

# WHITHER INTERNATIONAL LAW, THITHER SPACE LAW: A DISCIPLINE IN TRANSITION

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## I. INTRODUCTION

A law review essay articulating the relationship between the topics chosen for writing in the *Harvard Law Review* by law teachers and students is worthy of attention.<sup>1</sup> Apart from the extensive research done by the author of the essay and the interesting findings in it, what held my interest was a certain description of space law. Although space law as such is not included by the author as a topic, the discipline did come to her attention, since a book review on space law had appeared in the *Review*. The topic came to the essay in this manner:

The pages of the *Review* revealed other historical quirks, too . . . . In 1964, for example, Judge Posner . . . wrote a review of a book entitled *Law and Public Order in Space*, a subject that seems quaint now. I had not created a subject for “space law,” [for tabulating the scholarly interest] of course, and I was in no mood to create one . . . . After some reflection, I catalogued space as the “final frontier” of international and comparative law—but not before having a good laugh.<sup>2</sup>

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1. Sara K. Stadler, *The Bulls and Bears of Law Teaching*, 63 WASH. & LEE L. REV. 25 (2006).

2. *Id.* at 42.

While perhaps being a bit short of scorn, the passage betokens the triviality to the discipline space law.<sup>3</sup> The present article in no way aims to confront the author of the essay for this assessment; instead, it uses the triviality attributed to the discipline as a point to consider what it is in space law that provokes laughter and the feeling that is a quirk. Is it that space law is a less populated branch of law? Given the fact that the number of scholars pursuing space law exceeds that of those who pursue legal informatics or legal linguistics, such skepticism is unfounded. The scientific nature of the activities regulated by space law and therefore an orientation that could be described as “less of law and more of hard science” could also be a reason for the triviality attributed. Yet, this skepticism collapses before the reality of the coexistence and symbiosis of science and law in areas ranging from forensic methods to patent specifications. However, suspicions regarding the discipline’s status come to the fore again if one considers the relatively fewer number of space law publications in the general law reviews and journals of international law<sup>4</sup> as well as the dearth of public legal debates on international law.<sup>5</sup>

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3. Space law is mentioned again in a couple of footnotes; e.g., note 69 of the essay states:

*Law and Public Order in Space* would have been incomplete without at least a word on the topic of the problem of men from Mars, and the authors of the book did not disappoint, devoting a whole chapter to the subject. What might such men be like? The authors did not know, but they did discuss the problem of Chinese adaptation to the realities of Western power in the late nineteenth century. What?

*Id.* at n.69 (internal quotations and citations omitted).

4. Although no authoritative survey has been conducted in this area, a rough search of Westlaw and Lexis reveals that the total number of articles (notes, comments, and book reviews excluded) written on space law is relatively small. There are many international law journals not yet to publish an article on space law. The journals that used to sporadically publish research on space law are no longer doing so. Even law journals dedicated to space law come with an “air and space” section, which in most cases devotes seventy-five percent of its pages to Air/Aviation Law. See, e.g., *Annals of Air and Space Law*, *Air and Space Law*, *German Journal of Air and Space Law*. The only journal exclusively meant for space law—*Journal of Space Law* (presently published by the National Remote Sensing and Space Law Center of the University of Mississippi)—although inactive for a short period from 1995 to 2003, now serves in the discipline.

5. Although space law has been discussed in the annual meetings of the American Society of International Law as well as in the Hague Academy courses, it has not attracted much attention from new-generation scholars.

Nevertheless, space law has every bit as much academic vitality as its counterparts—or, probably, a tad more—if measured in terms of annual conferences,<sup>6</sup> summer courses organized annually,<sup>7</sup> international and regional epistemic forums,<sup>8</sup> and an annual international moot court competition.<sup>9</sup> In addition, there are a few universities that host institutes offering special space law teaching.<sup>10</sup> Apparently, there is some inconsistency: on one hand there is the relative absence of the discipline from the legal mainstream, on the other its activeness within its own ambit. The triviality of space law seems to lie far deeper than the above-mentioned speculations suggest. In fact, the situation warrants a detailed and methodical enquiry into the epistemic culture of the discipline.

The article first provides a critique of the intellectual and professional history and the prevailing epistemic culture of space law with the aid of scholarly sensibilities, a literature review, and an account of ideological and technological influences. It reveals that, while active in its own ambit, space law has been sliding away from international law—which is considered its parent discipline—and has enclosed itself within a new set of values and norms. However, the

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6. The Annual Colloquia on the Law of Outer Space organized under the auspices of the International Institute of Space Law (IISL) since 1958 are a sort of town-meeting of the space law community. More recently, the European Center for Space Law (ECSL) has started its own annual colloquia. In addition, the space law wing of the United Nations Office of Outer Space Affairs (UNOOSA) also organizes periodic thematic workshops.

7. The most noteworthy program of study in this regard is the ECSL Summer Course on Space Law and Policy, held regularly since 1992.

8. The IISL and the ECSL serve as the best examples.

9. The Judge Manfred Lachs Moot Court Competition is organized annually by the IISL alongside its annual colloquia. The competition is preceded by regional rounds for Asia-Oceania, Europe and North America and national funding rounds in certain Asian countries. For details, see [www.spacemoot.org](http://www.spacemoot.org) (last visited on Jan. 21, 2008).

10. For example, the National Remote Sensing and Space Law Center of the University of Mississippi (United States), the Institute of Air and Space Law at McGill University (Canada), the Institute of Air and Space Law at Cologne University (Germany), the Institute of Air and Space Law at the University of Lapland (Finland), and the International Institute of Air and Space Law at Leiden University (Netherlands). A comprehensive list of universities teaching space law is available at [www.unoosa.org/docs/spacelaw/eddir/eddir.doc](http://www.unoosa.org/docs/spacelaw/eddir/eddir.doc) (last visited on Jan. 21, 2008).

article does not confine itself to a critique but rather seeks to provide a broader analytical framework for understanding the normative characteristics of the field. To this end, the research derives two opposing hypotheses: 1) space law ought to be where it is and as it is and should remain separated from international law as a unique jurisprudence; and 2) although it has its own characteristics, space law is not a branch of law distinct from international law and there is an imbalance in the pattern of thinking in space law that prompts one to believe that it is separate from international law. The article introduces selected concepts and theories of epistemology to frame a debate in which the two hypotheses compete for justification. Within this setting, it examines the true nature and foundation of space law.

The article serves another purpose in that it addresses the postmodern concerns in international law centered on “fragmentation” and the “question of self-contained regimes,” topics hotly debated and discussed among various international law groups. A surprising amount of literature has evaluated the pros and cons of the fragmentation of international law and verified self-contained regimes as mere figments of the scholarly imagination. However, nearly all such studies have taken a viewpoint that focuses on the structural integrity of international law; hardly any studies have examined closely the internal agitation experienced by a special branch/fragment of international law amid the vicissitudes of postmodernity. The article fills that gap in the literature by examining the disciplinary mechanics of space law, in particular its reflexive response to postmodernity. The format adopted in the article is to balance the assumptions and beliefs of space law against those of its parent structure, international law, yielding a neutral depiction of the situation.

As a caveat, the article has some level of artificiality, in terms of methodology, pooled into it. This is seen in its discourse pattern—a critique and a debate on the critique. Even within the debate the sole argumentator changes positions and defends each side. However, the method has the advantage of taking the assertions to the extreme, predicting the worst that can happen in postmodernity and presenting the effectiveness of law’s defensive mechanism in crisis.

## II. A CRITIQUE OF THE EPISTEMIC CULTURE IN SPACE LAW

### *A. Advancing a New Discipline*

The opening of the high frontier to human exploration occurred at a time when the nations of the world lived in an atomistic culture supported by certain self-centered ideologies.<sup>11</sup> It was obvious that the benefits of the new frontier would be polarized among the superpowers at the time—the only ones who could penetrate outer space. This accretion of power in space by two contending systems led the rest to part with atomism and line up behind the superpowers, creating polarized clusters in a choice driven partly by the lesser countries' global status and partly by ideological sympathies. The superpowers felt a certain responsibility towards the countries of the world,<sup>12</sup> yet, motivated by security and economic concerns, “claimed for themselves the right in their discretion to exclude others [from certain rights and] . . . impose conditions.”<sup>13</sup> On the other side, states without any space capabilities claimed a right to be allocated space resources and to the coordination of exclusive uses, if established, by an international organization.<sup>14</sup> In general, both the haves and have-nots felt the need to have some kinds of prescriptions governing space-related activities and to safeguard their respective interests in space. All eyes optimistically turned towards the lawyers.

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11. The ideologies that supported self-centerism are not limited to realism and economic and political nationalism; the Soviet practice of communism was not anti-egoistic either.

