IN THE COURT OF APPEAL OF BELIZE, A.D. 2011

CIVIL APPEAL NO. 19 OF 2010

BETWEEN:

MS WESTERHAVEN SCHIFFAHRTS GMBH & CO KG
REDIER SHIPPING BV **Appellants**

AND

THE ATTORNEY GENERAL OF BELIZE **Respondent**

BEFORE:

The Hon. Mr Justice Mottley	**-**	**President**
The Hon. Mr Justice Sosa	**-**	**Justice of Appeal**
The Hon. Mr Justice Morrison	**-**	**Justice of Appeal**

Michael Young SC and Miss Deshawn Arzu for the appellants.
Miss Lois Young SC and Miss Magali Perdomo for the respondents.

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13, 14, 19, 20 October 2010 and 16 May 2011.

MOTTLEY P

[1] I have read the judgment of Mr. Justice Morrison and I concur.

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MOTTLEY P

SOSA JA (President as from 1 January 2011)

[2] I concur in the reasons for judgment and orders proposed in the judgment of Morrison JA, which I have had the benefit of reading, in draft, and to which I find myself unable usefully to add anything. The judgment of the Court is therefore in the terms set out in paragraphs [109] and [132] – [134], inclusive, *infra*.

SOSA JA

MORRISON JA

Introduction

[3] This is an appeal from a judgment given by Conteh CJ on 26 April 2010, in which he awarded damages in the sum of $11,519,047.00 to the respondent in an action brought on behalf of the Government of Belize ('GOB') against the appellants ('the shipowners'). This action arose out of the grounding ('the grounding') on 13 January 2009 on the Belize Barrier Reef ('the Barrier Reef') of M/V Westerhaven ('the Westerhaven'), a sea-going ship of a gross tonnage of 7,541 tons. The actual grounding occurred at a point some 56 kilometres from Belize City.

[4] The action was brought on behalf of GOB as "the owner, custodian and guardian" of the Barrier Reef and the claim against the shipowners, who were respectively the registered owner and the charterer of the Westerhaven, was in respect of the damage to the Barrier Reef caused by "the wrongful navigation and or negligence" of the captain and crew of the Westerhaven.

[5] Liability, which was initially denied, was conceded by the shipowners shortly before the commencement of the trial in the court below and the matter thereafter proceeded as to damages only.

[6] In this appeal, the shipowners challenge the award of damages in the court below on the grounds that the Chief Justice erred in holding (i) that the shipowners' liability to GOB for damages arising out of the grounding was not limited by the operation of the Convention on Limitation of Liability for Maritime Claims 1976 ('the 1976 Convention'); and (ii) that GOB had sufficiently proved that it was entitled to damages in the sum awarded or at all.

[7] There is no challenge on this appeal to Conteh CJ's express finding (at para. 47 of his judgment) that the 1976 Convention "is operational and effective and the applicable instrument" for the purposes of limitation of liability for maritime claims in Belize. This conclusion finds conclusive support in section 3(1) of the International Maritime Organization Conventions Act 2008, read together with item 1 appearing in the Schedule to the Act. While it will be necessary to return to the 1976 Convention in greater detail later in this judgment, it may be helpful to outline its general effect briefly at this stage.

[8] The 1976 Convention permits certain categories of persons (including shipowners and charterers) to limit their liability to third parties for claims related to the operation of ships in a number of situations, which are set out in Art. 2.1(a) to (f). Of relevance to the instant case are sub paragraphs (a) and (c). Art. 2.1(a) relates to "claims in respect of loss of life or personal injury or loss of or damage to property (including damage to harbour works, basins and waterways and aids to navigation) on board or in direct connexion with the operation of the ship or with salvage operations, and consequential loss resulting therefrom", while Art. 2.1(c) relates to "claims in respect of other loss resulting from infringement of rights other than contractual rights, occurring in direct connexion with the operation of the ship or salvage operations".

[9] The limits of liability in any given case derive from the actual tonnage of the ship involved, in accordance with a formula set out in Art. 6 of the 1976 Convention and the evidence in this case is that, if the convention is held to be applicable, the shipowners will be entitled to limit their liability for the grounding to US$2,009,347.49.

The Barrier Reef

[10] In 1996, the Barrier Reef, which is the longest in this hemisphere, was named by the United Nations Educational, Scientific and Cultural Organization ('UNESCO') as a 'World Heritage Site'. The following extract from a working paper published by the World Resources Institute ("Coastal Capital: Belize. The Economic Contribution of Belize's Coral Reefs and Mangroves", E. Cooper, L. Burke and N. Bood, 2009, available online at http://www.wri.org/publications), sets the stage appropriately:

> "Belize, home to only 300,000 people, is well known for its marine and terrestrial biological diversity. Sitting in the heart of Central America, this small country boasts the longest barrier reef in the Western Hemisphere, extending approximately 200 km along its Caribbean coast and covering approximately 1,400 km (McField and Bood 2007). The barrier reef complex includes a variety of reef types (barrier reef, lagoon patch reefs, fringing reefs, and three off-shore atolls) and ecologically linked habitats including mangrove forests, seagrass beds, estuaries, and numerous small islands or cayes. Island and coastal mangroves (within 1 km of the coast) cover approximately 400 – 420 km of the country.
>
> Two of Belize's major industries – tourism and fisheries – rely heavily upon coastal mangroves and coral reefs, and the majority of its population and valuable real estate lies along coastal areas that are sheltered by these habitats. These and other benefits to Belizeans make effective management of these resources a critical priority."

[11] In his judgment (at para.5), Conteh CJ described the evidence of GOB's leading expert witness at the trial, Dr Melanie McField, who is an acknowledged authority in the study and assessment of coral reef eco-systems, marine science and conservation, as "cogent and helpful". In her

witness statement, Dr McField described coral reefs as "actual living ecosystems made up of a vast assemblage of plants, animals and microbial life that function together to sustain the reef framework and to produce a variety of ecosystem services benefiting the people of Belize, the Wider Caribbean and the world". None of the parties to this appeal takes exception to Conteh CJ's characterisation of the Barrier Reef in the opening sentence of his judgment as "one of the distinguishing features of the country".

The grounding

[12] The relevant facts were not in dispute at the trial. The Westerhaven is a container ship used in international trade and it had, prior to the date of the grounding, called on Belize on a regular basis. On the afternoon of 13 January 2009, en route to Belize, the vessel arrived at the English Caye pilot station, where it took on a Belizean pilot at 1352 hours. The vessel then proceeded on her inbound voyage, mooring alongside the Port of Belize some two hours later. By 2100 hours, all cargo operations having been concluded, the Westerhaven departed its berth, again with a Belizean pilot on board, arriving at the English Caye pilot station at 2239 hours. There, the pilot disembarked and the Westerhaven continued on her southbound voyage to the port of Santo Tomas, Guatemala.

[13] Just over an hour later, at approximately 2345 hours, in circumstances which it is not necessary to describe in the light of the shipowners' acceptance of liability, the Westerhaven went aground on the Barrier Reef, at a point some 5.7 nautical miles southeast of English Caye. The actual grounding occurred inside the Caye Glory Spawning Site Marine Reserve, which is one of 11 active fish spawning sites forming part of Belize's Marine Protected Areas (of which there are 18 in all) system. It is common ground that, as a direct consequence of the grounding, considerable damage was done to the Barrier Reef.

[14] In due course, on 18 January 2009, after the commencement of salvage operations, the Westerhaven was re-floated and was towed back to the Port of Belize.

GOB files action

[15] GOB commenced action on 16 January 2009 by filing a claim *in rem* against the Westerhaven. In the claim form, GOB was described as "the owner of Belize's Barrier Reef" (which was described as "the property"), and the claim was against the shipowners for negligent damage to GOB's "property". The amount of the claim, including interest to the date of filing, was $31,102,877.12. Shortly after the claim form was filed, what Conteh CJ described (at para. 27) as "an animated skirmish", ensued between the parties, having to do, in the first place, with GOB's successful application for the arrest of the Westerhaven and, thereafter, with the shipowners' application for its release upon terms. In support of the application for the warrant of arrest, an affidavit filed on behalf of GOB by Major (ret.) Lloyd Jones, Commissioner of Ports for Belize, provided an estimate of the damage to the reef, based on a preliminary valuation done by the Department of the Environment ('DOE'), dated 16 January 2009, in the amount of US$15,540,000.00 (representing an estimated area of damage of approximately 4,440 square metres at US$3,500.00 per metre). In the result, by an order made by the Chief Justice on 28 January 2009, the Westerhaven was released from arrest upon provision by the shipowners of security, approved by the court, in the sum of US$6,500,000.00 in the form of a guarantee from a commercial bank or reputable insurance company with a place of business in Belize. This order was subsequently varied by a further order made by the Chief Justice on 13 February 2009 giving approval to the provision of security by way of a guarantee from a named institution in the said sum of US$6,500,000.00.

[16] On 16 February 2009, GOB filed an amended claim form, with the charterers Reider Shipping BV added as a defendant, pursuant to the order of the Chief Justice. On that same day, the shipowners filed a defence, taking

the point, among others, that their liability with respect to the claim was limited under the 1976 Convention to the maximum amount of US$2,009.347.49. The shipowners also filed a counterclaim on the basis that GOB had caused them loss and damage by claiming "excessive security" above the limit of liability prescribed by the 1976 Convention. However, the counterclaim was not pursued at trial (in my view, correctly so, since, as Conteh CJ observed at para. 34 of his judgment, "the quantum of security … was security set by the Court itself") and nothing now turns on it.

[17] On 3 February 2009, GOB filed a further amended claim form (the "Amended Amended Claim Form"), in which it now described itself as "the owner and custodian" of the Barrier Reef, and deleted the statement that the Barrier Reef was "its property".

[18] GOB's statement of claim was filed on 3 April 2009. In it, GOB described itself (at para. 1) as "the owner, custodian and guardian" of the Barrier Reef and (at para. 15), it averred that the grounding of the Westerhaven had "destroyed an area of the Belize Barrier Reef amounting to 18,519.6 square metres" and set out GOB's particulars of loss, damage and expense as follows:

> "PARTICULARS OF LOSS, DAMAGE AND EXPENSE
>
> A. Damage and injury to the environment and loss of use of the environment including:
>
> (i) Loss and damage to habitat for fish, invertebrates and plants and associated commercial fisheries value
>
> (ii) Loss of protection against erosion and storm surge
>
> (iii) Loss of biodiversity
>
> (iv) Loss and damage to tourism, recreational and aesthetic and cultural value
>
> Value of environmental and ecological loss and damage: $5,400.00 per square metre of injured reef.

Total environmental and ecological loss and damage: $31,080,000.00.

B. Expenses incurred by Governmental agencies in responding to the incident:

(i) Expenditure incurred by the Belize National Coast Guard in responding to the casualty: $3,000.00

(ii) Expenditure incurred by the Fisheries Department for immediate inspection and assessment of injured reef and marine environment: $5,000.00

(iii) Expenditure incurred by the Department of the Environment for immediate inspection and assessment of injured reef and marine environment: $1,047.00

Total expenses incurred in responding to incident: $9,047.00.

TOTAL LOSS, DAMAGE AND EXPENSES: $31,089,047.00."

[19] By notice dated 2 June 2009, the shipowners applied to the court for the determination, as a preliminary issue, of the question whether the 1976 Convention (or the 1996 Protocol which subsequently amended the 1976 Convention) applied to this case. The ground of the application was that this question was purely an issue of law and that its early determination might save expense and serve to promote a resolution of the matter. However, this application was heard and refused by Conteh CJ on 6 July 2009. (Curiously, by the time his judgment came to be written, Conteh CJ appears to have forgotten this episode entirely, twice observing in the judgment that no application had been made to have the issue of limitation tried as a preliminary issue and on the second occasion commenting that this was "regrettable, as the issue of limitation of liability has, in the event, been the central focus of the trial" – see paras. 24 and 49 of the judgment.)

