JOINT DISSENTING OPINION OF JUDGES AL-KHASAWNEH AND SIMMA

The Court has evaluated the scientific evidence before it in a methodologically flawed manner — We are not in a position to assess the evidence submitted by either party as to whether there has been a breach of the 1975 Statute — Fact-intensive cases with a complex scientific component require the Court to go beyond its traditional methods of fact-finding — The Court should have made full use of the various possibilities made available to it under the Statute and Rules — The Court should either have appointed its own experts or had party-appointed experts subjected to cross-examination — Interaction with experts as counsel deprives the Court of the ability fully to consider the facts submitted to it — The use of "experts fantômes" by the Court is not an acceptable practice in disputes with a complex scientific component — Other international dispute-settlement bodies have resorted to scientific expertise in a more convincing manner — The Court has interpreted its role in the present case extremely narrowly, since the 1975 Statute would have allowed it to take a forward-looking, prospective approach, engage in a comprehensive risk assessment and embrace a preventive rather than a compensatory logic — This logic has particular cogency in environmental disputes — The Court has failed to grasp the innovative and progressive character of the 1975 Statute — Neither has the Court drawn adequate conclusions from the link between procedural and substantive obligations — In sum, the Court has missed a golden opportunity to demonstrate its ability to approach scientifically complex disputes in a state-of-the-art manner.

1. The present dispute between Argentina and Uruguay concerns a pressing issue in our time, that of the protection of the environment and human health. It is a remarkable case: 35 years ago two States concluded a comprehensive treaty, very progressive for that time, in which they aimed to regulate the management of a complex river ecosystem, including obligations to take measures to prevent the pollution of that ecosystem. They undertook specific obligations to co-operate and inform each other of everything they intended to do which might have an effect upon the shared natural resource that forms their common boundary: the River Uruguay. Thirty years later, one of the two States decides to proceed as if that treaty had never been concluded: in disregard of its procedural obligations under the 1975 Statute, Uruguay has authorized a large-scale construction precisely within this river ecosystem. The Judgment of the Court characterizes Uruguay's breach in the clearest terms, and we concur without reservation with operative paragraph 1 of the

Judgment, which adjudged that there was a breach by Uruguay of its obligations to notify and to inform.

I. A Missed Opportunity to Cope with Scientific Uncertainty in a State-of-the-Art Manner

2. While we agree with the Judgment's finding of a breach by Uruguay of its procedural obligations, we cannot endorse operative paragraph 2 of the Judgment of the Court, and have accordingly voted against it. As we will explain in the following dissent, the Court has evaluated the scientific evidence brought before it by the Parties in ways that we consider flawed methodologically: the Court has not followed the path it ought to have pursued with regard to disputed scientific facts; it has omitted to resort to the possibilities provided by its Statute and thus simply has not done what would have been necessary in order to arrive at a basis for the application of the law to the facts as scientifically certain as is possible in a judicial proceeding. Therefore, faced with the results of a deficient method of scientific fact-finding, we are not in a position to agree "that the Eastern Republic of Uruguay has not breached its substantive obligations under Articles 35, 36 and 41 of the 1975 Statute of the River Uruguay". The evidence submitted by Uruguay to establish this result has not been treated *lege artis* by the Court; the same is valid for the evidence submitted by Argentina in order for the Court to arrive at the opposite conclusion. Consequently, and logically, we have no other possibility than to dissent.

3. The exceptionally fact-intensive case before us is unlike most cases submitted to the Court and raises serious questions as to the role that scientific evidence can play in an international judicial institution. The traditional methods of evaluating evidence are deficient in assessing the relevance of such complex, technical and scientific facts, yet the Court has laconically explained, at paragraph 168 of its Judgment, that

> "it is the responsibility of the Court, after having given careful consideration to all the evidence placed before it by the Parties, to determine which facts must be considered relevant, to assess their probative value, and to draw conclusions from them as appropriate".

