

The ICJ Whaling Case: science, transparency and the rule of law*

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Abstract

The International Court of Justice (ICJ) Whaling Case (Australia v. Japan, New Zealand intervening) was greeted by the popular press, particularly in Australia and New Zealand, as a win for “good science” as opposed to “bogus science”. However, in this article we argue that a closer analysis of the decision reveals that the ICJ - by sidestepping the crucial issue of how to define “scientific research” under the Whaling Convention - missed an opportunity to further the rule of law in international law, particularly as it applies to commons areas that require scientific cooperation and obligations.

1 Introduction

In this article we analyse the International Court of Justice’s decision in the *Whaling Case (Australia v. Japan, New Zealand intervening)*. In particular we examine the ICJ’s approach to – or perhaps, more appropriately ‘avoidance’ of – defining ‘scientific research’ for the purposes of the *International Convention for the Regulation of Whaling (ICRW)*, or international law more generally. More than that, it is an exploration of the interface between science and international law.

The *Whaling Case* centered upon the legal question of whether Japan’s lethal harvesting of whales was, ‘for the purposes of scientific research’ under the provisions of the ICRW. As will be discussed, that legal question was predicated on a contest about scientific veracity, or, more appropriately scientific ‘demarcation’ – that is, where the boundary line between legitimate science and other endeavours lies. That is a complex question that has not been resolved within science itself, let alone philosophy more generally.¹

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However, we argue that, once placed into a legal framework, such questions require resolution to ensure the rule of law is maintained, if not by the parties to that framework, then by any adjudicative body charged with interpreting it.

As will be discussed, scientific definition and demarcation are more than philosophical questions, they have profound practical and legal implications within global governance. In this paper we refer collectively to legal rules allowing or permitting states to undertake scientific endeavours in pursuance of treaty terms as ‘legal-scientific obligations’. Despite the widespread use and importance of such legal-scientific obligations within global commons treaties, they have, to date, received little judicial consideration by international courts and tribunals. The *Whaling Case* was, therefore an important milestone in this regard.

This paper will analyse the *Whaling Case* against the larger backdrop of public international law, especially as it relates to commons areas and resources. It will adopt the following framework for that analysis:

- Firstly, it will examine the context of the dispute, to establish that the dispute was at its heart, one about scientific definition and demarcation;
- Secondly, it will discuss why the questions of definition and demarcation are questions of significant legal importance to international law over the commons; and
- The third and final part of this paper will consider whether the reasoning of the ICJ in the *Whaling Case* addresses the underlying problem of scientific demarcation in a manner, which advances public international law.

It will ultimately be argued that, while the ICJ did, in fact, adopt an approach which requires greater rigor and rationality in the application of legal-scientific obligations, it did not go as far as might have been hoped. That is, in very large part, because the ICJ avoided defining science, while implicitly evaluating Japan’s claims against largely unexplained scientific criteria. That is, it made a decision that was somewhat lacking in jurisprudential transparency. By that we mean it involves unstated or unjustified (either in a

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¹ Karl Popper described ‘the problem of demarcation’ as one of the ‘most fundamental problems in the philosophy of science’. See: Karl Popper, *Conjectures and Refutations: The Growth of Scientific Knowledge* (Routledge, 1962/ 2014) 55.

legal or scientific sense) logical conclusions in its process of reasoning. Insofar as that is the case, the ICJ appears to have limited the general applicability of its decision outside the particular factual matrix of the dispute. In that respect, the *Whaling Case* can be seen as somewhat of a missed opportunity to advance the rule of law in relation to international legal-scientific obligations.

2 Background to the Dispute

The *Whaling Case* essentially arose from competing interpretations of the meaning, scope and application of science under the ICRW. The root of the dispute lies in the 1982 decision of the parties to the ICRW to establish a general moratorium on commercial whaling subsequent to Article V of the treaty.² That Article permits the *International Whaling Commission* (IWC), as the governing body of the ICRW, to adopt 'regulations with respect to the conservation and utilization of whale resources' based, *inter alia*, on 'scientific findings [emphasis added]'. At the 1982 meeting of the IWC, Article V was invoked to amend the Schedule to the ICRW and the catch limits for all whales to zero, effectively prohibiting commercial whaling within the regime.³

² *Whaling in the Antarctic (Australia v. Japan: New Zealand Intervening)* (judgment) (31 March 2014), [herein 'judgment', and either 'merits' for primary judgment, or by dissenting or separate judge if name of judge included] <<http://www.icj-cij.org/docket/index.php?p1=3&p2=1&case=148&code=aj&p3=4>> (1 March 2015), 35. See: *International Convention for the Regulation of Whaling*, signed 2nd December 1946, 2124 UNTS 1 (entered into force 10 November 1948). Article V states '1. The Commission may amend from time to time the provisions of the Schedule by adopting regulations with respect to the conservation and utilization of whale resources, fixing (a) protected and unprotected species; (b) open and closed seasons; (c) open and closed waters, including the designation of sanctuary areas; (d) size limits for each species; (e) time, methods, and intensity of whaling (including the maximum catch of whales to be taken in any one season); (f) types and specifications of gear and apparatus and appliances which may be used; (g) methods of measurement; and (h) catch returns and other statistical and biological records.

2. These amendments of the Schedule (a) shall be such as are necessary to carry out the objectives and purposes of this Convention and to provide for the conservation, development, and optimum utilization of the whale resources; (b) shall be based on scientific findings; (c) shall not involve restrictions on the number or nationality of factory ships or land stations, nor allocate specific quotas to any factory ship or land station or to any group of factory ships or land stations; and (d) shall take into consideration the interests of the consumers of whale products and the whaling industry.'

³ This was achieved by inserting Paragraph 10(e) of the Schedule to the ICRW; see *International Whaling Commission Report*, IWC 34th Annual Meeting, 19-24 July 1982, 72-86

Japan initially protested against the 1982 commercial whaling moratorium, arguing that it was driven by social concerns and had ‘no basis in science.’⁴ However, it eventually withdrew its objection and instead indicated that it would undertake a ‘scientific whaling program’, involving lethal sampling of whales, to prove the moratorium was not based on ‘sound science’.⁵ This program was ostensibly undertaken in pursuance of Article VIII of the Convention, which states:

1. *Notwithstanding anything contained in this Convention any Contracting Government may grant to any of its nationals a special permit authorizing that national to kill, take and treat whales for purposes of scientific research subject to such restrictions as to number and subject to such other conditions as the Contracting Government thinks fit, and the killing, taking, and treating of whales in accordance with the provisions of this Article shall be exempt from the operation of this Convention.* [emphasis added]...

2. Any whales taken under these special permits shall so far as practicable be processed and the proceeds shall be dealt with in accordance with directions issued by the Government by which the permit was granted.

3. Each Contracting Government shall transmit to such a body as may be designated by the Commission, in so far as practicable, and at intervals of not more than one year, scientific information available to that Government with respect to whales and whaling....

Japan ran two back-to-back programs pursuant to Article VIII: the ‘Japanese Whale Research Programme under Special Permit in the Antarctic’ (JARPA) from 1987 to 2005; and subsequently (and immediately following JARPA) JARPA II from 2006 to 2014.⁶ These programs had had functionally similar objectives but varied in their lethal take of different whale species. In both programs, whale carcasses were sold for consumption as is permitted by Article VIII.

Despite Japan’s recourse to Article VIII and its claim to be harvesting whales to better inform the commercial moratorium, the majority of states in the IWC

⁴ Government of Japan, *National Diet Debates*, House of Representatives - Agriculture, Forestry and Fisheries Committee - No. 2, 11 October 1983 [excerpt], cited in Memorial of Australia, *Whaling in the Antarctic (Australia v. Japan: New Zealand Intervening)* [2014], ICJ Pleadings <<http://www.icj-cij.org/docket/index.php?p1=3&p2=1&case=148&code=aj&p3=1>> (1 March 2015) [herein ‘Australian Memorial’ or pleading party and pleading type if other pleadings], Annex 9, 77.

⁵ Merits, above n 2, 36; Counter-Memorial of Japan, above n 4, 13.