[20] The two issues raised on the pleadings for determination at the trial were therefore identical to those which arise on this appeal, viz., (i) whether the 1976 Convention applied, thus limiting GOB's recoverable damages to US$2,009,347.49, ('the limitation issue') and (ii) how should the damages suffered by GOB as a result of the grounding of the Westerhaven be quantified ('the quantification issue').

The trial

[21] The evidence at the trial was given by way of detailed witness statements, five in all on behalf of GOB and two on behalf of the shipowners. In addition, some of the witnesses were also called at the trial to amplify their witness statements and for cross-examination.

[22] Before the first witness was called on the morning the trial commenced, an application was made on behalf of GOB to amend its statement of claim to reflect what was described by counsel as "a different method, a final method of valuing the damage", based on a "new scientific technique". The actual amendment sought was to increase the amount claimed in the statement of claim for "Total environmental and ecological loss" from $31,080,000.00 to US$18,819,100.00, or $37,638,200.00. Hardly surprisingly, this application was vigorously opposed by counsel for the shipowners and it was in due course refused by the Chief Justice.

[23] GOB's main witness was Dr McField, who had, within three days of the grounding (at the request of the Fisheries Department), assembled a research team to assist in assessing the damage to the reef. The team's written report ('Westerhaven Ship Grounding Reef Health Assessment (Caye Glory)'), which was submitted on 27 January 2009, was exhibited to Dr McField's witness statement and also provided the basis for her evidence at the trial. Dr McField spoke to the impact of the grounding on the Barrier Reef as a habitat for fish, invertebrates and plants. With regard to fish, she stated that the grounding of the Westerhaven inside the Caye Glory Marine Reserve was of much higher ecological significance than it would have been if it had occurred

outside of the protected areas system. This was because the Caye Glory Marine Reserve was designed to protect the critically endangered 'Nassau Grouper' and it had once supported what was thought to have been the largest spawning aggregation of 'Nassau Grouper' in the world. (On this point, Dr McField's evidence was supported by the evidence of Ms Kirah Forman, who, as a member of the research team which conducted surveys at the grounding site during the period 13 – 19 January 2009, gave evidence of having observed "up to 3,000 Nassau Groupers on the bank ready to spawn, making this area one of the most important spawning sites in the Caribbean".)

[24] No doubt anticipating what was to be one of the major issues in the case, Dr McField asserted that the "living reef ecosystem and the services it provides are not the 'property' of anyone". She went on to expand on this as follows:

> "The reef cannot be bought or sold. A 'google' search of 'property in Belize' turns up over 33 million hits – none of the listings reviewed were selling coral reef. In fact, several years ago two private investors attempted to lease a section of the reef from [GOB] as a tourism management concession. Their efforts were unsuccessful due to public outrage at the suggestion that the nation's coral reef could be leased as property to any private entity. The Belize reef is certainly part of the nation's natural capital and public assets, capable of providing revenue generation and valuable ecosystem services for millennia to come, if its functional integrity is maintained."

[25] Dr McField also stated that the Barrier Reef is also a habitat for marine plants (which absorb carbon dioxide and release oxygen), algae and microorganisms, which in turn provide a food source for other marine life. Additionally, the Barrier Reef provides important protection of the coastline against erosion and storm surge and also has tremendous recreational, aesthetic and cultural value, making it "a mainstay of the tourism industry in Belize". The Barrier Reef contributes greatly towards the total biodiversity of Belize, the region and the world, as evidenced by its designation as a World Heritage Site by UNESCO, a designation reserved for sites "of outstanding cultural or natural importance to the common heritage of mankind".

[26] Based on a 2004 paper by an "acclaimed expert" (to borrow Dr McField's description), Jeffrey Wielgus, on the calculation of monetary claims for damages to coral reefs by vessel groundings, Dr McField concluded that there was "no standard dollar figure per square meter of injured reef or single approach than can be universally applied to these cases", reef damage in some cases having been valued "as high as US $10,895.97 per m^2 using a method called Habitat Equivalence Analysis, developed by the National Oceanic and Atmospheric Administration (NOAA) of the United States…[while the]…lowest value we have seen in any reported case of reef damage is US $2,000 per m^2". The figures varied, Dr McField said, "according to, among other things, density of coral cover, species of corals affected, and variety of fish living in the area".

[27] Dr McField and her team estimated the total area of damage to the reef as a result of the grounding to be 18,519.6 square metres, broken down into 7,332.3 square metres representing "core damage" and 11,187.3 square metres representing "partial damage". The value of the damage caused by the destruction of a section of the Barrier Reef was estimated to be US$2,700.00 per square metre of reef affected, which was, the team considered, a conservative estimate, given that "the area is inside a critically sensitive marine reserve and that the types of corals lost will take thousands of years to re-grow if ever". Accordingly, Dr McField estimated the value of the damage caused by the Westerhaven to be approximately US$26,952,693.00 (based on an estimate of 98% destruction of the reef in the area of "core damage" and 25% in the area of "partial damage").

[28] Amplifying her witness statement at the trial, Dr McField testified that the method used to assess the value of the damage and the conclusions which the team had reached represented the best that could have been done in the limited time available to them in the immediate aftermath of the grounding. She described the conclusion as "preliminary", because the team did not regard it as the best method and had in fact wanted to do a 'Habitat

Equivalency Analysis' ('HEA'), which was "a rather specialized field" and which had never been done in Belize before.

[29] When she was cross examined by Mr Michael Young SC for the shipowners, Dr McField readily agreed that the assessment of compensation for marine environmental damage was not her area of expertise, but nonetheless described the HEA as "the preferred method".

[30] GOB also placed great reliance on the evidence of Messrs Walter Jaap and Ed Watkins ('Jaap and Watkins'), who were called to establish a basis for the acceptance by the court of the HEA. Both gentlemen had considerable experience in the assessment and quantification of the value of injury and damage to coral reefs as a result of large vessel groundings. They conducted their survey of the grounding site in April 2009, with a view to providing a valuation of the injury and damage caused to the Barrier Reef as a result of the grounding. Their report, which is dated 15 May 2009, was exhibited to their joint witness statement.

[31] Jaap and Watkins estimated the total area of injury at 6,418 square metres, with the area of "catastrophic injuries" comprising 1,674 square metres of this total. Within the total area, the loss of ecological services was estimated at 98.50%. Jaap and Watkins favoured the assessment of the value of the damage to the Barrier Reef using the HEA methodology, by which they calculated the value at US$18,819,100.00. Mr Jaap explained in his oral evidence that this final figure was derived by applying HEA analysis to three parameters, viz., the total area of the damage, the "baseline" conditions as regards the ecological services provided by the damaged area before and after the occurrence of the damage and an assumption as to the number of years that it would take the damaged area to recover to pre-baseline levels (in this case, 500 years was assumed). HEA analysis then produced an area of "compensatory restoration", representing the total area of restored reef that would be necessary to compensate for the loss of the area of damaged reef over the recovery period. The compensatory restoration area was in this case calculated to be 188,191 square metres which, at US$100.00 per square

metre (the higher end of an accepted range of $75 - $100), made up the total of US$18,819,100.00.

[32] This is how the report prepared by Jaap and Watkins described the previous experience of the courts with HEA analysis in the United States of America (at page 12):

> "The HEA procedure is widely used by US federal and state agencies, and for compensation in marine construction disturbances (Mazzotta et al., 1994; King, 1997; NOAA, 1997; Milon and Dodge, 2001; Dodge, 2002; Dodge and Kohler, 2004; Fonseca et al., 2002; Jaap et al., Lum, 2006). Application of HEA was approved by the courts in at least two cases for which there exist reported opinions. In the first case, United States v. Fisher, 97 E. Supp. 1193, 1201 (S.D. Fla. 1997), the district court approved, without discussion, the use of HEA to value restoration cost due to sea grass destruction from a ship grounding in the Florida Keys National Marine Sanctuary. Since the damage occurred within a marine sanctuary established pursuant to the Marine Protection, Research, and Sanctuaries Act (MPRSA), the courts noted that restoration costs were explicitly recoverable under 16 U.S.C.P. 1432(6)(A) of the MPRSA, which provides for cost recovery based on the cost of replacing, restoring, or acquiring the equivalent of the damaged resource, as well as the value of the lost use of the resource pending its restoration or replacement. Similarly, the United States v. Great Lakes Dredge & Dock Co., 259 F3d 1300, 1305 (11th Cir. 2001), another case involving a ship grounding in the Florida Keys National Marine Sanctuary, the court of appeals affirmed the use of HEA as a methodology for valuing restoration costs of damaged sea grass beds. "In light of the explicit language set forth in the MPRSA mandating the recovery of restoration costs, it is not surprising that the HEA methodology for valuing restoration was deemed appropriate by the courts, since it meets the goal of the statute."

[33] Asked specifically about the possibility of doing major restoration work on the grounding site, Mr Jaap's response was that the site would be "perhaps unsuitable for doing major restoration", and he cited problems with "severe wave surges, wave energies, currents and so forth", as well as the risk of "collateral damages or injuries from construction equipment on site".

[34] In cross examination, Mr Jaap was shown the report to which Dr McField had testified and asked to comment on the differences in the area of "core damage" between that report and his own assessment of the same area, to which his response was that "I can only say that it is different and I would have to confer with them some way to be able to figure out why they came up with that value". He accepted that HEA was a method which was originally devised (by economists) in the United States of America, but stated that it had to his knowledge been used in other parts of the world. When pressed by Mr Young to say that HEA was "governed by, connected to or based on statutory requirements of the United States", Mr Jaap disagreed, insisting that "it was not developed just based on statute".

[35] During his cross examination by Mr Young, Mr Jaap was asked by the Chief Justice to explain his seeming preference for the word 'injury' (as distinct from 'damage') to describe the effect of the Westerhaven's collision with the reef, and his answer was that in the United States the tendency was to use the word 'injury' to characterise the actual impact on the site rather than 'damage': it was, he thought, "a cultural thing".

[36] Mr Richard Shaul was the shipowners' expert witness as to valuation of the damage to the Barrier Reef. He visited the grounding site over the period 17 January to 17 February 2009, and he estimated the total area of damage to be 5,343.8 square metres, of which an area of 4,128.5 square metres of crushed reef spur was the area of the most severe damage, "in terms of its adverse effect on the reef because it resulted in both a complete loss of biota and habitat (structure)". He was also able to review the report prepared by Dr McField's team before submitting his own injury assessment report dated 4 June 2009.

[37] Mr Shaul's approach was radically different from that of either Dr McField and her team or Jaap and Watkins. His recommendation was that what he described as the "restoration approach" should be adopted, with the primary goal being "to return the habitat to as close an approximation of its prior condition as reasonably possible". In order to achieve this, three major

concerns required to be addressed, firstly, identifying and locating injured coral and placing them in an area where they can safely recover; secondly, stabilising loose debris and rubble created by the grounding, so as to avoid "secondary (additional) injuries"; and, thirdly, replacing or repairing physical components "that will provide a structural framework for the reef to naturally recover". Mr Shaul made detailed proposals in his report as to how these objectives might be achieved and provided a breakdown of the estimated cost to conduct the proposed restoration. The total estimated cost was estimated at US$2,500,000.00 and the time required to accomplish the restoration was stated to be approximately six months.

[38] As regards the potential impact of weather conditions on any restoration effort, Mr Shaul accepted that weather conditions in the area of the grounding site "can be severe at times", but pointed out that the period January-February 2009, when the seas were at times very rough, had been in the middle of winter and that "summer conditions will be much calmer". He also accepted that "the idea of working in the marine environment can be dangerous, that there could be additional damage to the reef, that it will not be a simple task [which] can be said of any reef restoration project that has ever been conducted".