12. Myres S. McDougal and Leon Lipson capture the probable logic behind this stance.

As the lessons of space prowess are driven home to the peoples of the earth, the Big Two may find that they must pay not less but more attention to the reactions and drives of the less powerful nations; that they must redouble their coupled assurances of the possession of strength and the resolution not to use it except under extreme provocation; that they must pursue their quest of international support in the formal and informal fora of world public opinion.

Myres S. McDougal & Leon Lipson, *Perspectives for a Law of Outer Space*, 52 AM. J. INT'L L. 407, 410 (1958).

13. *Id.* at 416.

14. *See id.*

Lawyers were somewhat confused at the unfamiliar orientation of the activities involved—more or less a feeling of inferiority. In addition, “[s]ome disposition to claim priority for the physicists [was] . . . eviden[t] in certain utterances.”<sup>15</sup> Yet, the lawyers made studious note of their anxieties<sup>16</sup> and mutually discussed the future course of action,<sup>17</sup> all the while excusing themselves from making any final prescriptions.<sup>18</sup> With the unraveling of scientific puzzles, which to certain extent disadvantaged legal work, action became inevitable on the part of the lawyers. Soviet President Khrushchev’s facetious assurance to the world that the U.S.S.R. had no intention of claiming the Moon as the sixteenth Soviet socialist republic<sup>19</sup> prompted a reaction from at least American lawyers.<sup>20</sup>

The first official U.S. legal statement pertained to three possible issue areas—sovereignty claims, the definition of outer space, and the right of self-defense against an armed attack from space.<sup>21</sup> It called for a case-by-case approach to legal controls rather than a binding

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15. Pitman B. Potter, *International Law of Outer Space*, 52 AM. J. INT’L L. 304, 305 (1958).

16. See, for example, McDougal & Lipson, *supra* note 12; Potter, *supra* note 15; John C. Hogan, *Legal Terminology for the Upper Regions of the Atmosphere and for the Space Beyond the Atmosphere*, 51 AM. J. INT’L L. 362 (1957); and Wilfred Jenks, *International Law and Activities in Space*, 15 INT’L & COMP. L. Q. 99 (1956).

17. See, e.g., Jean Rivoire, *How to Introduce the Law into Space*, 2 PROC. COLLOQ. L. OUTER SPACE 129 (1959).

18. Jenks explains the situation: “International lawyers have not been slow to explore the challenge which the new scientific and technological developments present for the law, but their collective thinking on the subject is necessarily in a tentative stage of development.” C. Wilfred Jenks, *The International Control of Outer Space*, 3 PROC. COLLOQ. L. OUTER SPACE 3, 3 (1960). Ironically, the physicists were disturbed by the developments in policy and noticed an erosion of the philosophical base of physics; they preferred to remain secluded in their sphere. For a survey of the physicists’ views on policy, see Donald A Strickland, *Physicists’ View of Space Politics*, 29 PUB. OPINION Q. 223, 227, 231-32 (1965).

19. Arnold L. Horelick, *Outer Space and Earth Bound Politics*, 13 WORLD POL. 323, 323 (1961).

20. The mood among American lawyers in the “Sputnik crisis” is well captured in Barton Beebe, *Law’s Empire and the Final Frontier: Legalizing the Future in the Early Corpus Juris Spatialis*, 108 YALE L.J. 1737 (1999).

21. O.J. Lissitzyn, *The American Position in Outer Space and Antarctica*, 53 AM. J. INT’L L. 126, 126-27 (1959).

code.<sup>22</sup> However, academia disapproved of these statements, for they were not consonant with the prevailing political situation.<sup>23</sup> In any case, both approaches had the aim of safeguarding realist interests in space.<sup>24</sup> On the other side, Soviet lawyers advocated a policy of peaceful coexistence, which was criticized by the United States as being part of an “ideological battle” to spread “proletarian internationalism.”<sup>25</sup> The concept of peaceful coexistence found its way from policy desks all the way to classrooms as indoctrination through two companion volumes on Soviet space law published in 1962—*The Cosmos and International Law* and *The Way to Space Law*.<sup>26</sup> Although couched in the vocabulary of internationalism, the nationalist interests of the Soviets in the peaceful coexistence doctrine cannot be ignored, for it sought to put humankind in pursuit of a communist world order.<sup>27</sup> In addition to their respective national

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22. *Id.* at 128.

23. Both views are captured in Lissitzyn, *supra* note 21, at 130.

24. For example, one among the claims made by the legal adviser of the Department of State, Loftus E. Becker, was complete and exclusive sovereignty over air space, which extends to 10,000 miles from the surface of the Earth. Drawing on the Antarctica analogy, he asserted that U.S. rights over outer space need no specific claim on the country's part, as its activities in outer space have created a right upon which it would be justified in asserting territorial claims. Opposing this view, Professor Lissitzyn argued that this claim is absurd since the United States has not recognized 10,000 miles as the upper limit of sovereignty, a condition for determining exclusive and complete sovereignty over the area. However, his real concern was the following: “If the Soviet Union should also make a claim of sovereignty on the basis of similar activities, where should the boundary between the two sovereignties be drawn?” For details, see Lissitzyn, *supra* note 21, at 129.

25. A critical view of the Soviet approach to space law appears in Robert D. Crane, *Soviet Attitude Toward International Space Law*, 56 AM. J. INT'L L. 685 (1962). For an issue-based approach, see Samuel Kucherov, *Legal Problems of Outer Space: USA and Soviet Viewpoints*, 2 PROC. COLLOQ. L. OUTER SPACE 64 (1959).

26. Robert D. Crane, *The Beginnings of Marxist Space Jurisprudence?*, 57 AM. J. INT'L L. 615, 618, 619 (1963).

27. With the concept of peaceful coexistence, the U.S.S.R. intended a communist form of “superstructure” and thereby a new reality that avoided any kind of opposition to its political and economic strategies and put humankind under a communist world order. This strategy was criticized for a distortion of the doctrine of historical materialism. See Crane, *Soviet Attitude*, *supra* note 25, at 715, 716. Nationalist intentions are also evident in many issue areas, for example, delimitation of outer space, where certain ideological inadequacies were pointed out by the



interests, the superpowers differed in their opinion on many issue areas, which certainly hampers the development of a body of law. Certain scholars felt that an emphasis on internationalization could eliminate the tribulations of superpower rivalry (strategic as well as ideological) and build a “comprehensive and complex outer space system” benefiting all peoples.<sup>28</sup> Their focus was a kind of institutionalism, preferably under the United Nations,<sup>29</sup> since “coordination” then was synonymous with institutions, which in turn was synonymous with the United Nations. Although the United Nations did undertake coordination activities by way of some ad hoc arrangements, its complex formalism and lack of proper institutions and procedures failed to secure the expected coordination.<sup>30</sup> There was also a lack of a real sense of duties to be performed. Hence, epistemic forums were looked to as the ideal platform at that time. Coincidentally, Andrew G. Haley, a Washington lawyer, was elected president of the International Astronautical Federation (IAF), which during his tenure established the International Institute of Space Law (IISL).<sup>31</sup> From the very start, the IISL focused its activities on studying various legal issues rather than securing intergovernmental cooperation; from its very inception, it tended to be an agora. A few initial colloquia of the IISL witnessed efforts to pump law into the vacuum. Yet, on the whole, there was rather little talk of internationalism; the social dimension of space activities was also absent, and there was even a quixotic touch to many contributions. A hard-science syndrome was evident throughout the forum, in which legal problems wrapped in scientific niceties were seen as a matter of prestige for the authors. Scientists were deities. However, the fact

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Soviet Union.

28. Klaus Knorr, *On the International Implications of Outer Space*, 12 WORLD POL. 564, 567 (1960).

29. *Id.* Nongovernmental academic and professional bodies like the IAF were also considered. See, e.g., Michel S. Smirnoff, *The Role of IAF in the Elaboration of the Norms of Future Space Law*, 2 PROC. COLLOQ. L. OUTER SPACE 147 (1959).

30. But see James Simsarian, *Outer Space Co-operation in the United Nations*, 57 AM. J. INT’L L. 854 (1963).

31. For details, see ANDREW G. HALEY, *SPACE LAW AND GOVERNMENT* 364-70 (1963). Glimpses of the preparatory work that led to the IISL are articulated in Eugene Pepin, *Proposals for the Future Work of the Permanent Legal Committee of the International Astronautical Federation*, 2 PROC. COLLOQ. L. OUTER SPACE 123, 124 (1959).

that historically the Institute was a sister undertaking of the IAF—a technical body—in all likelihood spawned a nascent legal-scientific community within the IISL. The concern that science was outstripping law, aggravated by the boastings of the scientific scholarship,<sup>32</sup> was felt seriously by the legal community, which expressed its regret that, for example, “[i]f satellites always burned up as they reentered the atmosphere and before they reached the earth, we would not have the legal problem of responsibility for damage.”<sup>33</sup> Since satellites did not always burn up during reentry, they made a call to pool legal and scientific resources.<sup>34</sup> However, the IISL could never equilibrate effectively between the two streams and that was to become the Institute’s biggest handicap (this is dealt with in due course below).