⁶ Merits, above n 2, 36.

criticised the use of lethal sampling pursuant to JARPA/JARPA II.⁷ Some states, notably Australia and New Zealand, went further than this, arguing that the actual purposes of the program were commercial and that ‘so called “scientific” whaling is contrary to [Japan’s] international obligations and should stop;’⁸ a claim that they would eventually take to the ICJ in 2010.

2.1 Arguments of the parties

The arguments made in the ICJ largely reflected the disagreement as to the meaning and scope of ‘scientific research’. Hence, in its Memorial to the ICJ, Australia reiterated its previous diplomatic position and arguments, that, as a matter of law, Japan had an:⁹

[O]bligation not to kill whales for commercial purposes and [an] obligation not to conduct commercial whaling ... [because] the true purpose of JARPA II is continued whaling pure and simple...the issue of special permits by Japan allegedly under Article VIII...purportedly authorising whaling ‘for purposes of scientific research’ is not consistent with the Convention.

Japan, in its Counter-Memorial, argued that JAPRA II was:¹⁰

[A] legitimate scientific programme, permitted under Article VIII of the ICRW. JARPA II’s objectives and methods, together with its valuable scientific outputs ... are fully consistent with the text as well as with the object and purpose of the ICRW

... It is obvious that Australia is opposed to any form of whaling ... regardless of science or law

... Japan [has] the earnest hope [for] ... rational discussion, putting an end to the unreasonable rows and restoring... whale conservation and management based on science.

⁷ Reuben Ackerman, ‘Japanese Whaling in the Pacific Ocean: Defiance of International Whaling Norms in the Name of “Scientific Research”, Culture and Tradition’ (2002) 25 *Boston College International & Comparative Law Review* 323, 325-326. In the IWC, see: IWC Resolutions 2003-3 and 2005-1, 2005-1, 2007-1; Annual Reports of the IWC, (2009) 26-28; (2010) p 23; (2012) pp 41-43. IWC Resolutions and reports are available at <<https://iwc.int/home>> (1 March 2015).

⁸ Press statement by the (then) Australian Federal Environment Minister, Hon Tony Burke, cited in: Minister for Australian Antarctic Division, ‘Australia continues push for reform at International Whaling Commission’, *Press Release*, 2nd July 2012 <<http://www.antarctica.gov.au/news/2012/iwc-minister>> (1 March 2015).

⁹ Australian Memorial, above n 4, 3.

¹⁰ Counter-Memorial of Japan, above n 4, 4.

Thus, each party claimed that the other party was misappropriating an agreed treaty term – ‘scientific research’ – to mask activities that were not permitted by the treaty. The conflict over the meaning of scientific research was highlighted by the intervention of New Zealand, which, in its observations argued that:¹¹

Article VIII permits the killing of whales ... only if ... an objective assessment ... demonstrates that the killing is *only* “for purposes of scientific research” and ... the killing is necessary ...and ... the Contracting Government ... has discharged its duty of meaningful cooperation.

Bar the term ‘for the purposes of scientific research’, the criteria posited by New Zealand were not to be found in Article VIII of the ICRW. Japan subsequently complained:¹²

New Zealand has a different conception of what counts as “scientific research”... Japan has, accordingly, to address two different cases against it, emanating from two States that have stated openly that they are acting in a common cause.

While this is not strictly true - New Zealand had not provided an alternative definition of ‘scientific research’ *per se* - Japan’s observation highlighted an underlying problem in the ICRW treaty and regime. Specifically there has historically been a lack of objective certainty amongst the parties, even those acting in common cause, about what constituted ‘scientific research’ pursuant to Article VIII. That is, in part, because the ICRW does not provide a definition of the term. Nor does it establish any demarcation criteria by which to distinguish permissible scientific research from the regulated activities of commercial exploitation and subsistence whaling. As will be discussed in the next section, that is a problematic oversight, but one common to treaties relating to commons areas and resources.

3 The Importance of Scientific Definition and Demarcation to Commons Treaty Governance

As discussed above, the fact that the whaling dispute could arise in the first place is largely the product of the ICRW’s lack of definitional specificity about its legal-scientific obligations. That is a common feature of multilateral treaties over commons resources or spaces.¹³

¹¹ Observations of New Zealand, above n 4, 2.

¹² Observations of Japan, above n 4.

¹³ See i.e. *Protocol on Environmental Protection to the Antarctic Treaty (The Madrid Protocol)*, opened for signature 4 October 1991, 30 ILM 1455 (entered into force on

Clearly any law must have limits, and any exception to a law must similarly have boundary lines; otherwise it constitutes an absolute exception to any obligation in the treaty. It is therefore appropriate to view the common lack of definition of scientific terms in multilateral treaties as reflecting an implicit assumption that such terms have a plain, ordinary meaning outside the technical-legal confines of any specific treaty.¹⁴ Yet the reality is that, despite the apparent assumption of scientific normativity, definitions of science are either contested or lack the form of specificity that would allow legal demarcation between scientific and non-scientific activities.¹⁵ This compounds uncertainties about the scope and content of legal-scientific obligations.

As a caveat to the following discussion we note the substantive body of relevant literature – especially within the social sciences – about scientific demarcation.¹⁶ The problem of summarizing differing schools of thought in a contested space is, of course, that the summary itself can be interpreted as value laden and preferential.¹⁷ It is not our intention to weigh in on the socio-philosophical debate about scientific demarcation, contribute our own, or to select a preferred school from within it. Rather, our intention is to highlight the problems that the very debate has created for legal-scientific obligations

14 January 1998) Art 7; *United Nations Convention on the Law of the Sea*, opened for signature 10 December 1982, 21 ILM 1261 (entered into force 16 November 1994) Arts 119(1), 143(3), 238; *United Nations Framework Convention on Climate Change*, opened for signature 4 June 1992, 31 ILM 849 (entered into force 21 March 1994) Arts 3, 4(2)(c); *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies*, opened for signature 27 January 1967 6 ILM 386 (entered into force 10 October 1967) Arts 1, 4; *Biodiversity Convention*, opened for signature 5 June 1992, 31 ILM 818 (entered into force 29 December 1993) Arts 7(a), 8; *UNESCO Universal Declaration on the Human Genome and Human Rights* (1997), UN GA Res A/RES/53/152, 9 Dec. 1998, Art 18.

¹⁴ *Vienna Convention on the Law of Treaties*, opened for signature 23 May 1969, 8 ILM 679 (entry into force 27 January 1980), (herein 'VCLT') Art 31.

¹⁵ The Oxford English Dictionary, for instance, defines it variously and broadly in relation to its root 'science', which is in turn defined as 'knowledge ... acquired by study; acquaintance with or mastery of any branch of learning'. The broadness of the definition provides little to demarcate 'science' from other activities, such as theology or mysticism, which are generally regarded as antithetical to scientific research, but which purport to develop knowledge through study. Similarly, other dictionary definitions do not provide structural criteria by which to demarcate science from non-scientific research or study. *Oxford English Dictionary* (Online Resource) <<http://www.oed.com/>> (1 March 2015).

¹⁶ A helpful treatise on the longstanding contest over scientific definition and demarcation is set out in: Charles Alan Taylor, *Defining Science: A Rhetoric of Demarcation* (University of Wisconsin Press, 1996).

¹⁷ Indeed, even stating that it is contested might be interpreted as a preferential value judgment by those who consider the matter settled.

because of the uncertainty it imports into their terms. We also highlight that competing demarcation theories exist which are less prone to definitional uncertainty and therefore provide a possible avenue to a 'legal' definition of science.