Thus, the Court has clung to the habits it has traditionally followed for the assessment and evaluation of evidence to arrive at the finding in operative paragraph 2. It has had before it a case on international envi-

ronmental law of an exemplary nature — a "textbook example", so to speak, of alleged transfrontier pollution — yet, the Court has approached it in a way that will increase doubts in the international legal community whether it, as an institution, is well-placed to tackle complex scientific questions (cf. S. Rosenne, "Fact-Finding before the International Court of Justice", in *Essays on International Law and Practice*, 2007, pp. 235 and 250; A. Riddell and B. Plant, *Evidence before the International Court of Justice*, 2009, p. 353; C. M. Schofield and C. H. Carleton, "Technical Considerations in Law of the Sea Dispute Resolution", in A. G. Oude Elferink and D. R. Rothwell (eds.), *Oceans Management in the 21st Century*, 2004, pp. 251-252). The adjudication of disputes in which the assessment of scientific questions by experts is indispensable, as is the case here, requires an interweaving of legal process with knowledge and expertise that can only be drawn from experts properly trained to evaluate the increasingly complex nature of the facts put before the Court (cf. C. Foster, *Science and the Precautionary Principle in International Courts: Expert Evidence, Burden of Proof and Finality*, forthcoming, 2010, Chap. 2). For this reason, in this dissenting opinion, we will endeavour to explain why we could not follow the Court along this path.

4. The Court on its own is not in a position adequately to assess and weigh complex scientific evidence of the type presented by the Parties. To refer to only a few instances pertinent for our case, a court of justice cannot assess, without the assistance of experts, claims as to whether two or three-dimensional modelling is the best or even appropriate practice in evaluating the hydrodynamics of a river, or what role an Acoustic Doppler Current Profiler can play in such an evaluation. Nor is the Court, indeed any court save a specialized one, well-placed, without expert assistance, to consider the effects of the breakdown of nonylphenolethoxylates, the binding of sediments to phosphorus, the possible chain of causation which can lead to an algal bloom, or the implications of various substances for the health of various organisms which exist in the River Uruguay. This is surely uncontroversial: the task of a court of justice is not to give a scientific assessment of what has happened, but to evaluate the claims of parties before it and whether such claims are sufficiently well-founded so as to constitute evidence of a breach of a legal obligation.

5. In so doing, however, the Court is called upon "to assess the relevance and the weight of the evidence produced in so far as is necessary for the determination of the issues which it finds it essential to resolve" (S. Rosenne, *The Law and Practice of the International Court of Justice, 1920-2005*, Vol. III, 4th ed., 2006, p. 1039). Thus, it is the *method* pursued by the Court in this case which is problematic. The Court here has

been content to hear the arguments of the Parties, ask a few token questions, and then disappear and deliberate *in camera*, only to emerge with terse, formalist replies as to whether there have been violations of the substantive obligation to prevent pollution embodied in Article 41 of the 1975 Statute. In several paragraphs, the Court variously states that it "sees no need" or "is not in a position" to arrive at specific conclusions (paragraphs 213, 228), that "there is no [clear] evidence to support" certain claims (paragraphs 225, 239, 259), that certain facts have "not . . . been established to the satisfaction of the Court" (paragraph 250), or that the evidence "does not substantiate the claims" (paragraph 257) that Uruguay is in breach of its obligations under the 1975 Statute. In other words, the Court has used the traditional rules on the burden of proof and obliged Argentina to substantiate claims on issues which the Court cannot, as a court of justice, fully comprehend without recourse to expert assessment. Yet, it is certainly compatible with the Court's judicial function to have recourse, when necessary, to experts: as the Court previously has stated, "the purpose of the expert opinion must be *to assist* the Court in giving judgment upon the issues submitted to it for decision" (*Application for Revision and Interpretation of the Judgment of 24 February 1982 in the Case concerning the* Continental Shelf (Tunisia/Libyan Arab Jamahiriya) *(Tunisia* v. *Libyan Arab Jamahiriya), Judgment, I.C.J. Reports 1985*, p. 228; emphasis added). Although *in casu* the majority of our colleagues did not consider it necessary to do so, we argue strenuously that it would have been indispensable in the case at hand.

6. We are not convinced by the claim that, in a case like the present one, scientific expertise can satisfactorily be supplied, and acted upon by the Court, by experts acting as counsel on behalf of the Parties under Article 43 of the Statute. On this point, we share the concerns expressed by the Court in paragraph 168 of the Judgment. But we do not agree with the Court's passive approach to the Parties' conduct here, and there were several alternatives for the Court.