[39] Mr Shaul was emphatically of the view that there was "no uniformly accepted procedure or set of procedures globally employed to determine an appropriate claim for damages to coral reefs caused by vessel groundings" and he thought it "disappointing" that the report by Dr McField and her team (which he considered to be "deeply flawed") had made "only scant mention of restoration potential at the grounding site". Mr Shaul had problems with Dr McField's use of Mr Wielgus' "more than 10 years old" data to calculate an average value for compensation purposes of US$2,700.00 per square metre and his conclusion was that the report presented "a very subjective assessment of the injury…based on a limited, and…deficient survey of the site".

[40] However, Mr Shaul also stated that "coral reef injuries are well suited for [HEA] evaluation because they can often be significantly mitigated through readily available restoration techniques". He accordingly went on to suggest that "methodologies such as reef restoration and [HEA] be utilized to help determine the damage claim…[and that]…it would be most useful if the involved parties work cooperatively to ensure that sound scientific judgment is considered ".

[41] When Mr Shaul was cross examined, Miss Deanne Barrow, who appeared with Ms Lois Young SC for GOB, took Mr Shaul directly to his observations quoted above. Asked whether it was his opinion that the HEA method was appropriate for valuing the damage caused by the grounding, his answer was that "it could be, yes". He went on to reiterate his view that "HEA should be conducted in a cooperative effort" between GOB and the shipowners and recommended the adoption of this approach. However, he accepted that he had not done an HEA analysis on the grounding site and that there was no element of compensatory damages in the amount budgeted for his restoration plan. He nevertheless considered that the reef, if restored in accordance with his proposal, would provide the same ecological services as had existed before the grounding, "over time".

[42] Miss Barrow also tackled Mr Shaul directly (and vigorously) in relation to the potential impact on his restoration proposal of prevailing weather conditions at the grounding site and the passage of time since the grounding. He accepted that those were both relevant factors, as a result of which the total size of the area of injury to the reef might have expanded since the night of the grounding. He also agreed that no emergency salvage work had been done by the shipowners in this case within the critical two to three week period after the grounding. Further, that corals in the 4,128.5 square metres of crushed reef spur that he had estimated, that is, roughly three quarters of the total area of injury by his estimate, could not be re-attached. Finally, Mr Shaul accepted that, given the passage of time since the grounding, he could not say for sure if his plan to re-attach corals dislodged by the grounding would work.

Conteh CJ's judgment

[43] On the limitation issue, Conteh CJ found in favour of GOB, on the basis of his acceptance of "the principal plank" (as he described it at para. 64) of GOB's position on this issue, which was that the Barrier Reef was not 'property' within the meaning of Article 2.1(a) of the 1976 Convention and that the shipowners' liability was therefore not limited. This is how the Chief Justice stated his conclusion on this issue (at para. 85):

> "I do not therefore think that either paragraph (a) or (c) of Article 2.1 of the 1976 Convention is directly applicable to limit liability in respect of claims for injury or damage to the Belize Barrier Reef. This is so because I find, the Barrier Reef is not "property" for the purposes of the limitation of liability for claim in respect of it. I also find and hold that a claim, as the instant one, for damage and injury to the environment as a result of the grounding of the **Westerhaven** on the Barrier Reef, is not a "claim in respect of **other loss** resulting from infringement of rights other than contractual rights." It is a claim that is clearly *sui generis* and does not flow from infringement of rights whether or not contractual. It is clearly a claim in respect of the ecology of the Barrier Reef and of the marine environment."

[44] On the quantification issue, Conteh CJ considered it "reasonable and fair to award [GOB] the sum of $2,000.00 per square metre, and given that [GOB] is making a claim in respect of only 5,755 square metres of reef damage, this makes a total of $11,570.00.00" (para. 139). As regards the HEA, the learned judge said that he was "constrained from accepting it for the simple reason that it is premised on legislation that has no parallel in Belize" (para. 130). In the final result, Conteh CJ awarded $11,570,000.00 as damages to GOB in respect of the damage to the Barrier Reef and $9,047.99 for expenses incurred as a result of the grounding, both items to bear interest at 3% per annum from 14 January 2009.

The grounds of appeal and a late respondent's notice

[45] On 28 May 2010, the shipowners filed notice of appeal challenging Conteh CJ's judgment in respect of both sums awarded. Four grounds of appeal were filed, as follows:

> "(1) The Learned Chief Justice erred in interpreting the Convention on Limitation of Liability for Maritime Claims 1976 (the 1976 Convention) and holding that it does not apply to a claim for damages for negligence arising from damage to the Belize Barrier Reef.
>
> (2) The Learned Chief Justice erred in holding that the Claim does not fall within Article 2 [and particularly 2(1)(a) and 2(1)(a)] of the 1976 Convention.
>
> (3) Having rejected the assessment of damages put forward by the Claimant, the Learned Chief Justice erred in choosing the sum of $2,000.00 per square metre as representing the loss and damages sustained by the Claimant.
>
> (4) The Claimant not having proved the quantum of damages, the Court ought to have awarded nominal damages only."

[46] It will be seen immediately that these grounds give rise to the identical issues which were canvassed at the trial in the court below, grounds 1 and 2 relating to the limitation issue and grounds 3 and 4 to the quantification issue. When the appeal came on for hearing on 13 October 2010, Mr Young withdrew the appeal against the award of $9,047.00, with interest.

[47] Some time after the hearing of the appeal had commenced (on 14 October 2010) Ms Young for GOB sought and was granted leave to argue, by way of respondent's notice, the following:

> "That the trial judge misdirected himself and erred in law when he rejected the Habitat Equivalency Analysis (HEA) as a basis for quantifying the value of the injury to the Belize Barrier Reef and to the environment."

The submissions

[48] Taking grounds 1 and 2 together, Mr Young for the shipowners referred us to the 1976 Convention for its actual language, particularly in Art. 2.1(a) and (c). He submitted that treaties, like any other legal documents, are drafted to reflect the intention of the contracting parties and that they should be interpreted, as prescribed by the Vienna Convention on the Law of Treaties 1969 ('the Vienna Convention'), in accordance with the ordinary meaning of their terms, taken in context and in the light of the object and purpose of the particular treaty.

[49] In his detailed skeleton argument, Mr Young very helpfully referred us to a number of leading texts and authorities on shipping law, by way of an examination of the historical background to the 1976 Convention and to emphasise in particular the policy underpinnings of the concept of limitation of liability in international shipping. He submitted further that consideration and comparison of a number of international conventions which limit liability for negligent damage make it clear that the 1976 Convention applies equally to claims involving damage to the environment, which are no less claims for damage to property because they contain an environmental damage component. Mr Young also referred us to the 1967 grounding of the vessel *'Torrey Canyon'*, to make the point that environmental issues were very much in the contemplation of the international shipping community from the time of that incident, which led to the International Convention on Civil Liability for Oil Pollution Damage in 1969.

[50] But quite apart from what he described as "abundant authority" demonstrating that environmental damage is covered by the 1976 Convention, Mr Young submitted that a close examination of the language of

the convention itself, particularly the exclusionary clauses in Art. 3, makes it clear that "where there is environmental damage emanating from the operation of a ship from a cause not falling within an exception under Art. 3, the shipowners will be entitled to rely on the limitation of liability in Art. 2".

[51] We were also referred by Mr Young to a number of provisions to in the statute laws of Belize, including the Belize Constitution, which treat the Barrier Reef as State property. GOB's position in this litigation was therefore inconsistent and contradictory, having regard to the clear evidence that the Barrier Reef was regarded by GOB as its property for other purposes. "Property", it was submitted, "in its essence and most basic sense simply connotes 'ownership'". Mr Young submitted further that 'property' is "a generic word, with a very wide meaning", and made the observation that GOB's position reflected "a fundamental inconsistency", whereby the Barrier Reef and the ecosystem which it supports are said by it not to be 'property', while at the same time it maintains a claim for damage to reef and the ecosystem.

[52] Mr Young accordingly concluded his wide-ranging arguments on the limitation issue by submitting that the claim for damage to the Barrier Reef was clearly caught by the language of Art. 2(a) and (c) of the 1976 Convention, having regard to the history of limitation conventions, the object and policy of the 1976 Convention and the wording of the convention itself.

[53] On the quantification issue, Mr Young reminded us at the outset that, even where negligence has been admitted, a substantial award of damages is not automatic and that the claimant must prove both the fact and the amount of loss and damage before he can recover substantial damages. Should he fail to do so, then nominal damages only will be awarded. Specifically as regards the Chief Justice's award, Mr Young complained that there was no explanation or indication of how the figure of $2,000.00 per square metre was arrived at and submitted that, having rejected GOB's basis of assessment, the court could only award nominal damages. Accordingly, it was urged, the

award of $11,570,000.00 should be set aside and nominal damages only should be awarded.

[54] Taking grounds 1 and 2 together, as Mr Young had done, Ms Young submitted that the Chief Justice's conclusion that the 1976 Convention did not apply was amply justified by the evidence in the case and the established principles of treaty interpretation. She too referred us to the Vienna Convention and submitted that the correct approach to the interpretation of Art. 2.1(a) of the 1976 Convention was to interpret the word 'property' in its context. She also made the point that, in interpreting international conventions, the interpretation of words used in domestic law should usually have no role to play.

[55] As regards the proper interpretation of the word 'property', Ms Young submitted that "the marine environment, made up of a complex web of relationships between various sea animals, plants and microorganisms, is not included within the scope of 'property' on an ordinary, natural reading of that word within the context and object of the 1976 Convention". To support this submission, we were directed to the evidence of Dr McField and the material referred to by her in her evidence, on the basis of which it was further submitted that GOB "is the Custodian of the reef as a natural resource" and that the Chief Justice had therefore come to the correct conclusion in declining to treat the reef as 'property' within the meaning of Art. 2.1(a).

[56] It was further submitted that It would in any event be an unnatural use of language to use the word 'damage' to refer to the impairment of natural resources such as a coral reef, the expert witnesses on both sides having confirmed a preference for the word 'injury' in relation to resource impairment. Ms Young also made the point that the authorities establish that there is an independent head of damages called 'environmental or ecological damages', which is separate from and in addition to property damage.

[57] Turning to the language and structure of the 1976 Convention itself, Ms Young made a number of points. The first was that the collocation of

"personal injury" and "damage to property" in Art. 2.1(a) "tends to show that the sub-paragraph deals with conventional concepts of **physical damage** and not damage to intangible ecological services" (emphasis in the original). Secondly, that the *ejusdem generis* rule applied, by virtue of which the meaning of the general word 'property' should be limited by the particular words immediately following it, that is, "harbour works, basins and waterways and aids to navigation", which are of a different genus or category from a coral reef. Thirdly, the express exclusion of oil pollution damage from the 1976 Convention (by Art. 3(b)), given the fact that such damage was already covered by the 1969 Convention on Civil Liability for Oil Pollution damage, demonstrates the intention of the framers of the convention to avoid overlapping between different types of loss.

[58] We were then taken by Ms Young to the language of a number of other conventions emanating from the International Maritime Organization, to make the point that those instruments generally make a distinction between 'property' and 'the environment' and that, if the framers of the 1976 Convention had intended liability for damage to the environment to be limited, they would have specifically included it.

[59] In the light of all of this, Ms Young submitted, it is clear that injury to the marine environment by destruction of coral reefs "represents a unique species of environmental damage…distinct from environmental damage caused by the agent of pollution". Thus the environmental effects of coral reef destruction are only now receiving global attention and concern, which are likely to result in the development of specific conventions by the maritime community. In addition to the unlikelihood of claims in respect of this species of environmental damage having been contemplated by the 1976 Convention and earlier conventions, the ceiling of liability placed by the 1976 Convention is "lamentably insufficient to carry out restoration or to compensate for the losses incurred", therefore making it obvious that the framers of the convention did not contemplate claims such as the instant one.