There have been a range of attempts to define science by scientists and sociologists both pre and post enlightenment; most have been contested or limited by subsequent advances in scientific knowledge and method.¹⁸ As Taylor notes, 'the intellectual horizon is littered with attempts to come to grips with the constitutive character of science.'¹⁹ By the twentieth century a general consensus had developed that the only stable feature of science was that no part of the enterprise was fixed or certain.²⁰ Scientific philosophy subsequently turned away from settling upon a strict or universal definition, but instead sought to find a way of effectively demarcating science from non-science (for instance pseudoscience or policy).²¹

For much of the twentieth century the dominant approach to scientific demarcation was that of 'critical rationalism'. Critical rationalism considers science to be distinct from other disciplines because of its acceptance of its own fallibility.²² This can be distinguished, for example, from faith-based

¹⁸ Hoyningen-Huene describes four phases of scientific ontology, each ascribing differing characteristics to science, each without a single consistent feature. Even scientific method, which was important in respect of the second and third phase (from the 17th Century to the 19th Century - mid 20th Century), was discounted in the fourth and present phase. See: Paul Hoyningen-Huene, *Systematicity: The Nature of Science* (Oxford University Press, 2013), 3-6. For an earlier discussion of the various attempts to describe science and the resultant problems and refutations see: Lakatos and A. Musgrave (eds), *Criticism and the Growth of Knowledge* (Cambridge University Press, 1970) 11; Thomas Nickles 'The Problem of Demarcation' in Massimo Pigilucci, Maarten Loudry (eds) *Philosophy of Pseudoscience: Reconsidering the Demarcation Problem* (University of Chicago Press, 2013) 101-118. For a broader overview of the history of science, including attempts to describe the enterprise see the seminal work of J.D Bernal, *Science in History: Volume 1: The Emergence of Science* (The MIT Press, 1971).

¹⁹ Taylor, above n 18, 4.

²⁰ Lakatos and A. Musgrave, above n 18, 11.

²¹ Thomas Nickles summarises the demarcation problem as dealing with a range of interrelated questions, including what science is: 'science ... constitutes empirical method and knowledge ... merits the greatest authority ... is most valuable in solving the problems we face'. See: Thomas Nickles 'The Problem of Demarcation' in Massimo Pigilucci, Maarten Loudry (eds) *Philosophy of Pseudoscience: Reconsidering the Demarcation Problem* (University of Chicago Press, 2013), 102.

²² Critical rationalism was propounded by Karl Popper in a series of works starting in the 1930s (see: Karl Popper *Die beiden Grundprobleme der Erkenntnistheorie* (Tübingen, 1933); Karl Popper, *Logik der Forschung* (Verlag von Julius Springer, 1935). It was an attack on positivistic interpretations of science. By the time the ICRW was negotiated, and when Article VII of the ICRW was agreed to, critical

belief structures which insist upon adherence to basic cantons or unquestionable tenants. Hence, what demarcates science from non-science is that all of its parts – its aims, methods, theories and so on – are open to falsification and review and, in fact, any proposition in science is accompanied by a test to prove whether or not it is incorrect.

More recently, a pragmatic socio-historical²³ description of science has gained ascendancy, which, while not discounting the falsification theorem, tends to view it as aspirational rather than reflective of the conduct of ‘normal science’.²⁴ This school recognises the historically paradigmatic nature of scientific research,²⁵ the tendency of scientific communities to work towards stability, consensus, and disciplinary authority, and the influence of socio-political factors on the direction and nature of intellectual inquiry.²⁶ Yet, even within this school, the conduct of ‘science’ is neither stable nor certain. Paradigms shift, so that what is the dominant scientific program in any one

rationalism was the dominant description of science, particularly due to the widespread acceptance of the position following the publication of Karl Popper, *The Open Society and Its Enemies* (Routledge, 1945).

²³ This school was led by Thomas Kuhn, who criticised falsification as an absolute description of the conduct, boundaries, and limits of science because it described the entire scientific discipline only by reference to its ‘revolutionary parts’, the reality being that scientific revolutions are rare and are in fact much slower to gain traction than political revolutions. See: Thomas Kuhn, ‘Logic of Discovery or Psychology of Research?’ in Imre Lakatos and Alan Musgrave (eds) *Criticism and the Growth of Knowledge* (Cambridge University Press, 1970) 1-10.

Later dialogue about demarcation has tended to build upon Kuhn’s paradigm. For instance, the ‘strong programme’ of scientific knowledge is premised upon the allegiance to a shared paradigm as a pre-requisite of scientific validity, but recognises the sociological and socio-political influences on any community of knowledge. See: ‘Ideals and monisms: recent criticisms of the Strong Programme in the sociology of knowledge’ (2007) *Studies in History and Philosophy of Science Part A* 38(1) 210 doi: 10.1016/j.shpsa.2006.12.003

²⁴ For a summary of the socio-historical view of ‘normal science’, see Nickles, above n 21, 109.

²⁵ Each program is constituted of a succession of related but slightly different theories, methods, approaches, and techniques developed over time, which share a common core. Scientists working in each program adhere to its core and attempt to construct their approach and understanding around it. They ‘shield’ their core from falsification though protective auxiliary hypotheses to explain anomalies or unpredicted outcomes. See: Thomas Kuhn, *The Structure of Scientific Revolutions* (The University of Chicago Press, first published 1962, 2012 ed).

²⁶ In respect to the sociological nature of scientific paradigms, see variously: Paul Thagard, ‘Why Astrology is a Pseudo-Science?’ PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association 227-228; David Bloor, *Knowledge and Social Imagery* (University of Chicago Press, 1991) Ch.1; and Robert K. Merton and Piotr Sztompka, *On Social Structure and Science* (University of Chicago Press, 1996) 205-241.

space and the contents of that program may not be the same at any one time in history.²⁷

Arguably, both views continue to hold traction in contemporary scientific philosophy²⁸ and governance,²⁹ one reflecting a view of the ontological status of science, the other the descriptive epistemology of its everyday practice.³⁰ Hence, the same scientific experts who argue that all science can say is what it does not know (critical rationalism), decry approaches to problem solving which do not meet with contemporary (paradigmatic) consensus as being 'unscientific' or 'pseudo-scientific'.³¹ The inherent tensions created by this apparently contradictory logic, combined with the constantly evolving and reflexive nature of scientific knowledge and process makes defining science a fraught task. Arguably that means that where it can be avoided it will be. The ubiquitous, integrated nature of science within modern society³² permits

²⁷ Imre Lakatos, *The Methodology of Scientific Research Programmes* (Cambridge University Press, 1978) 34.

²⁸ Gunnar Andersson, *Kuhn's, Lakatos's and Feyerabend's Criticisms of Critical Rationalism* (E.J. Brill, 1994).

²⁹ Paul Thagard, 'Why Astrology is a Pseudo-Science?' in D Klemke, Robert Hollinger, A. David Kline (eds) *Introductory Readings in The Philosophy of Science* (Prometheus Books, 3rd ed, 1998) 66.

³⁰ Ontology deals with the metaphysical identification of a thing i.e. science as a discrete enterprise (this is contested by some). Epistemology deals with the study of the nature of the thing – what is 'valid' science': S H Mellone, 'Psychology, Epistemology, Ontology, Compared and Distinguished' (1894) *Mind* 3(12) 474. Although the distinction has metaphysical relevance, it is largely beyond the scope of this paper, insofar as it relates to the question of scientific demarcation and from hereon in we will refer only to the 'epistemic' questions.

³¹ For a discussion in relation to climate change see Anthony Giddens, *The politics of climate change: National responses to the challenge of global warming* (2008) Policy Network Paper <http://www.policy-network.net/uploadedFiles/Publications/Publications/The_politics_of_climate_change_Anthony_Giddens.pdf>, 6-7 (1 March 2015)

³² Science is accepted as a predominant driver of modernisation and the dominance of human beings over the natural order. Conversely science is also viewed as informing our understanding of the risks created by the natural world, but also the risks from the very modernisation that science itself is responsible for. That is, science expands our understanding of the natural and human-made world, but also the nature of risks in it, and the risks posed by the very technologies and social changes it creates. This constant 'reflexive modernisation' has, since the industrial revolution (and arguably before), served to integrate science into the very fabric of global civilisation. See: Ulrich Beck, Anthony Giddens, Scott Lash (eds), *Reflexive Modernization: Politics, Tradition and Aesthetics in the Modern Social Order* (Polity Press, 2004). Beck summarises reflexive modernisation as follows 'The more society modernizes, the more knowledge it generates concerning its foundations, structures, dynamics and conflicts. The more knowledge about itself

such an aversion as does the tendency by governing elites to treat semantic, and epistemic questions about science as being of metaphysical, rather than practical importance.