7. One route for the Court, made available to it under Article 62 of its Rules, would have been to call upon the Parties to produce evidence or explanations that it considered necessary for understanding the matters in issue, or to have them arrange for the attendance of experts under paragraph 2 of the said Article. This would have triggered Articles 64 *(b)* and 65 of the Rules, whereby the experts, and the evidence they gave, could have been examined by the Parties and the bench, under the control of the President. These procedural safeguards do not exist for experts who appear under Article 43 of the Statute, who speak to the Court as counsel.

8. We consider, however, that the Court had another, more compelling alternative, provided in Article 50 of its Statute: "The Court may, *at any time*, entrust any individual, body, bureau, commission, or other organization that it may select, with the task of carrying out an enquiry or giving an expert opinion." (Emphasis added.) Article 67 of the Rules supplements Article 50 of the Statute with various modalities, chief amongst them the requirement that the parties "shall" be given the opportunity of commenting on every enquiry or expert opinion commissioned by the Court. Although, unlike the procedure described in paragraph 7 above, this procedure does not allow for the parties to cross-examine the Court-appointed experts, it nevertheless grants them a voice in assessing the opinions that such experts might produce. The Court is therefore endowed with considerable discretion, and two well-defined procedures under its Statute and Rules, to have recourse to outside sources of expertise in handling complex scientific or technical disputes. However, we consider that with regard to the present case, one of the most exceptionally fact-intensive cases the Court has been entrusted to resolve, it would have behoved the Court to have made recourse to at least one of the sources of external expertise which it is empowered to consult.

9. It is irrelevant whether such gathering of expertise in the case at hand would have had to be undertaken through the route prescribed under Article 62 of the Rules (by calling upon the Parties to produce evidence) or under Article 67 of the Rules and Article 50 of the Statute (by nominating its own experts); the point we wish to make is simply that the Court, when handling a dispute with complex scientific or technical aspects (which will become all the more common as the world will be faced with more environmental or other challenges), should more readily avail itself of the tools available to it under its constitutive instrument in order properly to assess the evidence placed before it. The flexibility in the wording of Article 50 of the Statute, for example, allows for recourse thereunder at any moment in the proceedings, which is especially noteworthy, as it means that the Article 50 procedure can be used from the very start of a dispute, during the written or oral phases, or even after the parties have appointed experts and that evidence is deemed unsatisfactory to the Court.

10. It is not exactly as though the Court has never invoked its powers under this provision. In the *Corfu Channel* case *(United Kingdom* v. *Albania)* (*Order of 17 December 1948, I.C.J. Reports 1947-1948*, pp. 124 *et seq.*), exercising its powers under Article 50 of the Statute, the Court commissioned three naval experts to evaluate visibility off the Albanian coast in order to substantiate the United Kingdom's claim, based on a finding of fact, that Albania could have seen various mine-laying operations occurring off its coast. In *Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada/United States of America),* (*Appoint-*

ment of Expert, Order of 30 March 1984, I.C.J. Reports 1984, p. 165), the Court, upon a joint request of the Parties, and again using its powers under Article 50 of the Statute, appointed an expert "in respect of technical matters and . . . in preparing the description of the maritime boundary and the charts . . ." (*ibid.*, p. 166). That expert's report was annexed to the Court's later Judgment in that dispute (*Judgment, I.C.J. Reports 1984*, pp. 347 *et seq.*).

11. This reliance on experts is all the more unavoidable in cases concerned with highly complex scientific and technological facts; we are extremely far from *Corfu Channel* in 2010, assessing as we do the breakdown of nonylphenolethoxylates, the chain of causation for phosphorus and dioxin/furan pollution in a river ecosystem, and the possible danger of low levels of dissolved oxygen. As Shabtai Rosenne suggests, technological evolution has brought to surface the tension that inevitably exists between the legal conception of "fact" and of evidence on the one hand, and the conception of facts in the sciences, on the other (Rosenne, "Fact-Finding", *op. cit.*, p. 238).

