly because the plaintiff, as he got older, would have been expected to have climbed closer to the pinnacle of his career, whilst other competitors would have died or retired. This would be likely to have strongly encouraged him to stay on to that age.

The present net value of US$1,464.83 per week using 3% Tables to age 72 is, US$778,455. I consider the favourable contingencies, which I have mentioned, cancel out the unfavourable ones. Accordingly, I award the sum of **US$778,455**.

3.11 Losses from future publishing

On the facts I have found in paragraph 3.9.4, the plaintiff had a chance of producing a revised edition of *Probation and Parole* in about 1995. On the evidence of Mrs Verduin, the plaintiff could have been expected to earn between $30,355 to $72,150 over the 5 years between about 1995 to 2000. That range of figures was based on a 15% royalty, assuming the book was sold only in hard cover (as originally intended) at its 1989 price of $20. The price in 1993 would have been set at $35

which would have increased the range to between $51,188 to $122,850.

In addition there is the chance that the plaintiff may have written at least one more core text, as well as a possible revision, at some time in the future.

I consider that the chances of a revised edition of *Probation and Parole* were probably in the order of 60% having regard to the likely success of the first edition and the incentive to the plaintiff to revise this edition. Also I consider that the chances of a further core text were about 20% with a 10% chance of a revision at some time in the future, with a similar outcome so far as earnings are concerned as to that of *Probation and Parole* (adjusted to reflect a higher price at $35). Projections of the raw calculations treating the revision of *Probation and Parole* as a certainty at average royalty earnings and for the first edition of the new textbook are set out at p17 of Section G of the plaintiff's written submissions. As to the revision of *Probation and Parole*, assuming a regular return over 5 years, the total is US$87,020. Similarly the hypothetical new textbook would return $US66,938 at present prices at some indefinite future time, probably beginning somewhere around the year 2,000. The plaintiff's raw figures make no allowance as I have said for possibilities but treat each work as a certainty. Having regard to the possibilities as I have estimated them to be in accordance with *Malec v J.C. Hutton Pty Ltd* (supra) I arrive at raw figures of $52,200 for the revision of *Probation and Parole*, $13,388 for the new core textbook and $8,700 for the revision. These figures total $74,288 which I will discount down to $70,000 to reflect the fact that the earnings are future earnings but received now as a lump sum. From this tax of 35% is to be deducted. This leaves US$45,500 net. From this sum I deduct $5,500 for the vicissitudes of life. I allow the sum of **US$40,000**.

3.12 Loss of Retirement Benefits

The plaintiff's claim under this head of damage is for an amount of $240,000. This is the average of two figures of $225,807 and $254,216 appearing in Table 4 of Section G of the plaintiff's written submissions. The defendant concedes a figure of $189,596 taken from the same table, less an allowance for contingencies. These are all after tax figures.

The area of dispute depends on two factors. The first factor is the probable retirement age. I consider the correct retirement age is 72 for the reasons given in para 3.10 above.

The second area of dispute is the level of "annual increases". The plaintiff contends for "annual increases" at the rate of $3,600; the defendant contends for the rate of $2,400. These annual increases reflected the merit increases discussed briefly in section 3.10 above and were not inflation based. I accept the plaintiff's submission that the evidence favours a probable range of merit increases at the mid level, rather than at the lowest level. I consider that before discounting for contingencies, the appropriate base figure is $254,216.

However I accept the defendant's submission that a discount for contingencies should be allowed to reflect the possibility that the plaintiff may retire at an earlier age than 72, and may not average as much as the average merit increases. I consider a discount of 15% adequately reflects these possibilities. Accordingly I award the sum of US$216,116.

3.13 Damages for Award Management

The evidence in this case is that the damages awarded to the plaintiff will be managed by professional fund managers. The plaintiff claims the fees to be charged by the managers.

The parties, I have been told, have agreed on an appropriate formula for calculating the amount of the award to be made for this head of damage, but there may still be some differences depending upon

the findings I have made thus far. By consent, I have been asked to publish my findings thus far, and defer dealing with this aspect of the claim until after the parties' legal representatives have had an opportunity to consider my findings.

Accordingly, I will defer this aspect of the claim until a date to be fixed.

4. Summary of Conclusions

In accordance with my findings, I summarize my conclusions as follows. I find that the plaintiff has established that the defendant's negligence caused the plaintiff's losses, and that there is no contributory negligence, and I propose to award the following sums:

Past Pain and Suffering and Loss of Amenities	A$140,000.00
Interest thereon	A$41,533.00
Future Pain and Suffering and Loss of amenities	A$210,000.00
Medical expenses incurred in Australia	A$141,187.89
	A$532,720.89
Medical expenses incurred in the United States	US$1,984,159.12
Future care costs	US$2,650,000.00
Past gratuitous services	US$203,675.55
Interest thereon	US$68,740.50
Future gratuitous services	US$260,000.00
Past lost earnings	US$340,657.00

Interest thereon	US$37,657.00
Loss of Future Earning Capacity	US$778,455.00
Losses from future publishing	US$40,000.00
Loss of Retirement Benefits	US$216,116.00
	US$6,579,460.17

The following items are reserved for further submissions:

(a) Interest on past special damages.

(b) Damages for award management.

(c) Costs.