The problem is that contests over the meaning and scope of science are more than metaphysical; they in fact permeate global disputes with far ranging geo-political consequences.³³ Those entrusted with determining what is accepted or legitimate scientific knowledge influence the global understanding of the natural and man-made world, and, as a consequence, how the international community should react and restructure itself in response.³⁴ That is particularly so when states commit to legal-scientific obligations relating to shared global spaces and resources.³⁵

Science is – as the foundational Editor of this journal rightly stated – one of ‘the main guidelines for the development of societies, and therefore for the development of the law’.³⁶ What is true at the domestic level is also true at the international level. As a result of a global society, science has become increasingly integrated and ubiquitous within the international legal system.³⁷ That is, in very large part, because of the assumption that it proceeds upon a path of critical rationalism.

it possesses and the more it applies it, the more expressly is tradition-guided action replaced by a knowledge-dependent, scientifically mediated global reconstruction of social structures and institutions. Knowledge compels decisions and creates new contexts of action. Individuals are liberated from structures and they must redefine their situation of action under conditions of manufactured insecurity in forms and strategies of ‘reflected’ modernization.’ Ulrich Beck, *World at Risk* (Polity Press, 2009) 119, 120.

³³ Science plays a dominant, central role in contemporary international affairs – or to co-opt from Beck, Giddens and others, the ‘global risk society’. Society tends to view science as both the source of risks and the most appropriate mechanism to identify, understand and attenuate risks. Those who are entrusted with identifying what is legitimate science and what is not control the basic engine for social change and management. Beck et al, above n 32.

³⁴ Sheila S. Jasanoff ‘Contested Boundaries in Policy-Relevant Science’ *Social Studies of Science* May 17(2), 224 doi: 10.1177/030631287017002001.

³⁵ In a semantic sense, this means that science can be both the object of the law (i.e. the law regulates/controls science) and, conversely the law’s subject (i.e. science informs the law/legal decision making). In a wider setting it means that, like contemporary society more generally, science is interwoven into the fabric of the wider legal system, both domestically, but also in international law.

³⁶ Rodger Brown ‘Random access memories: Reflections on a Journal’ (2011) *Journal of Law, Information and Science* 21(1), 6.

³⁷ Reflexive modernization operates on all parts of society, including the law. Indeed much of the development of the modern legal system can be tied into the advancement of science and technology, see: Ilona Kickbusch ‘Health Governance:

Because critical rationalism denies that any individual or entity possesses absolute authority to declare scientific truth, science tends to be viewed as the most rational and apolitical basis for common governance. As Peel notes, the inclusion of scientific obligations within treaties over such areas imbues them with a 'legitimising force' and signals a unified commitment to good governance.³⁸ Hence, she argues that 'government delegates in a global context adhere to the 'fiction' of objective science in order to establish a common set of ground rules.'³⁹

Yet, for 'ground rules' to be law, they must do more than articulate a legal fiction, they must denote meaningful obligations that are capable of objective, prospective and consistent ascertainment and application by the states that are bound by them.⁴⁰ Where that is not the case such rules begin to lose their normative status as laws, and, as a consequence, the adherence and fidelity to them by states.⁴¹

As was noted at the outset of this part, minimal definitional guidance is found within commons treaties that invoke legal-scientific obligations.⁴² Hence, if states are to be taken at their word – that is their commitment to legal rules is to be accepted *prima facie* – then the lack of internal definitions within such treaties must be taken to imply that an objective, prospective and consistent definition is ascertainable from an external source. To date, none exist within general treaties or international agreements. Nor, perhaps surprisingly, has there been much judicial attention given to the general definition of science or scientific research for the purposes of international law. The *Whaling Case* promised to bridge that lacuna.

The Health Society' in Kickbusch, McQueen et al. (eds), *Health and Modernity: Theoretical Foundations of Health Promotion* (Springer, 2007) 148.

³⁸ Peel posits that in this context, science has a strong 'legitimizing force' that helps to ensure its continued importance. See: Jacqueline Peel, *The Precautionary Principle in Practice* (Federation Press, 2006) 109.

³⁹ Ibid.

⁴⁰ The United Nations General Assembly has consistently declared 'fair, stable and predictable legal frameworks', See: Resolution adopted by the General Assembly *Declaration of the High-level Meeting of the General Assembly on the Rule of Law at the National and International Levels*, UNGA Res A/Res/67/1, I(8) (30 November 2012).

⁴¹ Jutta Brunnée, Stephen J Toope, *Legitimacy and Legality in International Law: An Interactional Account* (Cambridge University Press, 2011) 20-31.

⁴² Above n 13. As far as we are aware, none of those multilateral treaties seek to 'define' science or scientific research *per se*; although some do place caveats on the exercise of science (the ICRW does not do this). In many respects this may be put down to both the tendency to treat science as normative, but also the more general aversion to engaging with semantic or epistemic questions amongst scientific and governance elites. These factors arguably influence the drafting process, as well as the governance process within treaty systems.

Given the non-precedential basis for international law it is, of course, important not to overstate the relevance of individual judgments – even by the ICJ⁴³ – to general international law. Nevertheless, decisions of general legal principle by the ICJ are highly influential across the international legal domain⁴⁴ and will generally be followed both by international courts, and other domestic and state legal authorities,⁴⁵ not least because of their collective commitment to legal certainty and predictability under the mantle of the rule of law.⁴⁶ What made the *Whaling Case* particularly promising in this respect is the relatively bare-bones reference to scientific research in Article VIII of the ICRW. That is, there is nothing within the text of the treaty that might be seen as qualifying the type, quality or nature of scientific research therein.⁴⁷ That meant any subsequent decision about the meaning of that term *should* have been generalizable to any treaty regime incorporating legal-scientific obligations. We say ‘should’ because the ultimate decision may not in fact be as generalizable as might have been hoped for.

⁴³ Statute of the International Court of Justice art 59. (herein “ICJ Statute”).

⁴⁴ *Factory at Chorzów (Germany v Poland)(Merits)* [1928] PCIJ (Ser A) No 17, 76.

⁴⁵ Pursuant to Article 38(1)(d) of the ICJ Statute, the ICJ does, as a matter of general principle follow its own ‘settled jurisprudence’ unless there is ‘cause not to follow the reasoning and conclusions of earlier cases’ see: *Consular Staff in Tehran Case (United States of America v Iran) (Judgment)* [1980] [33]; and *Land and Maritime Boundary between Cameroon and Nigeria Case (Cameroon v Nigeria) (Preliminary Objections) (Judgment)* [1998], [28]

⁴⁶ As Acquaviva and Pocar note ‘In addition to the values of certainty and predictability that *stare decisis* emphasizes, this doctrine will also continue to thrive in international adjudication for a different reason: the authority it grants judges to adapt the law to specific situations by elaborating precise rules in all those areas not precisely disciplined by treaty or customary law.’ in Guido Acquaviva, Fausto Pocar (ed) ‘*Stare Decisis*’ *Max Planck Encyclopedia of Public International Law* (online) < <http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1683>> (1 March 2015).

⁴⁷ This may be contrasted with World Trade Organisation dispute resolution regime as it relates to contests over risk assessments between states. For instance, article 5 of the SPS requires states assessing risks to ‘human, animal or plant[s]’ use the techniques developed by ‘relevant international organisations’ (5.1) and if a state is undertaking measures not based on ‘relevant international standards, guidelines or recommendations’ it must provide an explanation why this is the case. While this may be attributable to the development of treaty law and scientific governance since the negotiation of the two regimes, it is worth noting that commons treaties concluded after the establishment of the WTO regime provide scientific research exceptions in nearly identical terms to Article VIII (for instance in the Madrid Protocol, see: above n 13). Perhaps it is more correct to view the WTO regime as one designed to resolve conflicts about contested science whereas commons regimes are designed around cooperative scientific governance for mutual benefit.