12. Yet, the Court has an unfortunate history of persisting, when faced with sophisticated scientific and technical evidence in support of the legal claims made by States before it, in resolving these issues purely through the application of its traditional legal techniques; and it has come under considerable criticism in this regard, particularly in very recent scholarly commentary on its working methods (cf., for instance, Rosenne, "Fact-Finding", *op. cit.*, pp. 239-242; Riddell and Plant, *op. cit.*, pp. 337-339; M. Benzing, *Das Beweisrecht vor internationalen Gerichten und Schiedsgerichten in zwischenstaatlichen Streitigkeiten* ("The Law of Evidence before International Courts and Arbitral Tribunals in Inter-State Disputes"), 2010, p. 472). In short, in a scientific case such as the present dispute, the insights to make sound legal decisions necessarily emanate from experts consulted by the Court, even though it certainly remains for the Court to discharge the exclusively judicial functions, such as the interpretation of legal terms, the legal categorization of factual issues, and the assessment of the burden of proof.

13. Quite aside from academic criticism, so long as the Court persists in resolving complex scientific disputes without recourse to outside expertise in an appropriate institutional framework such as that offered under Article 50 of the Statute, it willingly deprives itself of the ability fully to consider the facts submitted to it and loses several advantages of such recourse: the interaction with experts in their capacity as experts and not as counsel (see paragraph 6, *supra*); the advantage of giving the parties a voice in establishing the manner in which those experts would have been

used, a chance for the parties to review the Court's choice of experts (and for which subject-matter experts were needed); and the chance for the parties to comment on any expert conclusions emerging from that process. It would also have given the Court the opportunity of combining the rigour of the scientific community with the requirements of the courtroom — a blend which is indispensable for the application of the international rules for the protection of the environment and for other disputes concerning scientific evidence (Rosenne, "Fact-Finding", *op. cit.*, p. 245).

14. It would not be sufficient if the Court, in disputes with a complex scientific component, were to continue having recourse to internal "experts fantômes", as appears to have been the case, *inter alia,* in certain boundary or maritime delimitation cases: no less an insider than Sir Robert Jennings, a former President of the Court, has claimed that

> "the Court has not infrequently employed cartographers, hydrographers, geographers, linguists, and even specialised legal experts to assist in the understanding of the issue in a case before it; and has not on the whole felt any need to make this public knowledge or even to apprise the parties" (Sir R. Y. Jennings, "International Lawyers and the Progressive Development of International Law", in J. Makarczyk (ed.), *Theory of International Law at the Threshold of the 21st Century: Essays in Honour of Krzystof Skubiszewski*, 1996, p. 416).

The Court's Registrar, Philippe Couvreur, has defined the role of experts retained by the Court for purely internal consultation as that of temporary Registry staff members, entrusted with the giving of internal scientific opinions under the oath of confidentiality demanded of full-time Registry staff. As he explains, their conclusions would never be made public (Ph. Couvreur, "Le règlement juridictionnel", in SFDI (ed.), *Le processus de délimitation maritime: étude d'un cas fictif. Colloque international de Monaco du 27 au 29 mars 2003*, 2004, pp. 349 and 384). While such consultation of "invisible" experts may be pardonable if the input they provide relates to the scientific margins of a case, the situation is quite different in complex scientific disputes, as is the case here. Under circumstances such as in the present case, adopting such a practice would deprive the Court of the above-mentioned advantages of transparency, openness, procedural fairness, and the ability for the Parties to comment upon or otherwise assist the Court in understanding the evidence before it. These are concerns based not purely on abstract principle, but on the good administration of justice (C. Tams, "Article 50", in A. Zimmermann, C. Tomuschat and K. Oellers-Frahm (eds.), *The Statute of the International Court of Justice: A Commentary*, 2006, pp. 1109 and 1118). Transparency and procedural fairness are important because they require the Court to assume its overall duty for facilitating the production of evi-

dence and to reach the best representation of the essential facts in a case, in order best to resolve a dispute.