[60] On grounds 3 and 4, Ms Young submitted that GOB had quantified and adequately proved its loss by the expert evidence produced at the trial. Based on the HEA, GOB had proved the value of the environmental damage as being US$18,819,100.00 and in the light of this the Chief Justice's award of $11,510,000.00 amounted, in effect, to nominal damages. In any event, the amount awarded by the Chief Justice represented "fair, reasonable and just" compensation, which was entirely appropriate in the circumstances.

[61] Ms Young submitted finally, in a supplemental skeleton argument in respect of the respondent's notice, that Conteh CJ had erred in rejecting the HEA as a method for calculating compensation for injury to the Barrier Reef.

[62] Mr Young in his written reply challenged GOB's submission that reef damage was not in the contemplation of the framers of the 1976 Convention, pointing out that the *Torrey Canyon* disaster in 1967 caused substantial environmental damage, including damage to the coastal environment. In fact, Mr Young submitted, environmental damage from oil pollution raises identical issues to environmental damage to reef groundings. Mr Young also highlighted a number of anomalies that would flow from GOB's interpretation of the 1976 Convention, among them the fact that, while it would limit liability for injury or death to persons, liability for damage to reefs and atolls would be unlimited. Mr Young also pointed out that Ms Young's reliance on the *ejusdem generis* rule was inconsistent with her earlier submission on the inappropriateness of resorting to domestic law for the interpretation of international conventions. And finally, as to the reference by Ms Young to definitions of words in the context of other conventions, Mr Young submitted that this should not be a basis "to trammel the meaning" of the words in the 1976 Convention.

[63] In his reply on the quantification issue, Mr Young maintained his position that GOB had not proved its claim for damages and, as regards the HEA, submitted that Conteh CJ had been correct to treat it as inapplicable to Belize in the absence of appropriate legislation.

Discussion and analysis

[64] During the course of the wholly admirable submissions made by both leading counsel in this appeal, reference was made to a number of works of authority and judicial decisions on all aspects of the subject matter of the appeal. I have omitted to make specific reference to them only because of their great number, but I wish to place on record the tremendous assistance that I have derived from this material and to say that I am extremely grateful to counsel for their efforts. It naturally goes without saying that my failure to make specific reference to all of this material in the discussion which follows is not intended to signify either disregard or disrespect to either side.

Grounds 1 and 2 - the liability issue

[65] The starting point in considering this issue must naturally be the 1976 Convention itself. This appeal is primarily concerned with the provisions of Arts 1, 2 and 3, the full text of which is as follows:

> "Article 1
>
> Persons entitled to limit liability
>
> 1. Shipowners and salvors, as hereinafter defined, may limit their liability in accordance with the rules of this Convention for claims set out in Article 2.
>
> 2. The term "shipowner" shall mean the owner, charterer, manager or operator of a seagoing ship.
>
> 3. Salvor shall mean any person rendering services in direct connexion with salvage operations. Salvage operations shall also include operations referred to in Article 2, paragraph 1 (d), (e) and (f).
>
> 4. If any claims set out in Article 2 are made against any person for whose act, neglect or default the shipowner or salvor is responsible, such person shall be entitled to avail himself of the limitation of liability provided for in this Convention.
>
> 5. In this Convention the liability of a shipowner shall include liability in an action brought against the vessel herself.

6. An insurer of liability for claims subject to limitation in accordance with the rules of this Convention shall be entitled to the benefits of this Convention to the same extent as the assured himself.

7. The act of invoking limitation of liability shall not constitute an admission of liability.

Article 2

Claims subject to limitation

1. Subject to Articles 3 and 4 the following claims, whatever the basis of liability may be, shall be subject to limitation of liability:

(a) claims in respect of loss of life or personal injury or loss of or damage to property (including damage to harbour works, basins and waterways and aids to navigation, occurring on board or in direct connection with the operation of the ship or with salvage operations, and consequential loss resulting therefrom;

(b) claims in respect of loss resulting from delay in the carriage by sea of cargo, passengers or their luggage;

(c) claims in respect of other loss resulting from infringement of rights other than contractual rights, occurring in direct connection with the operation of the ship or salvage operations;

(d) claims in respect of the raising, removal, destruction or the rendering harmless of a ship which is sunk, wrecked, stranded or abandoned, including anything that is or has been on board such ship;

(e) claims in respect of the removal, destruction or the rendering harmless of the cargo of the ship;

(f) claims of a person other than the person liable in respect of measures taken in order to avert or minimize loss for which the person liable may limit his liability in accordance with this Convention, and further loss caused by such measures.

2. Claims set out in paragraph 1 shall be subject to limitation of liability even if brought by way of recourse or for indemnity

under a contract or otherwise. However, claims set out under paragraph 1(d), (e) and (f) shall not be subject to limitation of liability to the extent that they relate to remuneration under a contract with the person liable.

Article 3

Claims excepted from limitation

The rules of this Convention shall not apply to:

(a) claims for salvage or contribution in general average;

(b) claims for oil pollution damage within the meaning of the International Convention on Civil Liability for Oil Pollution Damage dated 29th November 1969 or of any amendment or Protocol thereto which is in force;

(c) claims subject to any international convention or national legislation governing or prohibiting limitation of liability for nuclear damage;

(d) claims against the shipowner of a nuclear ship for nuclear damage;

(e) claims by servants of the shipowner or salvor whose duties are connected with the ship of the salvage operations, including claims of their heirs, dependants or other persons entitled to make such claims, if under the law governing the contract of service between the shipowner or salvor and such servants the shipowner or salvor is not entitled to limit his liability in respect of such claims, or if he is by such law only permitted to limit his liability to an amount greater than that provided for in Article 6."

[66] The general limits of liability for claims, save for passenger claims, are set out in Art. 6 and the limit of liability for passenger claims is set out in Art. 7. It is not necessary to refer to the mechanism for fixing the actual limits of liability for the purposes of this judgment.

The history of and rationale for limitation of maritime claims

[67] The editors of Chorley and Giles' Shipping Law (8th edn, page 394), describe the rule that a shipowner can limit his liability to persons suffering loss or damage through negligent navigation or management of his ship as "an important rule, which sets shipping apart from all branches of industry and commerce". The concept of limitation of liability is that "a shipowner or some other person is entitled to limit his liability in respect of certain maritime claims arising out of an occurrence to a particular amount, irrespective of the total amount of such claims" (Admiralty Jurisdiction and Practice, by Nigel Meeson, 3rd edn, para. 8-3). That amount will then represent "a fund from which victims of the disaster are compensated pro rata, being paid a proportion of their actual loss if the fund is not large enough to allow payment in full" (Chorley and Giles, page 395).

[68] By the time the first piece of legislation giving shipowners the right to limit liability for claims was enacted in England in 1773 (the Responsibility of Shipowners Act, 7 Geo 2, c. 15), similar legislation had already been enacted elsewhere in Europe (for example, in Germany, Sweden and Holland). The 1773 Act allowed shipowners to limit liability to the value of the ship and freight for claims arising out of the theft of cargo by the master or crew. However, subsequent legislation in 1786 extended limitation to "any act, matter or thing or damage or forfeiture occasioned or incurred…without the privity or knowledge of the owners" (26 Geo. 3, c. 86) and later still to loss of life or personal injury. In due course, the limitation amount was detached from the value of the ship itself and the idea of a notional value was introduced, based upon the tonnage of the ship, and in 1894 the rights of shipowners to limit liability were consolidated in sections 502 and 503 of the Merchant Shipping Act 1894. International conventions followed in 1924 and 1957 (see generally Meeson, paras 8.1 – 8.4 and see below, para. [72], et seq]).

[69] In **Alexandra Towing Co. Ltd v Millet (Owners) and Egret (Owners) and Others, "The Bramley Moore" [1964] P. 200, 220**, Lord Denning MR said this:

> "The principle underlying limitation of liability is that the wrongdoer should be liable according to the value of his ship and no more. A small tug has comparatively small value and it should have a correspondingly low measure of liability, even though it is towing a great liner and does great damage. I agree that there is not much room for justice in this rule: but limitation of liability is not a matter of justice. It is a rule of public policy which has its origin in history and its justification in convenience."

[70] The "justification in convenience" to which Lord Denning referred finds an amplified echo in the following statement by Chorley and Giles (page 394):

> "The convenience of the rule is responsible for its survival. The modern justification is not that it would be unfair to make a shipowner pay for all the damage that he has caused: it is that a shipowner can obtain adequate insurance cover for third party claims if his insurers can calculate their maximum expense with certainty. Victims generally benefit if the limits are set high enough and if they can be sure that an insurer will pay their claim."

[71] And in his influential judgment in **The "Aegean Sea" [1998] 2 Lloyd's Rep. 39, 35,** Thomas J referred to a lecture given by Lord Mustill to the British Maritime Law Association ((1993) L.M.C.L.Q. 490) in which he identified at least six policy reasons underlying the applicable English legislation, being "…the ideal of the joint maritime adventure exemplified in the law of general average, the risks involved in the carriage of high value cargo, the need to protect share capital, the risk of ruin without the fault of the shipowner, the need to attract capital into shipping and the perceived general benefit to those that use shipping".

[72] In 1957, a new convention relating to the Limitation of Liability of Owners of Sea-Going Ships, was signed in Brussels ('the 1957 Convention').

Art. 1 of the 1957 Convention entitled a shipowner to limit his liability in accordance with the convention in respect of -

> "(a) loss of life of, or personal injury to, any person being carried in the ship [and] …
>
> (b) loss of life of, or personal injury to, any other person, whether on land or on water, loss of or damage to any other property, or infringement of any rights cause by the act, neglect or default of any person on board the ship, for whose act, neglect or default the owner is responsible or any person not on board the ship for whose act, neglect or default the owner is responsible…,
>
> (c) any obligation or liability imposed by any law relating to the removal of wreck and arising from or in connection with the raising, removal or destruction of any ship which is sunk, stranded or abandoned (including anything which may be on board such ship), any obligation or liability arising out of damage caused to harbour works, basins and navigable waterways."

[73] Art. 3 of the 1957 Convention set the limits of liability at (a) an aggregate amount of 1,000 francs per ton of the ship's tonnage, "where the occurrence has only given rise to property claims", (b) an aggregate amount of 3,100 francs per ton of the ship's tonnage "where the occurrence has only given rise to personal claims", and (c) an aggregate amount of 3,100 francs per ton of the ship's tonnage "where the occurrence has given rise both to personal claims and property claims…", of which a first portion amounting to 2,100 francs per ton of the ship's tonnage shall be exclusively appropriated to the payment of personal claims and a second portion amounting to 1,000 francs per ton of the ship's tonnage shall be appropriated to the payment of property claims.

[74] Art. 1(4) of the 1957 Convention set out the claims to which the convention did not apply, viz, (a) claims for salvage or for contribution in general average, and (b) claims by the master, members of the crew, servants on board the ship or of the owner, in certain specified circumstances.

[75] In 1976, an international conference was held in London for the purpose of updating the 1957 Convention. In **The "Aegean Sea"** (at page 45), Thomas J described the three significant changes introduced by the new convention which finally emerged from the negotiations as the raising of the amount of the limitation fund, a redefinition of the circumstances in which the limit could be broken (restricting it to circumstances where the loss resulted from the intentional or reckless act or omission of the party seeking to limit) and the extension of the benefit of limitation to salvors not working on board the ship (thus in effect reversing the decision of the House of Lords in **The Tojo Maru [1972] AC 242**).