4 The Decision of the ICJ

In March 2014, the ICJ determined in favour of Australia and New Zealand, finding that Japan's JARPA II was *not* a program for the purposes of scientific research, and could not, therefore, be said to be permitted by Article VIII of the ICRW.⁴⁸ The result was immediately lauded in the western popular press as a win for 'good science' against 'bogus science'.⁴⁹ The Australian Minister responsible for bringing the action described the result as ensuring that 'the charade of scientific whaling [will] cease once and for all'.⁵⁰ Yet, the reality was that the court's judgment was much more measured and restricted than was generally reported.

In fact, while the ICJ found JARPA II to be in contravention of the ICRW, it did not, as was claimed, vindicate, or even address the argument that Japan had misinterpreted or misappropriated the description of scientific research to mask its commercial activities. In fact, the Court found that JARPA II could 'broadly be characterised as 'scientific research''⁵¹ (quite the opposite of what was reported in the popular press). Moreover the ICJ denied that its role was to 'resolve matters of scientific or whaling policy'⁵² nor 'pass judgment on the scientific merit or importance of [Japan's] program [nor] ... decide whether the design and implementation of a programme are the best possible means of achieving its stated objectives.'⁵³ Instead the Court stated that the determination of whether scientific activities under Article VIII would be evaluated under a two-arm test as follows:

[F]irst [the court will ask], whether the programme under which these activities occur involves scientific research.

⁴⁸ Merits, see: above n 2, 71

⁴⁹ Andrew Darby 'International Court of Justice upholds Australia's bid to ban Japanese whaling in Antarctica' *Sydney Morning Herald* (online), 31 March 2014 <<http://www.smh.com.au/federal-politics/political-news/international-court-of-justice-upholds-australias-bid-to-ban-japanese-whaling-in-antarctica-20140331-35ude.html>> (2 March 2015); Martin Murphy 'Japan: Let Them Eat Whale, *The Diplomat* (online), September 25, 2014 <<http://thediplomat.com/2014/09/japan-let-them-eat-whale/>> (2 March 2015)

⁵⁰ Editorial, 'Australia wins whaling case against Japan in The Hague' *Associated Press* (online), April 1 2014 <<http://www.news.com.au/national/australia-wins-whaling-case-against-japan-in-the-hague/story-fncynjr2-1226870210553>> (1 March 2015)

⁵¹ Merits, above n 2, 41.

⁵² Merits, above n 2, 32.

⁵³ Merits, above n 2, 33.

Secondly, [the court will ask] [if the actions pursuant to that programme] is “for purposes of” scientific research by examining whether... the programme’s design and implementation are reasonable in relation to achieving its stated objectives. This standard of review is an objective one.⁵⁴

This test will be referred to hereinafter as the ‘Standard of Review’ test. Bar the reference to ‘for the purposes of’ in Article VIII of the Convention, the court did not extrapolate on the jurisprudential source or justification for its Standard of Review Test.⁵⁵

It is important to note from the outset that the test *seems* to require the identification of scientific research for the purposes of the first arm of the test, so as to establish that a program ‘involves’ scientific research and is ‘for the purposes’ of scientific research. However, the judgment provided no indicia, elements or sub-tests to establish when an activity constitutes scientific research, and when it does not. Instead the Court undertook a lengthy discussion about the contested meaning of scientific research without settling on any particular one itself. Indeed, it concludes by rejecting Australia’s argument that scientific research needs to meet four basic criteria (defined and achievable objectives; ‘appropriate methods’; peer review; and the avoidance of adverse effects) to be described as scientific.⁵⁶

As formulated by Australia, these criteria appear largely to reflect what one of the experts that it called regards as well-conceived scientific research, rather than serving as an interpretation of the term as used in the Convention. *Nor does the Court consider it necessary to devise alternative criteria or to offer a general definition of “scientific research [emphasis added].*

The Court then moved on to determining whether JARPA II was ‘for the purposes of scientific research’ under the second arm of its test. In other words it began a line of reasoning without reaching at an articulated conclusion that provided a general or treaty-specific definition of scientific research. That was notwithstanding its own recognition of the contest over the term.⁵⁷ Indeed, during the proceedings the Court only heard very limited evidence on what constituted ‘scientific research’ from

⁵⁴ Merits, above n 2, 29.

⁵⁵ As will be discussed below, the test appears to be co-opted – albeit without justification – from the World Trade Organisation dispute regime. See below 74.

⁵⁶ Merits, above n 2, 32-33.

⁵⁷ Caroline Foster ‘New Clothes for the Emperor? Consultation of Experts by the International Court of Justice’ (2014) *Journal of International Dispute Settlement*, 5 (1), 139. 10.1093/jnlids/idt015.

experts nominated by the parties to the dispute; the court refrained from calling on independent specialist experts in spite of it being empowered to do so under Article 50 of its statute.

4.1 Why was JARPA II Scientific Research?

As noted above, the Court ultimately concluded JARPA II to be a program that could be described as scientific research, albeit without propounding a definition of what scientific research was. The basis for its positive answer to this essential element of both arms of the test is not found within its lengthy discourse about the contest over the meaning of ‘scientific research’. Rather it is evident in later conclusions made significantly further in its judgment. Some 50 paragraphs after it determined not to ‘devise ... criteria or to offer a general definition of ‘scientific research’, the Court observed:

the JARPA II Research Plan describes areas of inquiry that correspond to four research objectives and presents a programme of activities that involves the systematic collection and analysis of data by scientific personnel. The research objectives come within the research categories identified by the Scientific Committee in Annexes Y and P.... Based on the information before it, the Court thus finds that *the JARPA II activities involving the lethal sampling of whales can broadly be characterized as “scientific research.”*⁵⁸ [emphasis added]

From an international legal perspective this conclusion is somewhat perplexing. It is not preceded by any legal test or reasoning. Yet the Court implicitly relied upon indicia or criteria of scientific validity to arrive at its answer. Specifically, the Court concluded that JARPA II research program (as opposed to the actual conduct subsequent to that program) could be ‘categorised’ as scientific research because it:

1. Has stated research objectives;
2. Those objectives align with the research categories in ancillary, procedural, annexes;
3. Sets out to “systematically” collect “data”;
4. Sets out to “analyse” collected data; and
5. Is conducted by scientific personnel.

The Court did not list such criteria as relevant to treaty interpretation, or scientific demarcation, earlier in its judgment. Nor did it indicate why other equally relevant scientific criteria, such as peer review, novelty, rigor, accepted methodology, and so on, were not equally relevant. Many of these

⁵⁸ Merits, above n 2, 41

latter criteria are actually included in Annex P (previously Annex Y), which the Court referred to consistently, yet they seem to have been overlooked by the Court.⁵⁹ The Court provided no explanation why the remainder (and majority) of the criteria set out in that Annex are not also relevant to its determination. Nor did it explain how it, as a non-scientific, judicial body determined JARPA II to 'come within the research categories' set out within that Annex.

In part, the Court was precluded from citing the Scientific Committee's 'approval' of the JARPA II Research Plan under the Annex, because that is not the role of the Annex or the Committee. Under the ICRW, the Scientific Committee was, upon the receipt of Japan's proposed program, only empowered to note that it 'provides the information under paragraph 30 of the Schedule'.⁶⁰

The review process set out by Annex P is *informative* not *determinative*. It is designed to inform comment, collaboration and information sharing amongst the parties, not provide a mechanism to approve or reject special permits. That is done by the state under the provisions of Article VIII.⁶¹ As noted above, the Scientific Committee does not have the capacity to comment upon the information provided; such a review process is not mentioned in Article VIII, nor do the words of that Article mandate that feedback by other parties or bodies must be taken into account. At most, the Annexes form part of the 'context' of Article VIII.⁶² Their essentially procedural nature means that they cannot be considered determinative of the legal scope and content of Article VIII. Furthermore, procedural review pursuant to those articles could not be said to form a 'subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions' according to the 1974 *Vienna Convention on the Law of Treaties* (VCLT), Article 31.3. Nor are

⁵⁹ This includes a requirement that a state provide, in advance, information about the objectives (of which the "research categories" are a subset), methods, impact assessment, modelling and collaboration/information sharing arrangements. Annex P Process for the Review of Special Permit Proposals and Research Results from Existing and Completed Permits < <https://iwc.int/private/downloads/u25vr6ymdaso0o8w404oc4go/Annex%20P%20updated.pdf>> (4 March 2015)

⁶⁰ Dissenting Opinion of Judge Yusuf, above n 2, 11.