15. Other international bodies have accepted the reality of the challenges posed by scientific uncertainty in the judicial process: in *Iron Rhine Railway (Belgium/Netherlands)*, Arbitral Award, 24 May 2005 (*Reports of International Arbitral Awards (RIAA)*, Vol. XXVII, pp. 35-125), the Tribunal recommended that the parties establish a committee of independent experts within four months of the date of the award to determine several facts, *inter alia*, the costs of reactivating the Iron Rhine Railway, the costs of alternative autonomous development by the Netherlands, and the quantifiable benefits accruing to the Netherlands by reason of the reactivation (*ibid.*, p. 120, para. 235). The Tribunal there considered it more appropriate for experts to "investigate questions of considerable scientific complexity as to which measures will be sufficient to achieve compliance with the required levels of environmental protection" (*ibid.*, p. 120, para. 235). The *Iron Rhine* Tribunal's hybrid approach for appointing experts is thus a positive example which could serve the Court; we see no reason why it cannot be considered under Article 50 of the Statute. Moreover, in the Award of the Arbitral Tribunal of 17 September 2007 in the *Matter of an Arbitration between Guyana and Suriname*, the Tribunal appointed an independent hydrographic expert and directed him as to the specific points of fact he was to examine (Procedural Order No. 6 of the Tribunal, 27 November 2006; Order No. 7 of the Tribunal, 12 March 2007). The Parties were given the opportunity to comment on the report of the independent hydrographic expert before it was adopted by the Tribunal (Order No. 8 of the Tribunal, 21 May 2007). The findings of the independent hydrographic expert were relied upon by the Tribunal in addition to the expert evidence submitted by the Parties in their pleadings, and the Award has been described as "based on a sound understanding and acknowledgement of the relevant technical points in the dispute" (Riddell and Plant, *op. cit.*, p. 356).

16. It is perhaps the World Trade Organization, however, which has most contributed to the development of a best practice of readily consulting outside sources in order better to evaluate the evidence submitted to it; in fact, it was devised as a response to the needs of the dispute resolution process in cases involving complex scientific questions (Foster, *op. cit.*, Chap. III). Various WTO panels have heard the experts put forward by the parties, have made recourse to specialized international organizations or agencies for information, or have outright heard the views of experts appointed by the Panel (see, e.g., *European Communities* —

Measures Concerning Meat and Meat Products (Hormones), Complaint by Canada, WT/DS48/R/CAN, WT/DS26/AB/R, WT/DS48/AB/R (1998), DSR 1998:II, p. 235; *European Communities — Measures Concerning Meat and Meat Products (Hormones), Complaint by the United States,* WT/DS26/R/USA, WT/DS26/AB/R, WT/DS48/AB/R (1998), DSR 1998:III, p. 699; *European Communities — Measures Affecting the Approval and Marketing of Biotech Products*, WT/DS291/R, WT/DS292/R, WT/DS293/R (2006) (hereinafter "EC-Biotech"); *Canada — Continued Suspension of Obligations in the* EC — Hormones *Dispute*, WT/DS321/R, WT/DS321/AB/R (2008); *United States — Continued Suspension of Obligations in the* EC — Hormones *Dispute*, WT/DS320/R, WT/DS320/AB/R (2008)). The consultation of tribunal-appointed scientific experts by WTO panels may take place even where the parties have not so requested (as in *United States — Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/R, WT/DS58/AB/R (1998), DSR 1998:VII, p. 2821 (hereinafter "US-Shrimp")), and even if the parties have agreed that such outside consultation is unnecessary (as occurred in *EC-Biotech*, Panel Report, para. 7.16). Between three and six experts are usually appointed in a two-stage consultation process, comprising both written and oral phases. During the latter phase, parties are invited during a "Joint Meeting" to comment on the expert reports as well as the comments of the opposing party (this procedure was first used in the WTO *US-Shrimp* case). This second, oral phase is particularly interesting because of the opportunity it affords to the panel and the parties for explanation of the concepts, methods and principles that underlie scientific arguments, and thus to improve their overall level of understanding of the science at play in a given case. Regrettably, a similar course of action was not adopted here.

17. The present dispute has been a wasted opportunity for the Court, in its "unfettered discretion" to do so (Rosenne, *Law and Practice, op. cit.*, p. 1333), to avail itself of the procedures in Article 50 of its Statute and Article 67 of its Rules, and establish itself as a careful, systematic court which can be entrusted with complex scientific evidence, upon which the law (or breach thereof) by a party can be established. Moreover, the decision not to employ the procedure available to it under Article 50 of the Statute has meant that the evidence has not been treated in a convincing manner to establish the verity or falsehood of the Parties' claims. Certainly, experts will be drawn into questions of legal interpretation through their involvement in the application of legal terms. The conclusions of scientific experts might be indispensable in distilling the

essence of what legal concepts such as "significance" of damage, "sufficiency", "reasonable threshold" or "necessity" come to mean in a given case. For this reason, in a case concerning complex scientific evidence and where, even in the submissions of the Parties, a high degree of scientific uncertainty subsists, it would have been imperative that an expert consultation, in full public view and with the participation of the Parties, take place. Therefore, with rue, we dissent from what is otherwise a solid Judgment.