The general impression during the era was that it was the lack of political will that thwarted international cooperation in space activities. Certain quarters sensed an emerging “technological determinism” and thought that it might secure cooperation; however, it in no way could have substituted for political will.<sup>35</sup> The policymakers aimed at establishing a global satellite consortium. To this end, the International Telecommunications Satellite Organization (INTELSAT) was established as an attempt at functional integration,<sup>36</sup> for it was the conviction at that time that functional organizations could surmount the forces of politics.<sup>37</sup> INTELSAT’s organizational structure was built up and strategies were programmed for an interface between technological dynamism and political choices,<sup>38</sup> which

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32. The danger lurking in such an attitude is articulated in David Madsen, *The Scholar, the Scientist, and Society: Unifying the Intellectual Community*, 38 J. HIGHER EDUC. 96 (1967).

33. Eilene Galloway, *The Community of Law and Science*, 1 PROC. COLLOQ. L. OUTER SPACE 59, 60 (1958).

34. See *id.* at 61.

35. Walter A. McDougall, *Technocracy and Statecraft in the Space Age—Toward the History of a Saltation*, 87 AM. HIST. R. 1010, 1021 (1982).

36. *Id.* Jonathan F. Galloway, *Worldwide Corporations and International Integration: The Case of INTELSAT*, 24 INT’L ORG. 503, 515-17 (1970). For the functional integration theory, see DAVID MITRANY, *A WORKING PEACE SYSTEM* (1966).

37. McDougall, *supra* note 35.

38. For details, see Steven A. Levy, *INTELSAT: Technology, Politics and the Transformation of a Regime*, 29 INT’L ORG. 655, 658 (1975). For more on the

secured some degree of cohesion in global communications. Yet, the organization did not bring expected internationalization at the political level.<sup>39</sup> What the venture did do was inculcate a corporate culture into the space sector and create a new set of space professionals—the managers.

Amid these developments, the United Nations, which hitherto had exhibited some kind of procedural inactivity, started to respond positively to the failing cooperation in space activities. In August 1962, Manfred Lachs, then a Polish diplomat, assumed the office of Chair of the Legal Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS). He was not one of those diplomats torn between excessive enthusiasm and complex pragmatism. He was a pragmatist who, to quote Thomas Franck, “panned for nuggets of utility in the raging torrents of ideology.”<sup>40</sup> He initiated the work of the committee with an artistic elegance; with an appeal to the legal community to shed its abject feeling of inferiority, he evoked the humanness of scientists and underlined the need for a professional fraternity among the two:

[S]cientists were no longer confined to the ivory towers of their laboratories, and the effects of their work on human and international relations were becoming felt with increasing rapidity. International law should likewise not be regarded as an intellectual poor relation of science, but should be used decisively to deal with the practical effects of the discovery of a new dimension.<sup>41</sup>

Lachs’ vision was sublime, based as it was on the understanding that the world is confronted with two conflicting ends—science and society:

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technical and economic aspects of INTELSAT, see Marcellus S. Snow, *INTELSAT: An International Example*, 30 J. COMM. 147 (1980).

39. Scholars such as Levy and Jonathan F. Galloway claim that INTELSAT has achieved this goal as well. However, their arguments are not convincing in this regard, although they have demonstrated an element of cohesion in global communications.

40. Thomas M. Franck, *The Private Lachs: Life as Art*, 87 AM. J. INT’L L. 419, 419 (1993).

41. U.N. GAOR, 1st Sess., 1st mtg. at 3, U.N. Doc. A/AC.105/C.2/SR.1 (Aug. 21, 1962).

On the one hand, there was the fear lest men should become a prisoner of his own scientific and technical inventions; on the other hand, there was confidence in the progressive development of man's mastery over nature and his use of it to serve his noblest aspirations.<sup>42</sup>

Science cannot single-handedly guide humankind to achieve its goals, for it cannot effect the transition from facts to norms. Therefore, science must be subjected to philosophical scrutiny, which can comprehend societal values and effect the transition from facts to norms smoothly.<sup>43</sup> Lawyers engaged in philosophical criticism in hermitic isolation will be too thinly supplied with facts and likely to misapprehend the values. Hence, both scientists and lawyers should carry on an effective dialogue in order to synthesize facts and norms. Such a synthesis can dismantle the destructive powers of the world and draw benefit from science and technology for constructive human purposes. This vision was realized by creating a legal and a technical subcommittee that was to arrange for a dialogue between scientists and lawyers—"an imaginative and innovative effort at international legislation within the United Nations,"<sup>44</sup> which Lachs referred to as a "phenomenon."<sup>45</sup>

Simultaneously with this measure, UNCOPUOS adopted a new dialectic method of consensual decision making—a procedure previously unknown in the United Nations.<sup>46</sup> It is a multilevel negotiating structure whereby the big powers negotiate first in their capital cities. Once their common interest takes space, a "corridor negotiation" easily brings others under the umbrella—a process

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42. *Id.* at 3-4.

43. JAMES S. FULTON, *SCIENCE AND MAN'S HOPE* (1954) (emphasizing the value-barrenness of science in the absence of a philosophical outlook).

44. Nandasiri Jasentuliyana, *A Survey of Space Law as Developed by the United Nations*, in *PERSPECTIVES ON INTERNATIONAL LAW* 350 (Nandasiri Jasentuliyana ed., 1995).

45. Manfred Lachs, *Foreword*, in *MANUAL OF SPACE LAW VOL. 1*, xii (Nandasiri Jasentuliyana & Roy S.K. Lee eds., 1979).

46. Although UNCOPUOS set out the consensus procedure in 1959, it was not put into practice until 1962. For details, see Eilene Galloway, *Consensus as a Basis for International Space Cooperation*, 20 *PROC. COLLOQ. L. OUTER SPACE* 105 (1978) (discussing how the use of the consensus method proved successful in shaping legal agreements on international space cooperation).

generally dubbed “higher-level consensus.”<sup>47</sup> By the time the issue under consideration reaches the negotiation room, consensus has been secured.<sup>48</sup> In UNCOPUOS, it might have been the hope that a consensus between the superpowers could bring about unanimity among other countries.<sup>49</sup>

Yet, none of the new legislative formulas proved to be the magic potion to fetch cooperation in one gulp. In the committee’s work, what the technical subcommittee essentially recommended for carrying out space activities was congenial working conditions, authorization, resources and, above all, international cooperation.<sup>50</sup> However, in the legal subcommittee, ideology and political concerns cumbered efforts at cooperation, which to a large extent maintained the inertia in lawmaking. Not even first-level consensus could be secured, as neither of the superpowers relaxed its position. The subcommittee felt that, given the unyielding stance of the superpowers, consensus could materialize only if the subcommittee relaxed its requirements. Since internationalization of all outer space activities appeared idealistic as a yardstick, the subcommittee reduced the standards of cooperation and reset the goal as being to secure the maximum possible cooperation.<sup>51</sup>

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47. Amitai Etzioni, *The Dialectics of Supranational Unification*, 56 AM. POL. SCI. REV. 927 (1962).

48. Considering the informal nature of these negotiations, preliminary negotiations between states were neither reported nor archived. See BIN CHENG, *STUDIES IN INTERNATIONAL SPACE LAW* 165 (1997).

49. See *id.* at 148 (the superpower ascendancy to which Cheng refers relates to the UN General Assembly).

50. See Lincoln P. Bloomfield, *Outer Space and International Cooperation*, 19 INT’L ORG. 603, 612 (1965) (some of the recommendations for which the Committee gave authorization included:

- 1) further steps to facilitate exchange of information; 2) support for international programs such as the International Year of the Quiet Sun and the World Magnetic Survey; 3) increased national participation . . . ; 4) United Nations Educational, Scientific and Cultural Organization (UNESCO) fellowships to assist scientific and technical training; and 5) the establishment of sounding rocket facilities under UN sponsorship . . .).

*Id.* at 612.