[76] But there was also an additional new feature of the 1976 Convention, which was the expansion in Art. 3 of the list of claims exempted from limitation to include, in particular, "claims for oil pollution damage within the meaning of the International Convention on Civil Liability for Oil Pollution Damage dated 29th November 1968 or of any amendment or Protocol thereto which is in force" (Art. 3(b)), and claims subject to any international conventions or national legislation governing or prohibiting limitation for nuclear damage" (Art. 3(c)).

[77] The reasons for the exception from limitation of claims for oil pollution damage are not, it seems to me, far to seek. On 29 November 1969, the International Convention on Civil Liability for Oil Pollution Damage ('CLC 1969') was adopted. In its preamble, this convention noted that the parties to it were "Conscious of the damages of pollution posed by the worldwide maritime carriage of oil in bulk [and] Convinced of the need to ensure that adequate compensation is available to persons who suffer damage cause by pollution resulting from the escape or discharge from ships". CLC 1969 made provision for limitation in respect of the escape of oil from a ship which carries oil in bulk as cargo (Art. 1) and entitles the owner of such ships to limit liability in respect of any one incident to an aggregate amount of 2,000 francs per ton, up to a maximum of 210 million francs (Art. 5)

.

[78] From all the available literature, it seems clear that the impetus towards the adoption of CLC 1969 was, as Mr Young demonstrated, provided by what has been described as the "emergence of the supertanker" in the late 1950s and the 1960s, followed closely by what came to be known as the *'Torrey Canyon'* accident on 18 March 1967 (see Colin de la Rue and Charles B. Anderson, Shipping Law and the Environment 2nd edn, 2009, Chapter 1). Over the decade of the 1950's, the size of the world's largest oil tankers increased by more than four times, from 19,000 dwt in 1952 to 100,000 dwt in 1959, and by the middle of the 1960s the size of the largest tanker had doubled from the 1959 figure to over 200,000 dwt in 1966 ('dwt' is an abbreviation for 'deadweight tonnage'). These were the supertankers, described as 'Very Large Crude Carriers' ('VLCCs'), the term coined "to describe floating giants in excess of 200,000 dwt" (de la Rue and Anderson, page 10, footnote 32). By this time, it was, as these authors put it, (at page 10) "only a matter of time before one of the new breed of supertankers would unleash pollution on a scale not previously seen from a ship, and so stimulate international demand for comprehensive changes in the law".

[79] And so it proved to be with the Liberian registered supertanker, *'Torrey Canyon'*, which in 1967 was one of the largest in the world. On 18 March 1967, laden with 120,000 tons of crude oil, en route from Kuwait to a port in Wales, the *Torrey Canyon* ran aground (due to navigational error) on a reef outside British territorial waters at a speed of over 15 knots. Before long, thousands of tons of oil began escaping from the vessel's ruptured tanks, giving rise to pollution on an unprecedented scale, including coastal contamination (on the British and French coastlines), the death of thousands of sea birds and a large number of marine organisms.

[80] Claims in respect of coastal contamination were made against the shipowners by both the British and French Governments and these were finally settled on a compromise basis (the total settlement was £3 million, shared between the two governments). Despite this, however, the consensus of opinion in maritime circles was "that traditional legal principles were wholly inadequate to deal with the consequences of pollution from ships" (de la Rue

and Anderson, page 12). These concerns led directly to a round of discussions and consultations, which would result in the first place in the conclusion in early 1969 of a voluntary agreement by oil tanker owners to pay compensation in specified circumstances for oil pollution damage (the 'Tanker Owners Voluntary Agreement Concerning Liability for Oil Pollution' – 'TOVALOP'). Thereafter, an international legal conference on marine pollution damage was convened in Brussels in late 1969 and this is turn led to the adoption of CLC 1969. As regards limitation of liability, this is how de la Rue and Anderson describe (at pages 16 – 17) the advance over the 1957 Convention that CLC 1969 represented:

> "In 1969 the main international regime governing limitation of liability for maritime claims was the 1957 Brussels Limitation Convention. This entitled shipowners to limit their liability to 1,000 Poincaré francs per ton of the vessel's net tonnage, provided that the shipowner was able to prove that the incident had not resulted from his "actual fault or privity". It was widely accepted that larger sums were required to provide adequate compensation for oil pollution damage and that any additional liabilities imposed on the shipowner should be limited to amounts against which he could readily insure. However, there were differences of opinion as to how far the additional cost should be borne by the shipowner alone, and as to the extent to which a contribution should be paid by the owners of oil cargoes, the hazardous nature of which was the main cause for concern. This naturally affected the amount to which the shipowner should be entitled to limit his liability.
>
> In the event it was decided at the 1969 Convention that the shipowner should be liable for oil pollution claims up to a limit of 2,000 francs per limitation ton, provided the pollution did not result from his "actual fault or privity". This accorded a privileged position to oil pollution claimants, including governments incurring clean-up costs, in comparison with other parties with non-pollution claims, a limitation fund established under CLC would be double that required under the 1957 Brussels Convention, and would be available exclusively to pay for pollution.
>
> CLC therefore introduced a threefold increase in the normal liability limits of a tanker owner for the different types of claims resulting from a casualty involving oil pollution. Consensus on these limits was made possible by an agreement reached among governments represented at the conference that a supplemental fund would be established to contribute to the cost

> of pollution claims, and to be financed by levies imposed on the owners of oil cargoes.
>
> The shipowner's limit of liability under the Convention was therefore conceived less as a restriction on the amounts recoverable by pollution claimants than as a means of apportioning the financial burden of oil spills between the shipping industry on the one hand and the oil industry on the other. It was envisaged that the latter would fund a second tier compensation available to pay supplemental amounts in major cases of oil pollution where claims exceeded the limit of the first-tier compensation recoverable from the shipowner and that the threshold of the fund's involvement would be somewhat lower than 2,000 francs, in order to relieve the shipping industry of the additional financial burden imposed upon it by CLC.
>
> There was insufficient time at the conference to develop appropriate provisions embodying a two-tier system in the text of CLC. Instead the Convention was concluded as the lower stratum in a two-tier system of compensation, and a resolution was adopted requesting IMCO to convene an International Legal Conference not later than 1971 to consider the establishment of a second-tier fund."

[81] Mr Young submitted that, while there can be no question that the 1957 Convention covered oil pollution (and therefore environmental) damage, what the CLC 1969 achieved was the trebling of the normal limit of liability for claims resulting from oil pollution in respect of ships carrying oil for cargo (hence the exclusion of such claims from the scope of the 1976 Convention). Save for that, it was submitted, the 1957 Convention remained applicable to all other environmental damage claims (such as those caused, for instance, by oil spills from ships not carrying oil as cargo) and this position remained unaltered by CLC1969. Ms Young, on the other hand, also taking the *Torrey Canyon* grounding and its sequel as her guideposts, contended for the opposite conclusion, which is to say that the development of a specific convention in 1969 to address pollution from oil spills "indicates that the 1957 Convention – the predecessor to the 1976 Convention – did not limit pollution damage".

[82] For my part, I accept Mr Young's submission on this point, for several reasons. Firstly, there was nothing in the language of the 1957 Convention to

suggest that it was intended to exclude from its ambit claims for environmental damage. Indeed, the damage caused by the *Torrey Canyon* grounding (in respect of which claims were not only brought, but settled), was, it seems to me, quintessentially damage to the coastal environment (a species of environmental damage) of both England and France. Accordingly (and secondly), the developments prompted by the growth of the supertankers and the *Torrey Canyon* grounding, which culminated in CLC 1969, arose not from the unavailability of a remedy under the 1957 Convention, but rather from the perceived restrictiveness of that convention, in terms of limitation of liability, given the demonstrated potential of oil pollution claims to generate exponentially higher losses than had previously been contemplated. Thirdly, the 1976 Convention, by its very specific exception from the right to limit liability under that convention of claims for oil pollution damage falling within the meaning of CLC 1969 (and also claims arising out of nuclear damage), gives rise to the clear and compelling implication that all other maritime claims (including claims for oil pollution damage caused otherwise than by ships carrying oil as cargo) not specifically excepted remain subject to limitation under the 1976 Convention (and subject, of course, to the lower limit of liability under that convention).

[83] Thus the real objective of Art. 3 of the 1976 Convention in this regard was, it seems to me, as Thomas J suggested in **The "Aegean Sea"** (at page 53):

> "Given the fact therefore that the limits of the CLC were much greater than the limits of the 1976 Convention, art. 3 was intended to ensure that the shipowner could not claim the lower limit under the 1976 Convention for claims within the CLC and that claims under the CLC should be dealt with under that Convention".

[84] With regard to the question whether claims for environmental damage were contemplated by the framers of the 1976 Convention, I would therefore conclude that, in the same way as such claims were plainly subject to limitation under the 1957 Convention, they remain so subject under the 1976

Convention, save only insofar as they are excepted from limitation under the specific terms of Art. 3.

Treaty interpretation – the proper approach

[85] In **The Tojo Maru**, the House of Lords was concerned with the construction of section 503 of the Merchant Shipping Act 1894 (as amended to give effect to the 1957 Convention). Lord Reid described the proper approach to construing the section in this way (at page 269):

> "It has been said that statutory provisions providing for the limitation of ordinary common law liability should be construed strictly. But I would not approach the construction of section 503 of the Merchant Shipping Act 1894 in that way. Its provisions must have been based on public policy that there should be no unnecessary discouragement of the operation of small vessels by companies of limited financial resources, by subjecting them to the risk of crippling damages if a large vessel should sustain extensive damage by reason of the negligent navigation of one of their vessels by their employees. Presumably it was thought that the owners of large vessels could protect themselves by insurance. Subsequent amendments of those provisions widening their scope appear to me to confirm that view. I would therefore apply these provisions to all cases which can reasonably be brought within their language. But it will require further legislation if they are to be applied to cases, probably unforeseen, which may be thought to be within the spirit of these provisions but which cannot reasonably be brought within their language. The courts must take these provisions as they find them."

[86] This statement was subsequently cited with approval by Thomas J (in **The "Aegean Sea"**, at page 46), who considered that, in the light of it, he "ought to have regard to the history of limitation in applying the provisions of the 1976 Convention…and apply the provisions of the Convention, if possible, to all cases which can reasonably be brought within the language of the Convention". And in the Australian case of **Qenos Pty Ltd v Ship 'APL Sydney' [2009] FCA 1090**, para. 8, Finkelstein J (sitting at first instance in the Federal Court of Australia) referred to the decision of the Supreme Court of the United States in **Just v Chambers 312 US 383, 385 (1941)**, in which it was said of similar provisions that "The statutory provision for limitation of

liability, enacted in the light of the maritime law of modern Europe and of the legislation in England, has been broadly and liberally construed in order to achieve its purpose of encouraging investments in shipbuilding and to afford an opportunity for the determination of claims against the vessel and its owner".

[87] In **James Buchanan & Co. Ltd v Babco Forwarding & Shipping (UK) Ltd [1978] AC 141, 152**, Lord Wilberforce observed that a national court should, in the interest of uniformity, construe rules formulated by an international convention, especially rules formulated for the purpose of governing international transactions such as the carriage of goods by sea, "in a normal manner, appropriate for the interpretation of an international convention, unconstrained by technical rules of English law, or by English legal precedent, but on broad principles of general acceptation". In **Shipping Corporation of India Ltd v Gamlen Chemical Co. A/Asia Pty Ltd (1980) 147 CLR 142, 159**, Mason and Wilson JJ, in a joint judgment, considered it important "that we should adhere to this approach when we are interpreting rules which have been formulated for the purpose of regulating the rights and liabilities of parties to international mercantile transactions where great store is set upon certainty and uniformity of application".