II. A Missed Opportunity to Approach an Environmental Dispute in a Forward-Looking and Prospective Manner

18. To move from the issue of the Court's failure to assess scientific evidence *lege artis* to a closely related matter: the Court has concluded that, while it has jurisdiction to settle disputes concerning the interpretation or application of the 1975 Statute under Article 60, it "cannot uphold the interpretation of Article 9 [put forward by Argentina] according to which any construction is prohibited until the Court has given its ruling pursuant to Articles 12 and 60" (Judgment, para. 154). It has rejected the hypothesis that Article 12 might contain any such "no construction obligation" (*ibid.*, para. 154) and has also determined that the parties to the Statute have a right to implement the project once that party's obligation to negotiate has come to an end (*ibid.*, para. 155).

19. The 1975 Statute provides a dual role for the Court. Article 60 of the Statute casts the Court in its traditional role, that of interpreting and applying rights and obligations under the 1975 Statute. It is a wide-ranging role, but it remains confined to the judicial function generally exercised by the Court when it is faced with a dispute that has come before it under a compromissory clause. It typically consists in a retrospective evaluation of the case at hand and is geared towards the perspective of identifying harm to the river ecosystem that has actually occurred or is impending. This reflects the traditional approach to international legal dispute settlement as the identification of infringements of obligations incumbent upon the parties and the reaction to such breaches in the form of fixing adequate compensation or providing for quintessentially retrospective remedies.

20. In contrast, Article 12 conceives of a distinct role for the Court: It provides that, if the parties fail to reach an agreement on whether an envisaged project "might significantly impair navigation, the régime of the river or the quality of its waters" (Article 11), "the procedure indicated in Chapter XV shall be followed" (Article 12), i.e., the matter shall

be submitted to the Court. While this seems to present merely another avenue leading to the application of Article 60, we would submit that the special procedure envisaged by Article 12 differs from that under Article 60 in so far as it modifies the function of the Court, transforming it into the primary adjudicator on technical and/or scientific matters when the parties cannot reach agreement.

21. In our opinion, in essence, under Article 12, the Court is not relegated to the function of adjudging *ex post facto* whether a breach has happened and what remedies constitute appropriate reparation for a claimed breach, but instead, is co-opted by the Parties to assist them from an early stage in the planning process. The perspective of Article 12 is decisively forward-looking, as under it, the Court is to step in, *before* a project is realized, where there is disagreement on whether there are potentially detrimental effects to the environment. Leaving aside the question whether this amounts to a "no-construction obligation" pending the decision of the Court, the very objective of calling upon the intervention of the Court under Article 12 is thus to obtain its authoritative interpretation of what "significant impairment" means in regard to a specific project and its specific risks and repercussions to the environment of the River Uruguay. On the basis of this input, the Parties can assess within the framework of their common management of the river ecosystem, whether and to what extent the project in question should be realized. As described above, the implications of the role so described go much further than the issue whether a so-called "no-construction obligation" is founded in Article 12, but extend into the manner in which the Court sets its procedure and handles evidence.

22. For the Court, differently from the standard discharge of its responsibilities under Article 60, the procedure of Article 12 implies that it has to take a forward-looking, prospective approach, engage in a comprehensive risk assessment and embrace a preventive rather than compensatory logic when determining what this risk might entail. This logic carries with it particular cogency in the realm of environmental law. As the Court itself has proclaimed elsewhere,

> "in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations inherent in the very mechanism of reparation of this type of damage" (*Gabčíkovo-Nagymaros Project (Hungary/Slovakia), Judgment, I.C.J. Reports 1997*, p. 78, para. 140).