51. See *id.* at 608-09.

### *B. Generality: The Hallmark*

The new approach crept into the subcommittee's strategy in such a manner that whatever regulations were to be prescribed thenceforth should be of a general nature. The approach gave ample room for nations to maneuver whenever their national pride and prestige was at risk in the consensus procedure, for generality only creates commitments of a general nature: specific obligations are difficult to identify. The "space" consequently created by generality was sufficiently broad that opposing state positions—realism and communism—came to cohabit it under the same headings.<sup>52</sup> Principles creating general obligations now started to take shape. The initial optimism was that these general obligations could be narrowed down to more specific ones—according the principles the status of "criteri[a] of the legality"<sup>53</sup> or "ground rules for the future exploration and use of outer space . . ."<sup>54</sup> In addition, the principles, although broad, were seen as generating certain shared expectations among the states and giving them certain clues to setting optimal policy goals.<sup>55</sup> The subsequent Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (Outer Space Treaty)<sup>56</sup> melded the principles together did not deviate from the general nature of those principles, for UNCOPUOS apprehended that any variation from what

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52. The first resolution spelling out a set of principles governing the activities of states in outer space, Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, was secured under the new strategy of consensual decision making. The two superpowers, which had stood antagonistic to one other until then united under the broad legal framework provided by the resolution. See Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, G.A. Res. 1962, U.N. GAOR, 18th Sess., 128th plen. mtg., U.N. Doc. A/RES/1962 (1963).

53. GENNADY ZHUKOV & YURI KOLOSOV, INTERNATIONAL SPACE LAW 40 (1984).

54. CHENG, *supra* note 48, at 153.

55. *But see* Harry H. Almond, *General Principles of Law—Their Role in the Development of the Law of Outer Space*, 57 U. COLO. L. REV. 871 (1986).

56. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 [hereinafter Outer Space Treaty].

had been secured thus far might break the thin thread binding the states together in cooperation.

The Outer Space Treaty was warmly received by the international community of states. It laid down principles such as freedom of exploration, international responsibility of states for national activities in outer space, the duty to assist astronauts in peril, exclusive peaceful use of celestial bodies, and not stationing nuclear weapons and weapons of mass destruction in outer space.<sup>57</sup> Yet, little did the states that took part in the negotiations know that the Outer Space Treaty was an opportune diplomatic code negotiated to ensure cooperation between the superpowers. Most of the principles of which states felt proud and which scholars glorified<sup>58</sup> have virtually no normative content or import. For example, in order to make sense of “peaceful use” of outer space, scholars desperately run between “non-aggressive” and “non-military.”<sup>59</sup> Freedom of exploration means hardly anything for the majority of states, for whom space is a remote reality, partial demilitarization of outer space is puzzling,<sup>60</sup> and the meaning of “international responsibility” for states is far from the real normative sense of the term.<sup>61</sup> Nevertheless, in the superpowers’

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57. See generally *id.*

58. The Outer Space Treaty has been glorified by scholars as, for example, “the foundation of the international legal order in outer space” (Jasentuliyana, *supra* note 44, at 359), “a concrete base” (I.H. Ph. Diederiks-Verschoor, *Some Observations Regarding the Treaty on Space Law*, 10 PROC. COLLOQ. L. OUTER SPACE 164, 164 (1967)), “the charter” (Eilene Galloway, *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies*, 5 ANNALS AIR AND SPACE L. 481, 481 (1980)), and “the Magna Carta for space activities” (Eilene Galloway, *Expanding Space Law into the 21st Century*, 35 PROC. COLLOQ. L. OUTER SPACE 49, 52 (1992)).

59. See, e.g., J.E.S. FAWCETT, *INTERNATIONAL LAW AND THE USES OF OUTER SPACE* 29-34 (1968); Linda Johanna Friman, *War and Peace in Outer Space: A Review of the Legality of the Weaponization of Outer Space in the Light of the Prohibition on Non-Peaceful Purposes*, 16 FINNISH Y.B. INT’L L. 285, 285 (2005) (the oscillation between non-aggressive and non-military has been presented within the framework of apologist and utopian positions in the international legal arguments as articulated by Martti Koskenniemi).

60. For instance, Damodar Wadegaonkar feels that the demilitarization clause of the Outer Space Treaty is imperfectly drafted and somewhat illogical. DAMODAR WADEGAONKAR, *THE ORBIT OF SPACE LAW* 13 (1984).

61. See S.G. Sreejith, *International Space Law: A Saga of Mankind’s Lost Aspirations—Introductory Episode*, 2 AALCO Q. BULL. 1, 6-8 (2006).

perspective, the hollowness of the same principles becomes phenomenally transformed into evocative standards of mutual conduct. For instance, freedom means “survival of the fittest”; ambiguity in the meaning of peaceful use makes it subjectively and expediently determined. Partial demilitarization is favorable for both superpowers, as they themselves are the armers and disarmers, i.e., to paraphrase Fawcett, the right hand has to devise military capabilities and the left defend against them.<sup>62</sup> Finally, control by international law and the Charter of the United Nations validates the inherent right of self-defense by the superpowers, which presupposes the possibility of an armed attack in outer space as well.<sup>63</sup>

In essence, the Outer Space Treaty is a risk-free contractual instrument of bilateral scope meant for the superpowers. A trick of international diplomacy, however, furnished it with the image of an inchoate instrument requiring development, which was vigorously pursued by the scholars in the field. They indoctrinated the novices on the elementariness and generality of the Treaty; no one had even an iota of suspicion regarding the Treaty’s two-fold image. Virtually every scholarly work on the Treaty ends with an emphasis on its generality,<sup>64</sup> an optimism for progress,<sup>65</sup> and a call for revision.<sup>66</sup>

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62. FAWCETT, *supra* note 59, at 29.

63. *But see* CARL Q. CHRISTOL, *THE MODERN INTERNATIONAL LAW OF OUTER SPACE* 35-37 (1982).

64. Jasentuliyana, *supra* note 44, at 359-61 (maintaining that the Outer Space Treaty has “broad parameters” which can serve as the foundation on which more detailed rules can be built).

65. Joanne I. Gabrynowicz voices such an optimism regarding space law in general. “[I]nternational space law has completed its first phase. Important general principles—some of them, historic—were articulated and agreed upon by a majority of nations. The next generation of space law involves agreeing on specific norms . . . [Many] questions, . . . are yet to be answered.” Joanne I. Gabrynowicz, *Space Law: Its Cold War Origins and Challenges in the Era of Globalization*, 37 SUFFOLK U. L. REV. 1041, 1047 (2004). *See also* Ivan A. Vlasic, *The Space Treaty: A Preliminary Evaluation*, 55 CAL. L. REV. 507, 519 (1967) (expressing doubt that by the Space Treaty, the “quasi-legislative role of the [UN] General Assembly . . . may have been undermined, and the authority of its future law-oriented space resolutions diminished . . . It would be most unfortunate for the cause of public order in outer space if the future shows that states have by their recent action on the Space Treaty permanently impaired the decision-making usefulness of the United Nations General Assembly.”).

66. *See, e.g.,* Ty S. Twibell, *Circumnavigating International Space Law*, 4



Only a small minority make an appeal against any tampering with the Treaty.

With the Outer Space Treaty, UNCOPUOS nevertheless accomplished the first step towards its mission of securing international cooperation in outer space. The Committee paid no heed to the repercussions in the form of generality that its course of action had wrought throughout the discipline. The space law that developed afterward in UNCOPUOS also focused on international cooperation,<sup>67</sup> regardless of the normative compromises it might have to make in securing cooperation. Further efforts to craft specific obligations, in the “cooperation compromise,” created more general and inconsequential obligations even for specific activities. For example, the Rescue Agreement<sup>68</sup> imposes an unconditional obligation to return astronauts and space objects to the launching state but lacks any specific provision for the settlement of claims.<sup>69</sup> The Liability Convention<sup>70</sup> lays down absolute and fault liability for the damage caused by space objects yet leaves the compensation concerns to be determined by the myriad principles of equity and justice.<sup>71</sup> The

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ILSA J. INT’L & COMP. L. 259 (1997). Twibell explores various ways to “vaccinate” the Outer Space Treaty, which in his view is infected with a virus. *Id.* at 274-95. His focus indicates that the virus is the “no-sovereignty” laid down by the Treaty. *Id.* at 271-72. *See also* Kendra Webb, *To Infinity and Beyond: The Adequacy of Current Space Law to Cover Torts Committed in Outer Space*, 16 TULANE J. INT’L & COMP. L. 295, 313 (2007) (the call for revision, however, applies to the entire space law).

67. For a review of the development of space law in the United Nations, *see generally* Vladimir Kopal, *United Nations and the Progressive Development of International Space Law*, 7 FINNISH Y. B. INT’L L. 1 (1996) (discussing how space law became an essential part of international law during the last half of the twentieth century).

68. Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, *opened for signature* Apr. 22, 1968, 672 U.N.T.S. 119.