⁶¹ Specifically it states; '*notwithstanding anything contained in this Convention any Contracting Government may grant ... a special [lethal] permit ... subject to such restrictions as to number and subject to such other conditions as the Contracting Government thinks fit ... [which] shall be exempt from the operation of this Convention*' [emphasis added].

⁶² The *Vienna Convention on the Law of Treaties* (VCLT), provides that treaties are to be interpreted in their context' (article 31.1) and that the annexes to a treaty comprise part of that 'context' (article 31.2).

those Annexes designed to establish a process of judicial review *vis a vis* the legal validity of Article VIII.

Hence in reaching its conclusion the Court was doing what the Scientific Committee cannot do under the provisions of the treaty based on the annexes; determining the veracity of Japan's claim that its Research Program met some of the criteria in Annex P. Insofar as that was the case it appears to have applied the Annex in a way not envisioned by the Convention parties. In fact the Court's selectivity of some of the criteria from the annex and not others indicates that it was undertaking an evaluative process, albeit one that is not scientifically explained or justified by the accepted rules of treaty interpretation. In sum, the Court's conclusions seem to lack jurisprudential transparency.

The same is true of the other criteria the Court relied upon. For instance, the Court did not indicate why the programme of activities pursuant to JARPA II were *actually* 'systematic', or *actually* involved scientific 'analysis of data'. It did not indicate the type of training or qualifications scientific personnel must have or even that they were to be selected from the relevant field (or how the relevant field should be determined). Yet all of these criteria require some form of value judgment that should be made transparent. This would include the assessment of whether JARPA II does, as a matter of scientific or legal fact, fall within the categories listed in Annex P. Certainly Japan *asserted* that was the case, but Australia had consistently contested the veracity of such claims. In fact, the core of Australia's argument from the outset is that JARPA II's objectives were a 'ruse' designed to obscure its *actual* objectives, namely to 'enable the continuation of [commercial] whaling'.⁶³

At the general level of principle, where a treaty contains a term that is vague or contested, then the term can be further clarified by agreement between parties to the particular treaty, e.g. in relation to the IWRC through a decision of the International Whaling Commission (IWC). Where there is disagreement between the parties, which precludes such agreement, which is clearly the case in relation to the issues in dispute in the *Whaling Case*, judicial proceedings offer a further possibility for an authoritative determination of the issue.⁶⁴ Where the Court lacks the technical competence to do this itself it may, pursuant to Article 50 of its Statute, entrust an independent panel of experts with such an advisory power. For instance it may have empowered a scientific body, independent from the conflict within the ICRW to advise it as to whether as a matter of contemporary scientific practice and principle, the JAPRA II Research Plan actually involved scientific research'.⁶⁵ Regardless of

⁶³ Memorial of Australia, above n 4, 2.

⁶⁴ Bearing in mind the essentially consensual basis of ICJ jurisdiction.

⁶⁵ This is important because, given the parties have required recourse to an external legal arbiter to resolve the legal aspect of their disputes it is unlikely a body within

the approach adopted, it is clear that a state cannot be considered free to determine the scope of its legal obligations, or contrive an outcome by constructing a definition of scientific research, which suits its aims.⁶⁶ Any subsequent interpretation by the ICJ or other judicial body, should as a matter of international legal principle, therefore conform to that requirement.

While it is accepted that arriving at a definition of scientific research grounded in international law is challenging, it would have been preferable for the Court to at least engage with the underlying problem and reach a conclusion based on application of the international law rules on treaty interpretation. Such an approach would have increased the reach and importance of this decision to general international law, but especially commons treaties. By avoiding such a definition, yet simultaneously making a determination as to whether JARPA II was 'scientific research' the Court appears to have made a scientific/technical evaluation indirectly, without transparently explaining how or why it has done this. The arbitrary choice of criteria and unqualified scientific, and technical conclusions made, provide little legal basis upon which to inform either the relevance of, or content of, the Standard of Review test outside of the facts of this one case.

4.2 The second, "reasonableness" arm of the Standard of Review Test

As noted above, the second arm of the ICJ's Standard of Review test requires that, for a state to establish its research program is 'for the purposes of' scientific research, it must show that program's 'design and implementation are reasonable in relation to achieving its stated objectives'.⁶⁷

The second arm of the test is given considerable attention elsewhere,⁶⁸ and will not be analysed in any great detail in this paper. Our position is that both

the regime is able to provide scientific advice that is, or would be seen by the parties to be independent and impartial.

⁶⁶ The UN Secretary General has summarised the shared common understanding of the rule of law by the international community as including, at least:

'a principle of governance in which all ... entities ... including the State itself, are accountable to laws that are publicly promulgated, equally enforced and independently adjudicated ... *adherence to the principles of supremacy of law, equality before the law, accountability to the law, fairness in the application of the law... legal certainty, avoidance of arbitrariness and procedural and legal transparency.*' Report of the UN Secretary-General on the Rule of Law and Transitional Justice in Conflict and Post-Conflict Societies, UN Doc S/2004/616, 23 August 2004, < <http://www.unrol.org/doc.aspx?n=2004%20report.pdf> > (1 March 2015);

⁶⁷ Above n 19.

⁶⁸ See Caroline Foster 'New Clothes for the Emperor? Consultation of Experts by the International Court of Justice' (2014) *Journal of International Dispute Settlement*, 5 (1), 139. 10.1093/jnlids/idt015

arms of the test rely on a workable definition of ‘scientific research’, or, more appropriately, an objective demarcation test to determine what is scientific and what is not for the purposes of treaty law. That said, a range of observations may be made about the lack of legal justification for, or explanation about, the selection and use of criteria relevant to this arm of the test. As with the first arm, the lack of jurisprudential transparency undermines the general applicability of the test outside of the specific facts of the *Whaling Case*, let alone the ICRW as a specific regime.

Our primary observation is that at no point did the Court explain from where it derived the sub-element of ‘objective reasonableness’ in the second arm of its test. This is somewhat confusing given those words are not used in the ICRW in Article VIII or elsewhere. Nor does the Court cite any relevant jurisprudence relating to the ICRW – nor indeed to any treaty within the larger corpus of international law – from which that term might have been extracted. Beyond that, we also observe that, like with the first arm of the test, the ICJ did not set out any criteria in advance of its reasoning. Instead such criteria can only be extracted from the conclusion it reaches by a process of inverse reasoning.

The most appropriate place to look for the Court’s application of the second arm of its Standard of Review test is in the last two paragraphs of its reasoning-proper, in which it concludes that:⁶⁹

[The] broad objectives of JARPA and JARPA II overlap considerably... [without justifying] the considerable increase in the scale of lethal sampling in the JARPA II Research Plan... sample sizes for fin and humpback whales are too small to provide the information that is necessary to pursue the JARPA II research objectives based on Japan’s own calculations, and the programme’s design appears to prevent random sampling ... the process used to determine the sample size for minke whales lacks transparency, as the experts called by each of the Parties agreed ... some evidence suggests that the programme could have been adjusted to achieve a far smaller sample size, and Japan does not explain why this was not done ... little attention was given to the possibility of using non-lethal research methods ... funding considerations, ... played a role in the programme’s design ... no humpback whales have been taken ... the take of fin whales is only a small fraction ... the actual take of minke whales has also been far lower than the annual target ... Neither JARPA II’s objectives nor its methods have been revised or adapted to take account of the actual number of whales taken... its open-ended time frame, its limited scientific output to date, and the absence of significant co-operation between JARPA II and other related research projects ... Taken as a whole, the Court considers that JARPA II involves activities that can broadly be characterized as scientific research (see paragraph 127

⁶⁹ Merits, [225] –[227], pp 64-65.

above), but that the evidence does not establish that the programme's design and implementation are reasonable in relation to achieving its stated objectives.