23. The points regarding scientific expert evidence made before apply even more forcefully in regard to such a preventive perspective. Given the multiplicity of the factors involved, the long periods of time and accumulation of effects to be taken into account, the intricate questions of

causality and interdependence to be considered, all these add up to a complex matrix of factual issues which can only be transformed into a sound evidentiary basis for the Court's reasoning and decision-making if, and only if, the Court makes use of external scientific and technical expert input, combined with necessary procedural guarantees. This is even more so if there exists a situation where the scientific community itself is divided and the question arises whether, and to what extent, the precautionary principle should enter the fore.

24. Article 12 is the natural seat of these considerations and concerns in the 1975 Statute. It is thus, given the time of its conclusion, a truly remarkable and highly characteristic feature of the Statute and reflects its innovative and progressive character. In its rejection of the philosophy of *fait accompli*, it offers a paramount example of how to entrench prospective, preventive reasoning at the institutional level in the assessment of risks from the authorization process onwards. In particular, the preventive assessment of risk is particularly needed in the crucial and ever-more important field of environmental protection. Acknowledging the often "irreversible character of damage to the environment" (see *supra*, para. 22) is a first important step to make. Beyond this, the Court must remain aware, when confronted with challenges of risk of environmental pollution and endangerment of ecosystems, of the inherent weaknesses and flaws of the traditional retrospective judicial process and its compensatory logic. Article 12 of the 1975 Statute clearly transcends this narrow framework. Nonetheless, the majority seems almost unanimously to have assumed that the Court is acting under Article 60 of the 1975 Statute, and has decided on that basis.

25. However, the role discharged by the Court even under Article 60, as is amply evidenced by the Judgment, has been *de facto* that of an "expert" or "specialized" court, exercising the functions expected of it under a dispute referred to it under Article 12. It is therefore even more regrettable that the Court has failed to grasp the implications for its function wrought by Article 12. It is our conviction that, with the device of Article 12 at hand, provided by the 1975 Statute itself, the Court could and should have engaged in a different kind of reasoning that would have been more responsive to the prospective and preventive aspects the Statute ascribes to the role of the Court. Against this background, the Court would not have had to limit its own role simply to assess *ex post facto* the damages that have occurred, but could have looked, in a more comprehensive manner, at the risk factors involved and the importance of the procedural obligations that the Parties have undertaken precisely to minimize that risk. In so doing, it could have also embraced a more flexible approach to the role that expert evidence could have played in the resolution of this dispute.

III. A Missed Opportunity to Clarify the Interrelation between Procedural and Substantive Obligations

26. A final observation: in matters related to the use of shared natural resources and the possibility of transboundary harm, the most notable feature that one observes is the extreme elasticity and generality of the substantive principles involved. Permanent sovereignty over natural resources, equitable and rational utilization of these resources, the duty not to cause significant or appreciable harm, the principle of sustainable development, etc., all reflect this generality. The problem is further compounded by the fact that these principles are frequently, where there is a dispute, in a state of tension with each other. Clearly in such situations, respect for procedural obligations assumes considerable importance and comes to the forefront as being an essential indicator of whether, in a concrete case, substantive obligations were or were not breached. Thus, the conclusion whereby non-compliance with the pertinent procedural obligations has eventually had no effect on compliance with the substantive obligations is a proposition that cannot be easily accepted. For example, had there been compliance with the steps laid down in Articles 7 to 12 of the 1975 Statute, this could have led to the choice of a more suitable site for the pulp mills. Conversely, in the absence of such compliance, the situation that was obtained was obviously no different from a *fait accompli*.

27. The Court does recognize a functional link between procedural and substantive obligations laid down by the 1975 Statute (see Judgment, paragraph 79). However, the Court does not give full weight to this interdependence, neither when assessing whether a breach of Article 41 of the 1975 Statute has occurred nor in determining the appropriate remedies for the breach of Articles 7 to 12 thereof. According to the Court, as long as compliance with substantive obligations has been assured (or at least lack of it not proved), the breach of procedural obligations would not matter very much and hence a declaration to that effect constitutes appropriate satisfaction; this is not the proper way to pay due regard to the interrelation of procedure and substance.

28. In conclusion, we regret that the Court in the present case has missed what can aptly be called a golden opportunity to demonstrate to the international community its ability, and preparedness, to approach scientifically complex disputes in a state-of-the-art manner.

(*Signed*) Awn Shawkat Al-Khasawneh.

(*Signed*) Bruno Simma.