69. CHENG, *supra* note 48, at 282-83.

70. Convention on International Liability for Damage Caused by Space Objects, *opened for signature* Mar. 29, 1972, 961 U.N.T.S. 187.

71. *See generally* BRUCE A. HURWITZ, STATE LIABILITY FOR OUTER SPACE ACTIVITIES (1992) (discussing the danger posed by abandoned space objects and the lack of liability assumed by the launching countries for that danger such objects pose if and when they fall to earth).

Registration Convention<sup>72</sup> is no more than a log-book system.<sup>73</sup> And, the Moon Agreement<sup>74</sup> witnessed the heights of legal speculation, as a result of which states fought a war of shadows and came out with nothing.<sup>75</sup>

Nevertheless, the Outer Space Treaty and its progeny were in effect realistic, at least giving them a role in securing superpower cooperation. The tool of generality which was used for securing cooperation, although it did not create any specific binding obligations, brought all space activities—and the associated virulent forms of nationalism and clash of ideologies—under the umbrella of international law.<sup>76</sup> In the meantime, international law had become a forum for a remarkable scholarly discourse, by Myers McDougal, which was to have a crucial bearing on space law as well, although it passed unobserved by the space law community. That discourse is presented and its impact examined by way of a putative debate with Wilfred Jenks in the next section.

### *C. Jenks Versus McDougal: A Telling Debate Overlooked*

Jenks and McDougal had their own respective visions of the future world order. Interestingly, human conquest of outer space occurred when both the scholars were in the process of devising schemes for the deployment of their respective ideas, and they found outer space to be an ideologically and normatively amorphous domain where they could try out their schemes. What else could prompt a UN official and a champion of a new stream of legal thought to muse over human interests in an inorganic domain? Whatever their motives,

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72. Convention on Registration of Objects Launched into Outer Space, *opened for signature* Jan. 14, 1975, 1023 U.N.T.S. 15.

73. For details of the Convention, including its drafting history, see Nicolas M. Matte, *The Convention on the Registration of Objects Launched into Outer Space*, 1 ANNALS OF AIR AND SPACE L. 231 (1976).

74. Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, *opened for signature* Dec. 18, 1979, 1363 U.N.T.S. 3.

75. The major dispute between the states in the negotiations regarded the exploitation and sharing of the natural resources of the Moon. *See generally* Carl Q. Christol, *The Moon Treaty Enters into Force*, 79 AM. J. INT'L L. 163 (1985).

76. *But see* Manfred Lachs, *The International Law of Outer Space*, in RECUEIL DES COURS III 41, 41-46 (1964).

they did frame schemes for outer space with grave concern, interestingly, differing significantly.

### *1. Jenks and the Common Law of Mankind*

Disappointed by the negative balance of power which characterized the world at the time, Jenks sought a “common law of mankind” which could reinstate the balance and to which all nations of the world could subscribe.<sup>77</sup> In a subsequent work, he expressed the conviction that the law of nations could be shaped into such a common law,<sup>78</sup> although an imbalance existed in the form of the law of nations. As an initial step, Jenks appeals to lawyers to build a “universality of perspectives,” embracing all the legal systems of the world, and to discover the “will of the world community,”<sup>79</sup> which would furnish the basis for a new set of norms. The fact that such norms emerge from the will of the community would be the basis of obligation in international law. Basically, to quote Richard S. Miller, “Jenks’s approach is that of the experienced international lawyer working within the framework of legal positivism to increase respect for rules of international law and thereby to encourage states which are members of the international community to submit their conduct to the application of those rules.”<sup>80</sup>

Jenks extended his general scheme of law to the law of outer space. In his address to the IISL in 1968, upon reviewing the development of space law, he pointed out a narrowness in the substantive approach of the discipline. “Space law, like air law, is not a substantive branch of the law . . . . It consists of an angle of preoccupation with a wide range of diverse problems rather than a well-defined area demarcated by the substance of the problems which it embraces.”<sup>81</sup>

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77. The seminal work in this connection is C. WILFRED JENKS, *THE COMMON LAW OF MANKIND* (1958).

78. See generally C. WILFRED JENKS, *LAW, FREEDOM, AND WELFARE* (1964).

79. Richard S. Miller, *Legal Scholarship, Realism, and the Search for Minimum World Order*, 17 *WORLD POL.* 478, 478-80 (1965).

80. *Id.* at 479.

81. C. Wilfred Jenks, *Seven Stages in the Development of Space Law*, 11 *PROC. COLLOQ. L. OUTER SPACE* 246, 262-63 (1968).

Jenks felt that such an approach was a requisite of the developmental stage of space law however, for the then ongoing phase, he emphasized the need to view the problems of space law through a wider spectrum. In other words, to paraphrase Jenks, space law had to be integrated into the development of the common law of mankind and to be situated wholly within the context of the relationship between humankind and its environment created by contemporary scientific and technological advancements.<sup>82</sup> He believed that the Outer Space Treaty and other UN Declarations on space would develop into the “common law of mankind” in the form of a World Science Treaty, which would provide “the framework for a concerted long-term effort to preserve and enlarge human freedom and human dignity in a world in which unprecedented resources of knowledge and skill create an unprecedented challenge and an unprecedented opportunity.”<sup>83</sup> However, Jenks’ positivist scheme met resistance from McDougal’s policy-oriented jurisprudence, which was embedded in the social context and viewed law as the outcome of an authoritative decision-making process.

## 2. *McDougal and Policy-Oriented Jurisprudence*

As a teacher, Myres McDougal advocated a policy-oriented legal curriculum that enabled his students to break out from the sterile world of abstract and contextless legal doctrines and sought to engage them in building a new world order.<sup>84</sup> As a scholar, he dreamt of an individual-centered world order.<sup>85</sup> Such was McDougal’s flair that whatever he posited as a scholar he sought to import to his charges as a teacher.

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82. *Id.* at 263.

83. *Id.*

84. Luther L. McDougal III, *Professor Myres S. McDougal’s Contribution to Legal Education*, 66 MISS. L.J. 27, 30 (1996). See also the tribute by Dame Rosalyn Higgins in Rosalyn Higgins, *McDougal as Teacher, Mentor, and Friend*, 108 YALE L.J. 957 (1999).

85. W. Michael Reisman, *Theory About Law: Jurisprudence for a Free Society*, 108 YALE L.J. 935, 937 (1999). Reisman emphasizes that, although centered on human beings, McDougal’s theory is not one of excessive libertarianism. Rather, its aim is to enhance the wider participation of individuals in societal decision-making. *Id.*

McDougal's theory (in addition to its conventional designation "policy-oriented jurisprudence," the theory is known as "value-oriented jurisprudence," which is more appropriate) aims at a world order based on human dignity where the individual is the nucleus.<sup>86</sup> However, in modern societies, aspirations for justice, peace, and security for individuals, who are under a sovereign nation state subject to the norms of international law, cannot be realized.<sup>87</sup> Moreover, the general failure of international law to attain universal effectiveness, which has enabled totalitarian regimes to grow, exacerbates the situation.<sup>88</sup> Human dignity becomes an illusion. "McDougal [and his associate Harold] Lasswell attempt to bypass the internal and external sovereignty [the real culprit] of nation-states by defining a 'world social process' in which individuals participate directly."<sup>89</sup> In other words, they deny any participation by a national society on behalf of its members. Such denial is incident to the attempt to build a world public order, whereby individuals and groups strive to maximize values within the limits of their capability, "individually in their own behalf and in concert with others with whom they share symbols of common identity and ways of life of varying degrees of elaboration."<sup>90</sup> In this scheme, in order to prevent the burgeoning of any totalitarian regimes, any attempts at a universal culture of shared beliefs, meanings, values, purposes, and principles are cast off.<sup>91</sup>

Human dignity—the core of the order—is said to have been achieved when values are widely shared (maximization of values) and private choice is underlined as the "predominant modality of power."<sup>92</sup> This phenomenon entails a social process. But how is the

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86. Gray L. Dorsey, *The McDougal-Lasswell Proposal to Build a World Public Order*, 82 AM. J. INT'L L. 41, 42 (1988).

87. *Id.*

88. *Id.* Universalism, say McDougal and Lasswell, "has had the effect of undercutting the authority of every doctrine put forward in the name of the whole body of nations." Myres S. McDougal & Harold D. Lasswell, *The Identification and Appraisal of Diverse Systems of Public Order*, 53 AM. J. INT'L L. 1, 2-5 (1959). As examples of totalitarian regimes, they cite Nazi and Communist regimes. *Id.*

89. Dorsey, *supra* note 86, at 42.

90. *Id.* (quoting Myres S. McDougal & Harold D. Lasswell, *The Identification and Appraisal of Diverse Systems of Public Order*, 53 AM. J. INT'L L. 1, 7 (1959)).