The following criteria might be extracted from those conclusions:

- The methodology must be applied consistently (between programs with similar objectives).
- The methodology must be capable of achieving its aims.
- The justification for the adopted methodology must be transparent in relation to its objectives.
- The methodology must be reflexive and responsive to the objectives, including any express or inherent limitation in the objectives and not be affected by considerations outside of the objectives.
- "Other factors" which indicate the method is not connected to the objects (lack of deliverables, dates, cooperation).

On the one hand, the use of such criteria may be seen to balance the Court's lack of engagement with the definition of scientific research by saying that unjustified aims are identified by inappropriate methods. On the other, the question remains as to where the criteria were selected from or how they are justified as a matter of science or international law. They seem to have been plucked from the ether in what Judge Bennouna describes as an 'impressionistic' selection of 'queries, doubts and suspicions, based on a selection of indicators from among the mass of reports and scientific studies'.⁷⁰

As with the first arm of its Standard of Review test, the ICJ does not obtain evidence from disciplinary experts nor refer to paradigmatic sources. As Judge Owada points out this results in the Court largely stepping into the shoes of peer reviewers and undertaking a 'scientific assessment' of JARPA II in relation to JARPA, 'straying into an area which lies beyond its delimited function' despite consistently asserting it would not do this.⁷¹

What is also problematic is that many of the criteria the court *did* select as relevant to the assessment of the second arm of its test were comparative in nature. That is, they required comparing the justification, numerical takes, and consistency between JARPA and JAPRPA II. Furthermore,

⁷⁰ Dissenting Opinion of Judge Bennouna, above n 2, 1.

⁷¹ Dissenting Opinion of Judge Owada, above n 2, 12.

many involved concessions on behalf of Japan, rather than actual scrutiny by the Court. Both these factors appear to further limit the judgment to its facts and provide little indication as to how an objective assessment of the second arm can be made in the absence of two substantial and long running programs to compare or voluntary concessions by one of the parties. While the judgment does indicate that there must be procedural connectivity between the methods adopted and objectives stated, questions remain. Would ticking off the procedural aspects of the methodology actually render research valid scientifically? If the scientific community does not support the research objectives, does it matter if the methods applied in respect of them are open, transparent, consistent or reflexive? These questions are not addressed by the decision.

5 *A Misappropriated Test?*

The Standard of Review test adopted by the ICJ in the *Whaling Case* is strikingly similar to that used by the Appellate Body of the *World Trade Organisation* (WTO).⁷² In fact it seems to be directly co-opted from WTO jurisprudence. But the WTO is a comprehensive regime with a great deal of specificity about scientific and technical processes. Moreover, objective reasonableness in that regime is used to evaluate two competing conclusions from a risk assessment process accepted to be valid by the Appellate Body.

The Standard of Review test applied by the WTO Appellate Body is derived from the text of the 1988 *WTO Agreement on the Application of Sanitary and Phytosanitary Measures* (SPS). SPS is a significantly different regime to the ICRW, or indeed the majority of multilateral commons treaties. Unlike those treaties, the SPS Agreement is largely prescriptive about the types of programs and procedures that states may use in pursuance of scientific obligations (or exceptions). Indeed it primarily requires that such programs be developed not by the state, but by 'relevant international organisations.'⁷³ In other words the veracity of the scientific programs' objectives, aims or design are generally not in dispute in the WTO regime, at least not where the Standard of Review test is applied.⁷⁴ Rather, that test is a judicial tool

⁷² United States Continued Suspension of Obligations in the EC-Hormones Dispute case ('EC-Hormones') WT/DS320/AB/R, WT/DS320/AB/R 16 October 2008, 246 – 247.

⁷³ SPS, Article 5.1: 'Members shall ensure that their sanitary or phytosanitary measures are based on an assessment, as appropriate to the circumstances, of the risks to human, animal or plant life or health, taking into account risk assessment techniques developed by the relevant international organizations'

⁷⁴ 'It is the WTO Member's task to perform the risk assessment. The panel's task is to review that risk assessment. Where a panel goes beyond this limited mandate and acts as a risk assessor, it would be substituting its own scientific judgement for that of the risk assessor and making a *de novo* review and, consequently, would exceed its functions..., the review power of a panel is not to determine whether the risk

employed to assist the WTO Appellate Body to determine the international legal question of which of two competing (otherwise legitimate) programs is more justifiable to the subject matter, in the circumstances of the case. That is a very different question to asking whether a single research program is valid at all.

That is not to say the test should not have been adopted. And it is not to say that we should not welcome the decision or its potential to advance international law. There is some apparent merit to the Standard of Review test adopted by the ICJ, inasmuch as it requires a greater degree of scientific rigour in state obligations. It also produces an outcome most states of the IWC hoped for, while ostensibly avoiding making value judgments about the rightness or wrongness of either Japan's or Australia's domestic policies on whaling. However, the wider reaching implications of the decision need to be carefully considered. We certainly should not refrain from asking questions about the jurisprudential justification of a decision simply because we agree (or disagree) with the outcome in that specific case. Certainly there are some questions the case has left open, possibly unnecessarily.

Most obviously it might be asked why the Standard of Review approach was adopted and whether it can be justified against the larger corpus of international law, especially the rules of treaty interpretation set out in the VCLT. One would have expected that approach to have been the basis for defining what science means in international treaty obligations. But that did not happen. Instead the ICJ adopted a test without explanation or justification. It addressed its core element (whether JARPA II was "for the purposes of scientific research") in the positive without clear legal explanation or scientific justification. It then used that core element as the basis to evaluate whether the second arm of its test was made out, based on unexplained criteria. Judge Bennouna summarized the sidestepping logic as follows:

The position adopted by the majority is thus a surprising one, since it amounts to devoting the essence of the reasoning to showing that JARPA II is not a programme 'for purposes of scientific research', while ultimately avoiding the issue of what the true aim of such a programme is.⁷⁵

assessment undertaken by a WTO Member is correct, but rather to determine whether that risk assessment is supported by coherent reasoning and respectable scientific evidence and is, in this sense, objectively justifiable.' *EC Hormones*, above n 72, 246. See also: Appellate Body Report, *Measures Affecting the Importation of Apples from New Zealand*, WT/DS367/AB/R (December 17 2010).

⁷⁵ Dissenting Opinion of Judge Bennouna, above n 2, 3. See also: Caroline E Foster, 'Motivations and Methodologies: Was Japan's Whaling Programme for Purposes of Scientific Research?' (Paper presented at the Whaling in the Antarctic: The ICJ Judgment and its Implications Symposium, Kobe University, 31 May – 1 June

It is important to remember that the ICJ is part of the international legal order and has a duty to advance the rule of law in international law.⁷⁶ The rule of law, at the very least, requires that terms agreed to are capable of being interpreted by those that are bound by them with certainty, objectively and prospectively.⁷⁷ However, the adoption and use of the Standard of Review test by the Court appears to involve the arbitrary selection of criterion, retrospective comparison between programs and unexplained reasoning. Ultimately it means that Japan has been breaching the law for at least a decade - if not double that time - before it became evident that was happening. An effective test, framed within the rule of law, should allow a country to determine, *in advance*, whether a Special Permit application is consistent with its international legal obligations. It should not take many years of activity – especially where that activity involves the lethal harvesting of wild animals – to retrospectively make such a determination.⁷⁸

5.1 Avoiding the real dispute

Given the lack of justification for the Standard of Review test, and the questions about its wider applicability, even within the ICRW regime, there is cause to question why this approach was adopted. That is especially the case as the VCLT and Statute of the ICJ arguably provide a clearer set of interpretative guidelines for the Court to follow.