[88] As to what these broad principles might be, in **CMA CGM SA v Classica Shipping Co. Ltd [2004] EWCA 114, para. 10**, Longmore LJ referred to Arts 31 and 32 of the Vienna Convention which entered into force on 27 January 1980, as "undoubtedly" enshrining some "broad and generally acceptable principles". In **Qenos Pty Ltd v Ship 'APL Sydney' (para. 11)**, Finkelstein J observed that "While the Vienna Convention did not come into force until 1980, it is accepted that it reflects customary international law and may be applied to treaties concluded before 1980" (citing in support **Arbitration regarding the Iron Rhine ("IJzeren Rijn") Railway (Belgium/Netherlands), Award of 24 May 2005**, **para. 45)**.

[89] In the instant case, both the shipowners and GOB also rely on the Vienna Convention, Arts 31 and 32 of which provide as follows:

“Article 31

General rule of interpretation

1. A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.

2. The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes:

(a) any agreement relating to the treaty which was made between all the parties in connection with the conclusion of the treaty;

(b) any instrument which was made by one or more parties in connection with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty.

3. There shall be taken into account, together with the context:

(a) any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions;

(b) any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation;

(c) any relevant rules of international law applicable in the relations between the parties.

4. A special meaning shall be given to a term if it is established that the parties so intended.

Article 32

Supplementary means of interpretation

Recourse may be had to supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusion, in order to confirm the meaning resulting from the application of article 31, or to

> determine the meaning when the interpretation according to article 31:
>
> (a) leaves the meaning ambiguous or obscure; or
>
> (b) leads to a result which is manifestly absurd or unreasonable."

[90] In **CMA CGM SA v Classica Shipping Co. Ltd**, Longmore LJ went on to say this (at para. 10):

> "The court may then, in order to confirm that ordinary meaning, have recourse to what may be called the travaux preparatoires and the circumstances of the conclusion of the convention. I would, for my part, regard the existence and terms of a previous international convention (even if not made between all the same parties) as one of the circumstances which are part of a conclusion of a new convention but recourse to such earlier convention can only be made once the ordinary meaning has been ascertained. Such recourse may confirm that ordinary meaning, it may also sometimes determine that meaning but only when the ordinary meaning makes the convention ambiguous or obscure or when such ordinary meaning leads to a manifestly absurd or unreasonable result."

[91] In approaching the interpretation of the 1976 Convention, therefore, a fair summary of these various prescriptions appears to me to require the court to approach the task as follows. As a general matter, the court should construe the provisions of international conventions broadly and liberally and apply them "to all cases which can reasonably be brought within their language". The court should approach the task unconstrained by traditional conceptions and technical rules of domestic law. More specifically, the court's starting point should be to determine the ordinary meaning of the words used in the convention, taken in their context and bearing in mind the object and purpose of the convention, with further reference, either to confirm the ordinary meaning or, where this approach leaves the meaning ambiguous or obscure or produces a result that is manifestly absurd or unreasonable, to all that has led up to the conclusion of the convention, including where necessary *travaux preparatoires*, as well as previous international conventions touching

and concerning the same or related subject matter, such as the 1957 Convention and CLC 1969. I would consider it important to have firmly in mind, however, that recourse to what Art. 32 of the Vienna Convention describes as "supplementary" means of interpretation is only permissible in cases of ambiguity or obscurity flowing from the ordinary meaning, or when such ordinary meaning leads to a result that is manifestly absurd or unreasonable.

Article 2.1(a) - the meaning of 'property'

[92] It is with these considerations in mind that I therefore come to consider the contention that lies at the centre of GOB's case in this appeal, which is that the Barrier Reef is not 'property' within the meaning of Art. 2.1(a) of the 1976 Convention.

[93] Mr Young urged on us the following dictionary definitions of the word 'property' (from the American Heritage Dictionary, 2nd College Edn, page 993):

> "**prop-er-ty** (pro ar-te) *n., pl.* **-ties**. 1. Ownership. **2**. **a**. A possession. **b**. Possessions collectively. **3**. Something tangible or intangible to which its owner has legal title. **4**. An article, except costumes and scenery, used as part of a dramatic production. **5**. **a**. A characteristic trait or peculiarity. **b**. A special capability or power; virtue. **c**. A quality serving to define or describe an object or substance. **d**. A characteristic attribute possessed by all members of a class. **e**. *Logic.* A predicable that is common and peculiar to the whole of a species and is necessarily predicated of its essence without being part of that essence. [ME *proprete* < OFr. *propriete* < Lat. *Proprietas,* ownership < *proprius,* one's own.] -- **prop er-ty-less**, *adj.*"

[94] To not dissimilar effect is the definition found in the Concise Oxford English Dictionary (10th edn, page 1146), where 'property' is defined as "1. a thing or things belonging to someone, 2. a building and the land belonging to it (properties), shares or investments in property, 3. Law ownership, 4. a characteristic of something, 5. old fashioned term for PROP". The word

derives from the Latin 'proprietas', as does the word 'proprietary', which means "of, referring to or characteristic of an owner or ownership" (ibid).

[95] Although Ms Young also contended for the word 'property' to be given its ordinary meaning in the context in which it is used in the 1976 Convention, she did not herself venture an alternative definition of the word. Rather, what she did say was that "the marine environment, made up of a complex web of relationships between various sea animals, plants and microorganisms, is not included within the scope of 'property' on an ordinary, natural reading of that word…"

[96] Conteh CJ had also taken a similar approach, saying that the Barrier Reef "cannot…be equated with 'property' *simpliciter*" and that there is "no ownership of the Barrier Reef as such in the proprietary sense…In truth the Barrier Reef is part and parcel of the national patrimony of Belize, whose inscription by UNESCO on the List of its World Heritage Sites imbues it with an international dimension not readily attributable to any other kind of property". Further, although there is "really no market for the Belize Barrier Reef its ecological value is inestimable" (para. 84).

[97] It seems to me, with the greatest of respect to Conteh CJ, that this approach sidesteps the accepted approach to treaty interpretation, by failing to take as its starting point the ordinary meaning of the word 'property' in the context in which it appears in Art. 2.1(a) and in the light of the evident object and purpose of the convention, which was to permit limitation of liability in the prescribed circumstances. By this approach, the learned Chief Justice has instead, from the very outset of the exercise, circumscribed the meaning of the word by reference to his own conception of what the Barrier Reef represents. In my view, the ordinary meaning of the word 'property' in the context in which it appears in Art. 2.1(a) is, "something tangible or intangible to which its owner has legal title" or "a thing or things belonging to someone". The word is used in Art. 2.1(a) against the background of a long and unbroken history of international conventions with the explicit objective of limiting the liability of shipowners for negligently causing loss to persons who assert

proprietary rights over the subject matter of the damage (or injury, as Ms Young urged us to characterise it). It seems to me that the Barrier Reef is no less a tangible object or thing by virtue of the fact that "[it] supports a complex web of relationships of living organisms functioning as a unit and interacting with their physical environment", as Dr McField put it, memorably, in her evidence in this case. Taking a broad approach to the interpretation of Art. 2.1(a), I would conclude that this is plainly a case which can reasonably be brought within the language of the convention.

[98] Dr McField had also stated that when a ship grounds on the reef the potential losses are "much more significant than just the present physical damage to the three dimensional limestone structure of the reef and include the loss of revenue, food, biodiversity and physical protection, among others for decades to centuries into the future". Conteh CJ was plainly highly impressed by and accepted this evidence and there has been no contention (and, indeed, there is no basis on the evidence to suggest) that he was not entitled to do so. But these considerations all go, it seems to me, to the difficult and vexed question of the assessment of damages for the physical destruction of an area of the Barrier Reef by the grounding, and do nothing to alter or affect the nature of the Barrier Reef itself as a tangible object or property within the meaning of Art. 2.1(a). The suggestion that, because there is no "market" for the Barrier Reef, it cannot be regarded as property, as Dr McField testified (based on her "google" search of property history in Belize – see para. [24] above)) and the Chief Justice accepted, similarly appears to me to conflate two distinct issues, that is, whether the Barrier Reef can be brought within the ordinary meaning of the word 'property' in Art. 2.1(a), and the consequential question of damages for the injury to the reef.

[99] That the availability of a 'market' is distinctly an assessment or a quantification issue derives support in my view from the judgment of Binnie J (speaking for the majority of the Supreme Court of Canada) in **British Columbia v Canadian Forest Products Ltd [2004] 2 S.C.R. 74**, to which we were referred by both counsel in respect of the quantification of damages issues in this case. That was a case in which the Crown claimed damages

against a licensed logging company, arising out of a forest fire which had affected approximately 1,491 hectares of forest. By the time the matter reached the Supreme Court, liability was no longer in issue, but a major issue which remained in contention was whether the Crown was entitled to recover compensation for environmental damages. One of the questions which arose in this context was the relevance of market value to the quantification of environmental damage, in respect of which the Crown argued that excessive focus on market value was inappropriate when attempting to assess such damages. In this connection, the Crown referred to and relied on a statement from the American case of **State of Ohio v U.S. Department of the Interior 880 F. 2d 432 (D.C. Cir. 1989), 462 - 463**, in which it was said that, while it was not irrational to look at market price as one factor in determining the value of a resource, "it is unreasonable to view market price as the *exclusive* factor, or even the predominant one. From the bald eagle to the blue whale and snail darter, natural resources have values that are not fully captured by the market system". In agreement with the position taken by the Crown, Binnie J said this (at para. 135):

> "135. The Crown's basic proposition that our environment is an asset of superordinate importance that cannot be quantified by its market value is not seriously disputed. The Ontario Law Reform Commission made the point as follows:
>
> > 'Many writers in the environmental field state that the market price, even if it existed, cannot be considered an adequate proxy for the true economic value of an environmental resource. Adherence to the market value technique, it is argued, seriously undervalues the true worth of the environmental resource, results in a low assessment of damages, and leaves injuries largely uncompensated…As one American author stated, the 'value of the famous Lone Cypress of Monterey Peninsula cannot be reduced to its price as lumber.'"

[100] A largely similar point was also made by the Court of Appeal of Messina, Italy, in **Ministry of Internal Affairs and Others v Patmos Shipping Corporation, and Others (1989) 4 International Environmental**

Law Reports 288, a case also referred to by both counsel in the instant case. That was a case in which the Italian Government sued shipowners for property and environmental damage caused by an oil spillage within Italian territorial waters. In accepting that under CLC 1969, damages were recoverable for both physical and environmental damage, the court said this (at page 291):

> "Such damage affects intangible values, therefore, which cannot be evaluated in monetary terms according to market process, since such a standard depends on the possibility of ownership and trade of a good, whereas, in this case, the reduction of the economic value depends on the diminished possibilities of enjoying the environment as a good, which by its nature cannot be marketed."

[101] I accordingly consider that the availability of a 'market' for the Barrier Reef is a matter that is relevant to damages, and not to the question whether the reef can be said to be the property of GOB. If, as I consider to be the case, the reef can reasonably be brought within the language of Art. 2.1(a) of the 1976 Convention, then the only remaining question would be whether GOB was entitled to bring and maintain an action in respect to the injury to the reef, a question which has never been in issue in this case. (Nor could it have been, given that the Barrier Reef is undoubtedly part of the territory of Belize as it is defined and delineated by section 1(2) of the Constitution and paras 1 and 2 of the Schedule to the Constitution. Para. 1 of the Schedule makes express reference to "the Turneffe Islands, the Caye of Lighthouse Reef and Glover Reef, together with all associated islets and reefs, and their adjacent waters as far as the outer limits of the territorial sea appertaining to them", while para. 2 includes in the territory of Belize a number of named Cayes "and all other cayes lying within and along the Barrier Reef… ". And see, to similar effect, section 2 of the Coastal Zone Management Act, in which "coastal zone management" is defined to include "the conservation of the Barrier Reef and other coastal resources… ".)