91. *See id.* at 43.

92. McDougal & Lasswell, *supra* note 88, at 11.

social process achieved? In other words, how are values maximized? At this point, McDougal and Lasswell call upon the scholars of international law to “disclose to as many as possible of the effective leaders, and constituencies of leaders, throughout the globe the compatibility between their aspirations and the policies that expedite peaceful co-operation on behalf of a public order of human dignity.”<sup>93</sup>

It is also up to scholars to give shape to the specific forms of institutions and processes for facilitating the maximization of values, law being one such process.<sup>94</sup> Rather than engage in abstract and dogmatic debates, scholars should “shift [their focus] to the appraisal of contemporary structures according to their positive or negative impact upon present and prospective value-shaping and sharing.”<sup>95</sup> Only then can the world order based on human dignity become a reality.

Given this scholarly scheme, what might have prompted McDougal to write *Law and Public Order in Space*—an 1100 page treatise on space law? Did the understanding conform to his world order? Or, was it a random scholarly act producing a bulky reader? According to a former student, the law of outer space seemed like an “eccentric interest of Mac’s.”<sup>96</sup> On the scholarly side, his treatise is branded as no more than a mere “handbook of analogies,” one “marred by excessive conceptualism, failure to differentiate legal from other problems, and preoccupation with the extraneous.”<sup>97</sup> However, McDougal had the conviction that outer space was yet another realm where value sharing takes place, and most effectively.<sup>98</sup> However, in

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93. *Id.* at 29.

94. According to McDougal and Lasswell, “legal process” is the making of authoritative decisions and law is the “conjunction of common expectations concerning authority with a high degree of corroboration.” See McDougal & Lasswell, *supra* note 88, at 9.

95. McDougal & Lasswell, *supra* note 88, at 29. For an application of this method, see generally Siegfried Wiessner & Andrew R. Willard, *Policy-Oriented Jurisprudence*, 4 GERMAN Y.B. INT’L L. 96 (2001) (discussing policy-oriented jurisprudence as a concept developed to provide legal professionals and others with a framework to understand and shape the law).

96. José A. Cabranes, *quoted in* YALE BULLETIN AND CALENDAR, May 1998.

97. Richard Posner, *Law and Public Order in Space*, 77 HARV. L. REV. 1370, 1373 (1964) (reviewing MYRES S. MCDUGAL ET AL., *LAW AND PUBLIC ORDER IN SPACE* (1963)).

98. See generally MYRES S. MCDUGAL ET AL., *LAW AND PUBLIC ORDER IN*

that sector, the community process—including value sharing—is imperceptible; various intellectual techniques are required to reveal it and thus to shape apposite policy goals.<sup>99</sup> In this scheme, McDougal postulates the same goal as he had for the earth arena—realization of a society based on human dignity.<sup>100</sup>

In order to build an effective public order in space—a “space commonwealth,” as McDougal and his colleagues called it—scholars should aim for optimum designs for the space age,<sup>101</sup> even if world politics (of the 1960s) constrains those efforts. As the first step, they should form a pattern of value distribution by inviting interested people from diverse regions to join in discovering and proposing policy principles and specific policies concerning space.<sup>102</sup> The second step would be to clarify value shaping and value sharing by establishing a legal order and relevant institutions. At this stage, it should be ensured that the “facilities of the legal order . . . do in fact harmonize with the requirement[s] of human dignity.”<sup>103</sup> An effective legal order exists only when its institutions have authority and control. McDougal, however, dissociates authority and control from power, in whose stead he sees individual-centrism: i.e. authority exists when it is “embedded in the expectations of the effective participants in the world community.”<sup>104</sup> Nevertheless, it cannot “be taken for granted that human expectations” are stagnant; expectations always change as society changes.<sup>105</sup> A treaty or charter, if considered as the representation of authority, will, given its inertness, trail behind the dynamism of society.<sup>106</sup> In contrast authority embedded in the participants’ expectations provides the desired balance between the

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SPACE (1963).

99. *Id.*

100. *Id.* at 1025.

101. *See id.* at 1027. While making their prescription, McDougal and his associates insert the caveat that their recommendations are highly tentative, generalized, and approximate in terms of several aspects of the overall problem.

102. *See id.* at 142.

103. *Id.* at 145.

104. *Id.* at 146.

105. *Id.*

106. *See id.*

community process and social context by enabling a less complex transformation along with individual expectations.<sup>107</sup>

### 3. *The Debate*

1) Jenks calls upon scholars to identify the common will of individuals and thereby facilitate the formation of a robust international legal framework. Space lawyers should endeavor to discover shared perspectives parallel to the identified common will for space and then integrate those into the broad international legal framework and make a larger whole. In effect, he takes a holistic approach towards space law, asserting that space law is not a self-sufficient discipline distinct from international law. However, Jenks' robust legal framework, what he calls the "common law of mankind," exists in the form of comprehensive treaties and principles, both general and particular.<sup>108</sup> This approach is contentious for McDougal (although he does not oppose there being scope for formal agreements and rules), who asserts that only particular subjects in space law need to be addressed by formal agreements. "The remainder of what a future historian will . . . be entitled to call 'The Law of Outer Space[]' . . . is conceived as the community's expectation about the ways in which authority will and should be prescribed and applied . . . ."<sup>109</sup>

2) Jenks wants to seek common will through universality; his conception of universality emphasizes the need to develop rules of universal applicability through a comparative study and synthesis of various legal systems.<sup>110</sup> McDougal, on the other hand, calls for an intellectual movement which can perform value maximization, i.e., one much akin to Jenks' comparative study.<sup>111</sup> However, in an earlier work with Lasswell, McDougal cautioned against the dangers of

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107. *See id.* at 1036.

108. Jenks' faith in the formal sources of law is highlighted in C. WILFRED JENKS, *SPACE LAW* (1966).

109. McDougal & Lipson, *supra* note 12, at 420.

110. Miller, *supra* note 79, at 481 (attempting to repudiate Jenks' "model of universality" using McDougal and Feliciano on the grounds of "normative ambiguity"). *But see* C. Wilfred Jenks, *The Need for an International Legislative Drafting Bureau*, 39 AM. J. INT'L L. 163 (1945); C. Wilfred Jenks, *Craftsmanship in International Law*, 50 AM. J. INT'L L. 32 (1956).

111. McDougal & Lasswell, *supra* note 88, at 28.



universality.<sup>112</sup> His opposition primarily regarded putting the whole world in pursuit of a single doctrine or ideology. His fear might have been a communist base for all space activities. Jenks' idea of comparative study and then maximizing universality is not objectionable vis-à-vis McDougal's scheme. But, what is objectionable for McDougal is Jenks' faith in legal doctrines and principles as a factor in decision making for the institutions that are to maximize shared values. This objection stems from McDougal's realization that those who will be making authoritative decisions for space will be the officials of the nation states making claims.<sup>113</sup> When such officials believe that particular claims bear heavily on the prominent values of their own state, they will manipulate legal doctrines and principles for the realization of preferred values;<sup>114</sup> that is, in the name of freedom of use and exploration, outer space possibly will be subject to power politics.

3) For Jenks, the will of the world community is the force urging compliance with rules and submission to international adjudication. However, McDougal eschews this traditional positivist approach of law as rules and rules as binding. First, he reduces rules to "receptacles of useful information,"<sup>115</sup> and secondly recasts law from its *rules* mold to a "delicate balance of authority and control" whereby authority "is a set of conditioned subjectivities shared by relevant members of a group" and control "refers to resources that can be employed to secure a desired pattern of behavior in others."<sup>116</sup> What secures compliance is the degree of authority (uniformity) and height of control (expectations).<sup>117</sup>

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112. *Id.* at 4-5.

113. McDougal & Lipson, *supra* note 12, at 418. For the discussion leading to this finding, see *id.* at 413-17.

114. The doctrines of international law vulnerable to such manipulation, according to McDougal, include sovereignty, domestic jurisdiction, non-intervention, independence, and equality. See McDougal & Lasswell, *supra* note 88, at 4.

115. Tom J. Farer, *International Law and Political Behavior: Toward a Conceptual Liaison*, 25 *WORLD POL.* 430, 434 (1973).

116. *Id.* at 435. Farer quotes the definitions from W. MICHAEL REISMAN, *NULLITY AND REVISION: THE REVIEW AND ENFORCEMENT OF INTERNATIONAL JUDGMENTS AND AWARDS* (1971).

117. *Id.* (drawing on McDougal & Lasswell).

Did space law scholars respond to McDougal's critique of Jenks' theory? What impact have McDougal's and Jenks' works had among space lawyers? What should space lawyers have learned from the debate?