As discussed above, much of the dispute and its resolution by the ICJ seem to have been premised upon a desire to avoid adjudicating on the underlying motives and purposes behind JARPA II.⁷⁹ While neither Australia nor New

2014) <http://www.edu.kobe-u.ac.jp/ilaw/en/whaling_docs/paper_Foster.pdf> (2 April 2015).

⁷⁶ See Resolutions adopted by the General Assembly on ‘The rule of law at the national and international levels’: 64/116 (2010); 66/102 (2012); A/RES/67/1 (2012).

⁷⁷ Above n 40. There is a well recognised implementation gap between commitment to the rule of law and its realisation across both domestic and international law. Nevertheless, these commitments and declarations represent a common understanding of the function of law, and subsequently what states mean, or promise to do when they enter into treaty relations.

⁷⁸ This may require the acceptance that the ICJ is to not just resolve the particular dispute between the parties, but also to further clarify international treaty obligations in a manner consistent with the objectives of the particular regime. For an insightful discussion of these alternate approaches to judicial resolution of disputes, and their theoretical underpinnings, see Timothy Stephens, *International Courts and Environmental Protection* (Cambridge University Press, 2009) 91ff.

⁷⁹ That is, Australia’s primary argument was that Japan had not just misinterpreted the law, but had used its terms as a ‘ruse’ to cover its actual intentions, contrary had intentionally done so to undermine the objects and purpose of the treaty. In other words, Australia was apparently encouraging the Court to examine not only

Zealand used the term 'bad faith',⁸⁰ Japan insisted that both their memorials amounted to such an allegation.⁸¹ The strategic basis for framing the opposing parties' arguments in such a way was apparently two-fold. Firstly, it would serve to place the onus on the claimant party to prove bad faith, to a (hitherto unmet) very high threshold.⁸² Secondly, it would engage the Court in adjudicating in a diplomatically sensitive area, which it has historically avoided doing.⁸³

Consequently, while the dissenting judges in the *Whaling Case* agreed that the Court was being asked to make a finding of bad faith,⁸⁴ the Majority was notably silent on the matter. Rather the decision is ostensibly concerned with the implementation JARPA II rather than its aims or purposes. This path was chosen, apparently, to avoid allegations the Court might be questioning Japan's motives or good faith.⁸⁵ As the discussion above has set out, that articulated process of reasoning is not particularly satisfactory, not least because of the artificiality in focusing on the implementation of a scientific program without considering the aims those implementation measures are directed to. Judge Yusuf therefore argued that:⁸⁶

the methods of JAPRA II, but also the legitimacy of its scientific approach and aims more generally. See; above n 65.

⁸⁰ *The Vienna Convention on the Law of Treaties* requires that all treaties be interpreted and adhered to in good faith. See Articles 26, 31, 46(2) 69(2)(b). See also the *Declaration on Principles of International Law Concerning Friendly Relations and Cooperation Among States in Accordance with the Charter of the United Nations*, which commits states to the 'duty to fulfil in good faith [their] obligations under international agreements valid under the generally recognized principles and rules of international law' (24 October 1980, UNGA Res 2625(XXXV), UN Doc A/8018 at 124.

⁸¹ Australia it said, sought to assert 'that stated purpose is not its true purpose . It is an assertion that Japan is acting in bad faith.' Similarly, it argued that New Zealand's argument 'in effect creates a presumption that a State granting a special permit is acting in bad faith.' See Counter-Memorial of Japan, above n 4, 414; Observations of Japan, above n 4, 24.

⁸² *Lake Lanoux Arbitration (France v. Spain) (Arbitral Award)* (1957) ILR 24, 126; *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, (Judgment) [2009] ICJ Rep 267.

⁸³ Hugh Thirlway, 'The Law and Procedure of the ICJ 1960-1989: Part Three (1991) *British Yearbook of International Law* 62 (1), 15-21, doi: 10.1093/bybil/62.1.1.

⁸⁴ And that the high threshold of proof had not been made out and/or such a finding was beyond the competence of the Court, Dissenting Opinions, above n 2 Judge Yusuf, 15, Judge Owada, 7; Judge Xue, 9.

⁸⁵ Above n 53. (check this – refers to an above n of merits)

⁸⁶ Dissenting Opinion of Judge Yusuf, above n 2, 15

[B]oth the review and the conclusions of the Judgment [appear to] entail a finding of bad faith which is not explicitly expressed, since JARPA II is considered to be in violation of the commercial whaling provisions of the ICRW.

Yet, there is cause to question whether that is actually the case and, as a consequence, whether the Court needed to avoid defining scientific research pursuant to the ordinary rules of treaty interpretation and opt for an arguably misappropriated test instead.

As discussed above, much of the whaling dispute can be reduced to definitional and epistemic uncertainty about what constitutes science and what demarcates it from other enterprises. Choosing one interpretation, which suits a state's interest when there is a multitude available, may involve self-interested opportunism – realistically that is what states do all the time – but it is not bad faith *per se*. Moreover tacit allegations of bad faith against other parties (in the case of Australia at least), or express allegations that other parties are making such claims (as was the case with Japan), should not serve to characterize the nature of the dispute or direct the court's line of reasoning in relation to it. The identification of the 'real dispute' underlying the conflict is part of the ICJ's jurisdiction, not the parties.⁸⁷ Here the real dispute arose from a fundamental disagreement about what is scientific and what is not; that is a question of scientific demarcation and a problem with much wider ranging consequences than simply the ICRW regime. It is that question to which the ICJ should have turned its attention.

6 Conclusion

While the ICJ ultimately found in favour of Australia in the *Whaling Case*, it did so in a relatively cautious way, largely avoiding some of the more fundamental questions underlying the dispute. In particular the Court sidestepped defining scientific research or science for the purposes of treaty law while implicitly applying selective scientific criteria to determine legal legitimacy. Hence, while the decision marks a move towards more rigour and rationality in the application of legal-scientific obligations, there is some cause to question just how broadly it has advanced international treaty law in this area.

⁸⁷ As the ICJ noted in the *Fisheries Jurisdiction* case "The Court will itself determine the real dispute that has been submitted to it ... It will base itself not only on the Application and final submissions, but on diplomatic exchanges, public statements and other pertinent evidence " which may, in fact indicate the dispute is the result "a question of law to be resolved in the light of the relevant facts' within the jurisdiction of the Court. *Fisheries Jurisdiction (Spain v. Canada), Jurisdiction of the Court, (Judgment)* ICJ Rep [1998], 449-451.

We acknowledge that we ourselves have not provided our own definition of scientific research or science in this paper. That was not the point. We consider that to be the role of the Court, as part of its overarching mandate to strengthen the rule of law in international law. While defining science is inherently challenging, we argue that the court should have interpreted "scientific research" in Article VIII of the Whaling Convention by application of international law rules relating to the interpretation of treaties.

While early forms of critical rationalism may have fostered a form of rule fatalism, contemporary theories of scientific demarcation are much more descriptive and pragmatic. Insofar as that is the case such theories yield a range of criteria, or indicia, which the Court might have selected from to provide a workable legal test for identifying whether a proposed activity is in accordance with a legal-scientific obligation.⁸⁸ Those criteria could have taken into account the paradigmatic nature of science, and the importance of disciplinary authority within it. In doing so the Court could have engaged scientific experts pursuant to its statute, both to identify the criteria relevant to the identification of relevant paradigmatic authority and its content. Importantly any generalisable test or criteria would have provided much needed clarification within international governance about both how to interpret legal-scientific obligations and who to consult in that interpretation.

The Court, by delivering a decision so closely limited to the facts, arguably missed the opportunity. Indeed, to the extent a general test might be extracted from the decision, that test appears to require largely retrospective evaluations made against uncertain criteria. This risks permitting states a wider range of definitional discretion about the scope of their duties than might be appropriate. That is arguably to the detriment of a range of commons treaties that mandate state legal-scientific obligations for the benefit of all humankind.

⁸⁸ Certainly this is an approach taken by domestic courts, who have needed to deal with such questions for considerably longer and in much greater detail. i.e. *Daubert v. Merrell Dow Pharmaceuticals*, 509 US 579 (1993); *R. v. Mohan* [1994] 2 S.C.R. 9.