[102] There is in my view absolutely no contradiction between the Barrier Reef being considered to be the property of Belize and its being "part and parcel of the national patrimony of Belize" and of importance to "the common heritage of mankind", as Conteh CJ described it (at para. 84). It is clear from the provision made in section 34 of the Coastal Zone Management Act for the establishment of "a Barrier Reef Foundation to receive gifts and donations and to raise funds to promote the conservation and management of the coastal resources of Belize, including the barrier reef", that Belize fully acknowledges and embraces its role as custodian and keeper of the precious environmental resource that the Barrier Reef represents as part of the common heritage of mankind.

[103] It is also clear from the "public outrage" reported by Dr McField (at para. [[22] above) as having greeted the attempt by two private investors to lease a section of the reef from GOB for the purpose of commercial exploitation, that the people of Belize also recognise and acknowledge their own responsibility to preserve one of the nation's foremost natural resources. In this regard, it is also of interest to note that one of Dr McField's very helpful suggestions in her evidence is that damages from the Westerhaven grounding might be used to capitalise the Barrier Reef Foundation and to "improve and restore reefs nation-wide".

[104] Finally on this aspect of the matter, I would observe that much of the justification put forward (by Dr McField in particular) for an award of damages to GOB as compensation for the grounding is obviously "proprietorial" in nature, in the sense that the various claims for economic loss plainly flow from a recognition (and counting) by GOB of the Barrier Reef as a valuable revenue resource from the standpoint of the national economy (see, for instance, paras. 20, 30 and 39 of Dr McField's witness statement, in which she states the real and substantial losses suffered by Belize, actually or potentially, by the damage to the Barrier Reef caused by the Westerhaven grounding). Indeed, the point is even more clearly made by Dr McField's further comment that "[t]he Belize reef is certainly part of the nation's natural capital and public assets, capable of providing revenue generation and

valuable ecosystem services for millennia to come, if its functional integrity is maintained". It seems to me that these factors do lend considerable support to Mr Young's observation that GOB's position in this matter reflects "a fundamental inconsistency", in the sense that while, on the one hand, GOB forswears a proprietary interest in the Barrier Reef, it nevertheless advances and maintains a substantial claim for damages in respect of damage inflicted to the Barrier Reef by the Westerhaven.

[105] Before leaving Art. 2.1(a), I should make two further points. Firstly, it seems to me that GOB's reliance in its submissions on the *ejusdem generis* rule in the interpretation of this article flies directly in the face of its own submission, based on **James Buchanan & Co. Ltd v Babco Forwarding & Shipping (UK) Ltd** and the authorities referred to (at para. [85] above), that the interpretation of international conventions ought not to be controlled by principles of domestic law. Secondly, while I have noted with interest the various different drafting techniques deployed by the drafters of the other international shipping conventions to which we were referred by Ms Young, I am bound to say that I have not found them helpful in the quest for the ordinary meaning of Art. 2.1(a). It seems to me to be clear from Arts 31 and 32 of the Vienna Convention, that resort to "supplementary means" of interpretation is only permissible where the application of the ordinary meaning of the terms of Art. 2.1(a) has left the meaning ambiguous or obscure or leads to a manifestly absurd or unreasonable result. In the instant case, I consider that the ordinary meaning of Art. 2.1(a) is plain and entirely consonant with the object and purpose of the 1976 Convention and that there is therefore no basis for resort to be had to any "supplementary means" of interpretation, such as the language used in other international conventions.

Article 2.1(c)

[106] Art. 2.1(c) permits shipowners to limit their liability as regards "claims in respect of other loss resulting from infringement of rights other than contractual terms, occurring in direction connexion with the operation of the ship or salvage operations". Conteh CJ's conclusion on this aspect of the

matter was that although there was no doubt that "the injury or damage was inflicted in connection with the operation of the ship Westerhaven" (para. 87), the claim in this case was "clearly *sui generis* and does not flow from infringement of rights whether or not contractual" (para. 85). Thus he rejected the shipowners' further claim that they were entitled to limitation under Art. 2.1(c), as an alternative to Art. 2.1(a).

[107] In **The "Aegean Sea"**, it is clear that Thomas J considered the claims to limitation under several heads of Art. 2.1 of the 1976 Convention, ultimately concluding in relation to certain pollution claims that they fell within Art. 2.1 (a), (c), (d), (e) and (f) (see pages 52 – 53). In **Qenos Pty Ltd v Ship 'APL Sydney'**, Finkelstein J, after a careful review of Art. 2 of the 1976 Convention and applying Arts 31 and 32 of the Vienna Convention, concluded that the claims for economic loss which the charterers sought to limit were claims in respect of consequential loss, within the meaning of Art. 2.1(a). But the learned judge then went on to consider whether, in the event that he was wrong in his construction of Art. 2.1(a), the claims fell under Art. 2.1(c). After a detailed examination of the background to Art. 2.1(c) (including its previous appearance in a slightly different form in the 1957 Convention), Finkelstein J concluded that the claims were also maintainable under Art. 2.1(c). In coming to this conclusion, he considered (again after a careful review of the drafting history of Art. 2.1(c)), that the word 'rights' in the opening words of Art. 2.1(c) ("claims in respect of other loss resulting from infringement of rights…") included "a legally enforceable claim which results from the act or omission of another person" (para. 35).

[108] Applying this illuminating analysis to the instant case, therefore, the negligent acts or omission of the master and crew of the Westerhaven which caused the grounding were an infringement of the rights of GOB as owner of the reef, which gave rise to a legally enforceable claim against the shipowner. It follows from this, in my view, that even if I am wrong in thinking that GOB's claim does in fact come within Art. 2.1(a) as a claim in respect of damage to property, it can alternatively come within Art. 2.1(c), as a claim in respect of "other loss" (that is, other than a loss falling within Art. 2.1(a) or (b)) "resulting

from infringement of other than contractual rights, occurring in direct connexion with the operation of the ship…"

Conclusion on grounds 1 and 2 (limitation)

[109] It follows from all of the foregoing that my conclusion on the limitation issue is therefore, contrary to what Conteh CJ decided, that GOB's claim against the shipowners is subject to limitation of liability, pursuant to the provisions of Art. 2.1(a), or, alternatively, Art. 2.1(c) of the 1976 Convention.

Grounds 3 and 4 - quantification

[110] In considering this issue, Conteh CJ noted (at para. 100) what was common ground between the parties, that is, that the matter raised "novel and complex issues of assessment of damages". He nevertheless considered that the overriding principle of *restitutio in integrum* was not in doubt, citing in support (at para. 97) the following statement of the position by Lord Blackburn in **Livingstone v The Raywards Coal Co. (1880) 5 App. Cas. 25, 39:**

> "I do not think there is any difference of opinion as to its being a general rule that, where any injury is to be compensated by damages, in settling the sum of money to be given for reparation of damages you should as nearly as possible get the sum of money which will put the party who has been injured, or who has suffered, in the same position as he would have been in if he had not sustained the wrong for which he is now getting his compensation or reparation."

[111] But despite the fact that neither party took issue with the Chief Justice's statement of the correct approach to the assessment of damages (indeed, in his submissions on this point, Mr Young himself relied on Lord Blackburn's judgment in the case cited by the learned judge), they were poles apart on the appropriate award for damages in this case. Mr Young for his part submitted that, even where negligence has been admitted, as it was in this case, a substantial award of damages was not automatic and it was for the claimant to prove its loss, which GOB had failed to do. Accordingly, in

reliance on the decision of the Privy Council in **Greer v Alstons Engineering Sales and Services Ltd [2003] UKPC 46**, Mr Young submitted that GOB ought to have been awarded nominal damages only. Ms Young, on the other hand, submitted that the Chief Justice's award of $11,510,000.00 ought not to be disturbed, pointing out that had the HEA method been applied, as it ought to have been, that award was well within the range of awards that it was open to the court to make. But in any event, Ms Young submitted in the alternative, in the light of the evidence of the Jaap and Watkins' valuation of GOB's loss at US$18,819,000.00, the Chief Justice's award of $11,510,000.00 could not be regarded as "real" damages and in fact constituted no more than nominal damages (relying for this submission on **The Owners of the Steamship "Mediana v The Owners, Master and Crew of the Lightship "Comet", The "Mediana" [1900] AC 113**).

[112] Counsel on both sides placed great reliance on the decision of the Supreme Court of Canada (to which I have already referred in another, not unrelated, context – see para. [99] above) in **British Columbia v Canadian Forest Ltd**. Mr Young directed our attention in particular to Binnie J's statement (at para. 12) that –

> "A claim for environmental loss, as in the case of any loss, must be put forward based on a coherent theory of damages, a methodology suitable for their assessment, and supporting evidence."

[113] For her part, Ms Young directed our attention to the following further statement by Binnie J (at para. 155):

> "I do not accept that there is anything so peculiar about 'environmental damages' as to disqualify them from consideration by the Court. The legislatures may choose to bring in a statutory regime to address environmental loss as was done in the United States…However there is no relevant legislation yet passed in British Columbia. That said, there is no reason to neglect the potential of the common law, if developed in a principled and incremental fashion, to assist in the realization of the fundamental value of environmental protection. However, the Court cannot act on generalizations and unsupported

assertions. In the absence of statutory intervention, the Court must proceed cautiously."

[114] No one could possibly disagree, it seems to me, with either of these statements. The one points to the old and well known principle that it is for a claimant to allege and prove the loss which he has suffered, as well as the damages which he claims, while the other suggests that, particularly in new or still developing areas of the law (such as, arguably, claims for environmental damage or injury), the law should not itself be an obstacle to proper compensation in an appropriate case.

[115] Dr McField had prefaced her own estimate of the value of the damage to the reef caused by the grounding with the observation that there was "no standard dollar figure per square meter of injured reef or single approach that can be universally applied to these cases". Her own research had revealed cases in which reef damage had been valued as high as US$10,895.97, and as low as US$2,000.00, per square metre. "The figures vary", she testified, "according to, among other things, density of coral…, species of corals affected, and variety of fish living in the area" (see para. [26] above).

[116] Among the difficulties with which Conteh CJ had had to grapple in assessing the value of the damage to the Barrier Reef in this case were the differing and, to some extent, contradictory bases on which the claim for compensation was put before him. The first major element of uncertainty related to the actual area of the damage caused by the grounding, while the second had to do with the significantly disparate values placed on the damage for compensatory purposes, even among GOB's witnesses themselves.

[117] GOB's claim for damages as originally filed on 16 January 2009, was, as it will be recalled, $31,080,000.00, based on a preliminary valuation of the environmental damage to the reef system caused by the grounding, prepared by the DOE and dated 16 January 2009, a mere three days after the grounding. In that valuation the area of damage to the reef, based on a visual inspection, was estimated at approximately 4,440 square metres at a value of

US$3,500.00 per square metre (it is not clear from the evidence how this particular figure, which was not mentioned or referred to again, was arrived at), making for a total of US$15,540,000.00 or $31,080,000.00.

[118] By the time Dr McField and her team presented their report to the DOE on 27 January 2009 (less than two weeks later), the total area of damage was estimated (based on visual inspection and photographs) at 18,520 square metres, broken down into 7,332.3 square metres of "core damage" and 11,187.3 of "partial damage". The value per square metre of the damage was reduced to US$2,700.00, based on an average of reef grounding awards compiled by Mr Wielgus in 2004. While there was no explanation in the evidence of the precise reasons for the team's choice of US$2,700.00 per square metre, Dr McField did say that it considered that figure to be "conservative", given that "the area is inside a critically sensitive marine reserve and that the types of corals lost will take thousands of years to re-grow if ever…"

[119] Then there was the Jaap and Watkins report dated 15 May 2009, in which the area of the damage (based on actual measurement of the perimeter of the area) was put at 6,418 square metres, of which 1,674 square metres was regarded as "devastated by hull crushing". Jaap and Watkins considered that, because of severe weather conditions, "it would be extremely challenging to attempt a restoration project at this site" and, applying HEA analysis, assessed the compensatory requirement for the damage at US$18,819,000.00. Although GOB's application at the outset of the trial to amend its statement of claim to reflect this figure was unsuccessful (and there was no appeal from this ruling), the Jaap and Watkins report was in evidence and formed part of the material that was available to the Chief Justice for the assessment of damages.