McDougal's policy-oriented jurisprudence appeared at a time when the legislative exercise for space was torn between two conflicting academic traditions in law—the American and the Victorian traditions of law. Whereas Victorian positivists like Jenks stood for a legal order based on doctrines, rules, and equity and comprising treaties, international custom, and general principles of law, American scholars held an instrumentalist view that law is an apparatus to balance societal interests and that any further action should be directed in terms of this conception of law. It was this conflict that was thwarting any attempt to govern human activities in space, whereas the general impression was that ideological differences between the superpowers were the sole cause of the deadlock. However, space law scholars vigorously pursued the positivist strategy by regulating state conduct through treaties and rules; most of the time they ignored the societal dimension of space activities.

Filling the legal vacuum by way of a comprehensive or particular treaty<sup>118</sup> and taming the superpowers were the only goals before scholars in the discipline, and these goals resulted in disposable diplomatic instruments. McDougal, in contrast, linked law with the “unfolding pattern of effective and authoritative decisions concerning the distribution of values in [a] social system[.]” and thereby provided a social spectrum for evaluating legal relationships.<sup>119</sup> This approach would have created a normatively stronger public order for space, maintaining the common interest of all peoples. The absence of such an approach posed challenges when the societal impact of space

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118. See, e.g., Cyril E.S. Horsford, *The Need for a Moon Treaty and Clarification of the Legal Status of Space Vehicles*, 9 PROC. COLLOQ. L. OUTER SPACE 48 (1966) and Giovanni Meloni, *International Liability for Space Activity*, 10 PROC. COLLOQ. L. OUTER SPACE 185 (1967). Meloni, after analyzing numerous and complex aspects of international liability for space activities, discusses the character of a future convention on liability. *Id.* at 194.

119. Oran R. Young, *International Law and Social Science: The Contributions of Myres S. McDougal*, 66 AM. J. INT'L L. 60, 63 (1972). Young nevertheless adopted a critical stance on McDougal's scheme. For a response by McDougal, see Myres S. McDougal, *International Law and Social Science: A Mild Plea in Avoidance*, 66 AM. J. INT'L L. 77 (1972).

exploration, in its later stages, became apparent and the need to safeguard rights to the benefits from space. In reacting to the challenge, scholars inundated the forums, initially with commentaries and interpretations,<sup>120</sup> and later on painstakingly stretched the scope of the treaties to virtually every space application,<sup>121</sup> albeit with no concrete outcome. This was particularly evident in the case of the Common Heritage of Mankind (CHM) principle, where, as the conceptions of “community property, . . . community benefit, . . . and benefit[s] of the posterity” clashed with the principle of sovereignty, the principle “floundered at the altar of state sovereignty [doctrine].”<sup>122</sup> The never-ending doctrinal debate on the CHM<sup>123</sup> might have been averted had the international community’s expectations of the relevant players been effectively assessed in terms of the policies to be used to secure the expected behavior of them.

However, space law scholarship failed to perceive the significance of McDougal’s interference in what was then the generally accepted pattern of thought in international law, Jenks being its mouthpiece. Neither McDougal and his colleagues nor anyone in the New Haven School expressed further concern for space law. Space law, however, gradually moved towards unusual levels of thinking, mostly under the auspices of epistemic forums such as the IISL.

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120. See, e.g., Bozidar Bakotic, *Some Pragmatic Reflections on Article IV of the 1967 Space Treaty*, 25 PROC. COLLOQ. L. OUTER SPACE 73 (1982); P.P.C. Haanappel, *Article XI of the Moon Treaty*, 23 PROC. COLLOQ. L. OUTER SPACE 29 (1980).

121. See, e.g., H. A. Wassenbergh, *Speculation on the Law Governing Space Resources*, 5 ANNALS OF AIR AND SPACE L. 611 (1980) and Frans G. von der Dunk, *Public Space Law and Private Enterprise—The Fitness of International Space Law Instruments for Private Space Activities*, 1999 PROC. PROJECT 2001—WORKSHOP ON LEGAL ISSUES OF PRIVATISING SPACE ACTIVITIES 12 (2001).

122. V.S. Mani, *The Common Heritage of Mankind: Implications for the Legal Status of Property Rights on the Moon and Celestial Bodies*, 39 PROC. COLLOQ. L. OUTER SPACE 31, 31, 33 (1996).

123. See Jennifer Frakes, *The Common Heritage of Mankind Principle and the Deep Seabed, Outer Space, and Antarctica: Will Developed and Developing Nations Reach a Compromise?*, 21 WIS. INT’L L.J. 409 (2003).

#### *D. Space Law in the IISL*

By the time the Permanent Committee on Space Law of the IAF became the IISL in 1960, the pioneers had sketched a syllabus for future scholars, e.g., dividing zones of space and determining extraterrestrial jurisdiction,<sup>124</sup> crafting of an agreement,<sup>125</sup> advocating the peaceful uses of outer space,<sup>126</sup> and providing doctrinal clarifications.<sup>127</sup> However, those who followed them, irrespective of the topic they discussed, sought to situate all the items in the syllabus in a comprehensive or particular treaty<sup>128</sup> and in an agency for enforcement with universalistic ideals.<sup>129</sup> The accelerating pace of technological growth and the emergence of new applications were to stir scholarly ingenuity. Scholars plunged into the technological dynamism in order to address the challenge; establishing an equilibrium between science and law appeared to be the tool of choice.

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124. See, e.g., John C. Cooper, *The Problem of Definition of 'Air Space'* 1 PROC. COLLOQ. L. OUTER SPACE 38 (1958); Henri T.P. Binet, *Toward Solving the Space Sovereignty Problem*, 2 PROC. COLLOQ. L. OUTER SPACE 11 (1959); Andrew G. Haley, *Survey of Legal Opinion on Extraterrestrial Jurisdiction*, 3 PROC. COLLOQ. L. OUTER SPACE 37 (1960).

125. Jean Rivoire, *Design for a Law of Space*, 1 PROC. COLLOQ. L. OUTER SPACE 97 (1958); Escobar Faria, *Draft to an International Covenant for Outer Space—The Treaty of Antarctica as a Prototype*, 3 PROC. COLLOQ. L. OUTER SPACE 122 (1960).

126. Such advocacy had the intention of safeguarding the rights of peoples of all nations to the beneficial results of exploring outer space. See Eilene Galloway, *World Security and the Peaceful Uses of Outer Space*, 3 PROC. COLLOQ. L. OUTER SPACE 93, 93-101 (1960).

127. The most seriously discussed doctrine was “national sovereignty.” See Spencer Beresford, *The Future of National Sovereignty*, 2 PROC. COLLOQ. L. OUTER SPACE 4 (1959). However, the principle of “state responsibility” also surfaced. For example, see I.H. Ph. de Rode-Verschoor, *The Responsibility of States for the Damage Caused by Launched Space-Bodies*, 1 PROC. COLLOQ. L. OUTER SPACE 103 (1958).

128. See, e.g., Horsford, *supra* note 118; Meloni, *supra* note 118.

129. Teofilo Tabanera, *Some Suggestions Concerning an Organization for Outer Space*, 11 PROC. COLLOQ. L. OUTER SPACE 207, 208 (1968). Such an organization, says Tabanera, “must be founded on a fundamental basis; the concept of the universality of space law and everything in it included, be it natural or artificial, and which has been put to the service of mankind.” *Id.* at 208.

*1. Science and Law: A Failed Equation*

The idea of a legal-scientific community was first proposed in the IISL by Eilene Galloway.<sup>130</sup> In her view, the aim of such a community should be “the evaluation of scientific and technological facts which affect the formulation of law.”<sup>131</sup> Afterwards, ironically, she drew a boundary line between the professionals of both realms. “It is part of the training of lawyers to evaluate the significance of facts which make up the social fabric, but it is not usually a part of the scientists’ training to consider the relationship of legal codes to science.”<sup>132</sup>

The call was repeated by two science-savvy lawyers in the aftermath of the Outer Space Treaty—Harvey Shiffer and Pieter Snyders—that a team of “juridical engineers” was needed for the effective enforcement of the space treaties.<sup>133</sup> However, they tipped the scales in favor of scientists, for lawyers and legislators were inexperienced in legislating space and “[i]t is only the scientist who is trained to understand Space and its environment . . . .”<sup>134</sup> Shiffer and Snyders are categorical in this regard:

Legislators must understand that they cannot formulate an effective SPACE LAW for an environment that they do not understand [sic]. No lawyer, no member of the Legal Community, and no so-called political scientist is competent, without the aid of Space scientists and engineers, to fit man’s exploration and exploitation of Space into terrestrial inventory or law.<sup>135</sup>

They then advise lawyers to “avoid burdening Space with the lengthy legal terminology of manifestly outdated earth law with its complicated systems and customs. They should cease ‘ex post facto’

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130. Eilene Galloway, *supra* note 33, at 59.