[120] It will be seen that on GOB's case, therefore, in respect of the two critical variables of area of damage to the reef and the value to be attributed to that damage, three distinct and, it appears to me, not readily reconcilable, bases of the claim for compensation had been put forward. It could not

therefore be said in my view that GOB had, to borrow Binnie J's felicitous formulation in **British Columbia v Canadian Forest Ltd**, put forward its claim "based on a coherent theory of damages, a methodology suitable for assessment, and supporting evidence" (see para. [112] above).

[121] Added to this mix by the end of the case, was the evidence of the shipowners' expert witness as to damages, Mr Shaul, whose position was that a restoration project could and should be undertaken at the grounding site, at a cost which he estimated at US$2,500,000.00. I have to say that, to the extent that Mr Shaul's evidence introduced into the case a completely different approach to the issue of compensation, I cannot but regard it as an unsatisfactory feature of the Chief Justice's overall assessment of the evidence on damages that he does not appear to have made any finding on this aspect of the matter. While Jaap and Watkins clearly regarded restoration of the reef as an impractical proposition, because of the prevailing weather conditions and the possibility of further damage to the reef, Mr Shaul maintained his position, even in the face of a thoughtful and highly effective piece of cross examination, that restoration was not only possible, but preferable in the circumstances. Given the significant difference in cost between Mr Shaul's restoration proposal and any one of the straight compensatory approaches put forward on GOB's case, it seems to me that a specific finding was called for on whether restoration could at all be regarded as a viable option in this case.

[122] However, despite this observation, it appears to me that the Chief Justice might nevertheless have been entitled to entertain substantial reservations at the end of the day as to whether Mr Shaul's restoration proposal described a practical approach to the issue of compensation in the circumstances of this case, for at least three reasons. In the first place, Mr Shaul himself said plainly that his proposal involved no element of compensatory damages for the loss of services of the Barrier Reef, which on his approach would, even after the restoration project was carried out, only provide the same ecological services as had existed before the grounding "over time" (see para. [41] above). This could well be the reason for the

conclusion in his own report that, although coral reef injuries "can often be significantly mitigated through readily available restoration techniques", other "methodologies such as reef restoration and [HEA]" could be utilised to help determine the claim for damages in this case. Secondly, it seems to me that Mr Shaul's restoration proposal would have had to be regarded as seriously qualified by his acceptance in cross examination of the potential impact on the viability of that proposal of prevailing weather conditions at the grounding site, the passage of time since the grounding (as a result of which, Mr Shaul allowed, he could not say for sure if his plan to re-attach corals dislodged by the grounding would be effective) and the fact that no emergency salvage work had been done at the grounding site within what he agreed was the critical two to three week period after the grounding (para. [42] above). And thirdly, there not does appear to me to have been any satisfactory explanation of the impact, if any, on Mr Shaul's restoration proposal of his acceptance in cross examination that, of the total area of damage, which he estimated to be 5,343.8 square metres, it would not be possible to re-attach corals in the area of most severe damage, which by his estimate was 4,128.5 square metres or roughly three quarters of the total area of injury, in which there had been, again on his evidence, "a complete loss of biota and habitat (structure)" (para. [36] above).

[123] But even putting Mr Shaul's evidence on one side, it seems to me that the Chief Justice was still left with the task of reconciling the differing bases of compensation put forward by GOB. Mr Young's complaint that Conteh CJ gave "no explanation or indication" of how the figure of $2,000.00 per square metre which he ultimately chose as the basis of his award of damages had been arrived at was met by Ms Young's submission (based on the respondent's notice) that, had the Chief Justice not erred in rejecting the HEA as an appropriate method of calculating compensation for the injury to the Barrier Reef, his award of $11,510,000.00 would have been well within the range of awards that it was open to him to make on the facts of this case.

[124] Conteh CJ's rejection of the HEA, upon which Jaap and Watkins had relied for their assessment of the value of the damage to the Barrier Reef,

was based on his conclusion (at para. 130) that, "helpful and instructive as the HEA maybe", he was nevertheless "constrained from accepting it for the simple reason that it is premised on legislation that has no parallel in Belize." Conteh CJ went on (at para. 122) to lament the fact that there was "no comparable legislation in Belize to that of the USQA on which the HEA is based or the Australian legislation regarding the Great Barrier Reef."

[125] In her submissions in support of the respondent's notice, Ms Young, while not directly challenging the basis of the Chief Justice's rejection of the HEA, pointed out that the expert witnesses on both sides at the trial had agreed that the HEA was an appropriate method of valuing GOB's claim. Mr Young on the other hand maintained his position that the HEA method of assessment of coral reef damage was "particular to the United States" and that it "arose out of and is applied in the particular statutory environment of the United States". In any event, he submitted, there was evidence that the HEA exercise conducted by Jaap and Watkins "may not otherwise have been reliable."

[126] Although he was pressed on this point (repeatedly) by Mr Young in cross examination, Mr Jaap insisted that the HEA method had not been developed "just based on statute." But notwithstanding Mr Jaap's resoluteness in this regard, it certainly seems to me that there was some indication in the Jaap and Watkins report itself that the prevalence of the HEA method in the United States, even if not an explicit result of a statutory mandate, was closely related to the existing statutory framework for the valuation of restoration costs for injuries to the marine environment in that country.

[127] Thus, for instance, Jaap and Watkins made reference (see para. [32] above) to two reported cases in the United States involving ship groundings in which application of the HEA procedure had been approved, **United States v Fisher, 97 E. Supp. 1193, 1201** (S. D. Fla. 1997) and **United States v Great Lakes Dredge & Dock Co, 259 F 3d 1300, 1305** (11th Cir. 2001). In the former case, Jaap and Watkins, having reported that the use of HEA to value

restoration cost had been approved without discussion, went on to observe that "Since the damage occurred within a marine sanctuary established pursuant to the Marine Protection, Research and Sanctuaries Act (MPRSA), the courts noted that restoration costs were explicitly recoverable under 16 U.S.C.P. 1432 (6)(A) of the MPRSA, which provides for cost recovery based on the cost of replacing, restoring, or acquiring the equivalent of the damaged resources, as well as the value of the lost use of the resource pending its restoration or replacement". Similarly, in the latter case, Jaap and Watkins stated that "the court of appeals affirmed the use of HEA as a methodology for valuing restoration costs of damaged sea grass beds. 'In light of the explicit language set forth in the MPRSA mandating the recovery of restoration costs, it is not surprising that HEA methodology for valuing restoration was deemed appropriate by the courts, since it meets the goal of the statute'."

[128] The material from Mr Wielgus' study with regard to the calculation of damages for coral reef injuries (see para. [26] above) also seems to me to support a strong implication that the popularity of the HEA as a method of assessing such damages is closely related to the existence of legislation in the United States for the protection of natural resources. That legislation was described by Mr Wielgus as "unique in that it addressed both the restoration of lost ecological services and the lost economic value of natural resources in the assessment of charges for damages". Mr Wielgus then went on, as the Chief Justice also noted (at para. 127) to refer to the "two legal statutes that cover physical injuries to marine resources: The Marine Protection Research and Sanctuaries Act (MPRSA) and the National Parks Systems Resources Act (NPSRPA)."

[129] In the light of this material, all of which appears on GOB's case, I therefore find myself unable to say, as the respondent's notice invites us to do, that Conteh CJ erred in coming to the conclusion that he could not accept the HEA as a basis for quantifying the value of the damage to the Barrier Reef, on the ground that it has no statutory underpinning in Belize.

[130] Which therefore brings me back to the question whether, having rejected the HEA, Conteh CJ's award of $11,510,000.00 can be justified. As I have already observed, the Chief Justice had the difficult job of reconciling divergent evidence as to both the area of the damage and the value to be attributed to that damage. In respect of the area of damage to the Barrier Reef, he settled on an area of 5,755 square metres, the result of dividing the total amount of GOB's claim of $31,080,000.00 by the sum of $5,400.00 per square metre. In doing this calculation, Conteh CJ obviously lost sight of the evidence that the amount of the claim as originally filed had been based on a preliminary estimate of 4,400 square metres of damage valued at US$3,500.00 per square metre (see para. [117] above). It nevertheless seems to me that the actual area of damage that he ultimately chose was within striking distance, on the one hand, of that estimated by Jaap and Watkins (6,418 square metres) and, on the other hand, Mr Shaul (5,343.8 square metres). Perhaps in confirmation of the fact that the precise estimation of the actual area of damage may not have been a simple matter, it is of interest to note that the Jaap and Watkins report stated that they had estimated the injury area "based on GPS information processed with GIS technology", while Mr Shaul's evidence was that he had used "state of the art" equipment, which was "a little more specific" than that used by Jaap and Watkins. It certainly seems to me that, by its heavy reliance at the end of the day on the Jaap and Watkins report, GOB was tacitly acknowledging that the estimate of 18,520 square metres of damage originally put forward by Dr McField's team might, entirely understandably in the light of the very preliminary stage at which it was done, have been overstated.

[131] In respect of the value of the damage, there is plainly considerable force in Mr Young's complaint that the Chief Justice did not state or explain his basis for arriving at the figure of $2,000.00 per square metre for the purpose of assessing suitable compensation. That was not a figure that was mentioned in the calculations of any of the witnesses and, given the very divergence in the evidence on this issue, it would obviously have been helpful to know the process that led Conteh CJ to this figure. But having said this, it is clear that the Chief Justice found himself with a range of unusually difficult

choices in this regard, based on, as he put it (at para. 137), "the conflicts between the expert witnesses as to the difficulty of estimating the damages accurately in this case", and his view that the novelty and complexity of the matter ought not to be "a bar in itself" (para. 139). In these circumstances, in the absence of any supporting legislation or ready precedents in Belize, it appears to me that Conteh CJ opted to "proceed cautiously" (as Binnie J had counselled – see para [113] above), by choosing what was on any view of the evidence a modest figure (well below the lowest in the range indicated by Dr McField - see para. [118] above). In a case in which it is common ground that a significant area of the Barrier Reef sustained severe damage, I do not think that there is any basis to suggest that the figure of $2,000.00 per square metre was excessive in all the circumstances; but neither can it be said, in my view, that by choosing this figure Conteh CJ fell egregiously short of his stated aim (at para. 140) of awarding compensation that was "fair and proportionate".

Conclusion on grounds 3 and 4 (quantification)

[132] In this matter, it was agreed on all sides that the assessment of damages for the damage to the Barrier Reef would be a complex and challenging exercise. Bearing all of this in mind and taking all things into account, it appears to me that the award made by the Chief Justice was within the range of awards that were open to him on the evidence and I would therefore affirm the award of $11,510,000.00 to GOB in respect of the damage caused to the Barrier Reef by the grounding of the Westerhaven.

Disposal of the appeal

[133] In the final result, I would allow the appeal in part, as it relates to the applicability of the 1976 Convention to the grounding of the Westerhaven and hold that GOB's claim against the shipowners in this case is subject to limitation of liability, pursuant to the provisions of the 1976 Convention.

[134] I would also order that the shipowners are to have one half of the costs of the appeal and of the trial in the Supreme Court, to be taxed if not sooner agreed.

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MORRISON JA