131. *Id.* at 61.

132. *Id.*

133. Harvey Shiffer & Pieter Snyders, *The Need for Enforcement for International Space Treaties*, 10 PROC. COLLOQ. L. OUTER SPACE 237, 239 (1967).

134. *Id.*

135. *Id.*

attempts to devise restraints in accepting progress and Space technological achievements already in man's inventory."<sup>136</sup>

Hence, there should be a team effort by scientists and lawyers. However, Shiffer's and Snyders' views appear extremely parochial. Placing laws within the scientific understanding and usability is one thing and suggesting that the legislator receive tuition on lawmaking from the scientist is quite another. Shiffer and Snyders were presumptuous in their contentions and failed to offer a method to bridge the divide between the scientist and the lawyer and build a scientific-legal community. In fact, such views tend to generate friction among the two communities.

George S. Robinson, in an insightful contribution which he read at the Sixteenth Colloquium on the Law of Outer Space, places sentiments such as Shiffer's and Snyders' in the framework of "anti-intellectualism in the . . . basic science[.]"<sup>137</sup> However, he reminds us that "[t]he undisciplined disaffection also is with technology[,]" where the discontented are sufficiently astute to recognize the distinction between the two [disciplines]."<sup>138</sup> For Robinson, these oppositions are false. "There is only one legitimate distinguishing factor between the so-called natural sciences and social sciences."<sup>139</sup> That distinguishing factor is methodology, in which the natural sciences study matter, and the social sciences (e.g., law) study behavior patterns.<sup>140</sup> What is, in fact, required is that science and law should get nearer in terms of methodology, without any parochial considerations entering the scheme.<sup>141</sup>

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136. *Id.*

137. George S. Robinson, *Scientific Renaissance of Legal Theory: The Manned Orbiting Space Station as a Contemporary Workshop*, 16 PROC. COLLOQ. L. OUTER SPACE 223, 225 (1973).

138. *Id.*

139. *Id.*

140. *Id.* To be more specific, science "aim[s] to understand, predict, modify, and control aspects of the natural and manufactured world, while law seeks current truth about scientific and other facts of cases in order to serve the much different goal of justice between parties (as well as other societal goals)." SCIENCE, TECHNOLOGY, AND LAW PANEL, A CONVERGENCE OF SCIENCE AND LAW: A SUMMARY REPORT OF THE FIRST MEETING OF THE SCIENCE, TECHNOLOGY, AND LAW PANEL 1-2 (2001).

141. Robinson, *supra* note 137, at 225.

One idea inferable from Robinson's account is that the coexistence of science and law does not mean that scientists and lawyers need to speak a common language; rather, there is a missing element—what Steven Yearley calls “the dark matter”<sup>142</sup>—from the scholars' account of their respective disciplines. Robinson, like Yearley, does not seem to be suggesting that scientists and lawyers should hand over the dark matter to the other side; he calls for a concerted effort to develop realistic philosophical templates within which scientific research can be conducted with a definite focus.<sup>143</sup> In sum, Robinson advocates a mental posture in which “anthropocentrically oriented values can change to accommodate unique models of value formation dictated by vast changes in . . . scientific knowledge.”<sup>144</sup>

However, no scholar seems to have espoused Robinson's idea. Papers on the coexistence of science and law appeared sporadically thereafter in the colloquia. In the 1985 Stockholm Colloquium, George P. Sloup, in his “immodest proposal,” suggested that lawyers pack their bags to go into outer space as participants on long space flights<sup>145</sup> “because they would acquire a much better understanding of the conditions spacefarers will experience on long-duration flights.”<sup>146</sup> If this is not possible, they should, at the minimum, take part in space-flight-oriented training in similar environments at polar bases. Sloup wanted to take this proposal to the following year's session entitled “Space Law Teaching,”<sup>147</sup> but this did not happen. In any event, Sloup's “hollow pragmatism” was miles away from the realization of a science-law balance.

Although technical as well as legal issues were addressed in relation to many space activities and applications, none of the attempts involved balancing technical and legal issues under a proper science-

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142. STEVEN YEARLEY, *MAKING SENSE OF SCIENCE: UNDERSTANDING THE SOCIAL STUDY OF SCIENCE* vii (2005) (positing that sociologists' accounting of contemporary society misses “masses” or “dark matter” relating to how society incorporates the language of science into its common lexicon).

143. Robinson, *supra* note 137, at 225.

144. *Id.* at 225-26.

145. George Paul Sloup, *The Training of Astrolawyers: An Immodest Proposal*, 28 *PROC. COLLOQ. L. OUTER SPACE* 235, 235 (1985).

146. *Id.*

147. *Id.* at 238.

law framework (such as the one suggested by Robinson). Scholars and scientists were very often seen to be swapping expertise that most of the time fell short of the scholarly standards which they generally maintained in their respective fields.<sup>148</sup> At a certain point the science-law equation lost its significance.

## 2. *Pink Clouds*

The awe and excitement generated by the human conquest of space was such that, from the very beginning of the IISL, scholars began to envisage legal issues and proceeded to grapple with them. To a certain extent, this action stemmed from a feeling of inferiority before the scientists, who were recording one feat after another in space; the failing science-law equation added fuel to the fire. However, rather than being futuristic, most of the scholarly conceptions turned out to be quixotic, a situation which Haley characterized as a “pink cloud” in the imagination of lawyers.<sup>149</sup> Ironically, it was Haley himself who sparked a chain of quixotic thoughts by postulating his concept of meta-law—“do unto others as they would have done unto them”—in relation to aliens.<sup>150</sup> Indeed, Shirley Thomas gave serious consideration to Haley’s xenological ideas.<sup>151</sup>

Can a legal union of a human being and an intelligent being from another planet be performed? Such a question never before has arisen, and considering the magnitude of it, immediate serious

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148. This trend was evident even outside the IISL.

149. Andrew G. Haley, *Space Age Presents Immediate Legal Problems*, 1 PROC. COLLOQ. L. OUTER SPACE 5, 18 (1958).

150. In *Space Law and Government* and also in some of his subsequent works, Haley highlighted the concept of meta-law, which refers to the study and development of a system of laws that can be applied in all human relationships with aliens. See HALEY, *supra* note 31, at 395.

151. Not only Thomas, but also McDougal, were apprehensive that the human dignity of the aliens might be neglected. See generally MCDUGAL ET AL, *supra* note 98, at 974-1021 (discussing the implications of the possible interaction between humans and non-earth life forms under the rubric of “astropolitics”).



thought should be given—especially in light of the fact that miscegenation is still forbidden in some areas.<sup>152</sup>

There were even more formidable issues.

What other legal problems would the marriage of a human being with a being from another planet present? If it were biologically possible for this mating to produce an issue, what would be the legal standing and moral rights of the issue, if the family were to remain on earth?<sup>153</sup>

Alien-related legal issues were seen even three decades later. Two space law attorneys foresaw that aliens would be “beings ‘with their own understanding of a kind of rules of behaviour.’”<sup>154</sup> Hence space lawyers should await their arrival with a ready-made code of conduct fashioned after Haley’s meta-law model.<sup>155</sup> However, there is a considerable dilemma here: what if the aliens “were to desire us to act in a manner toward them which would be repugnant to our moral code or sensibilities, scientific or otherwise[?]”<sup>156</sup> In that case, the Outer Space Treaty must broaden its horizons so as to provide a balance between the views of human beings and aliens.<sup>157</sup> Martine Rothblatt, Chairman and CEO of United Therapeutics Corporation, felt that in the absence of “informed consent,” it is perilous to establish contact with aliens.<sup>158</sup> Such an absence of consent could be the reason why other galactic intelligences are constantly avoiding

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152. Shirley Thomas, *A Reexamination of the Approach to Space Law*, 10 PROC. COLLOQ. L. OUTER SPACE 337 (1969).

153. *Id.*

154. Patricia M. Sterns & Leslie I. Tennen, *Exobiology and the Outer Space Treaty: From Planetary Protection to the Search for Extraterrestrial Life*, 40 PROC. COLLOQ. L. OUTER SPACE 141, 148 (1997) (quoting Ernst Fasan, *Legal Consequences of SETI Detection*, IAF Paper No. IAA-95-IAA.9.2.04 (1995)).

155. *Id.* See also M. de las Mercedes Esquivel de Cocca, *SETI Draft Second Protocol*, 37 PROC. COLLOQ. L. OUTER SPACE 233 (1994).

156. Sterns & Tennen, *supra* note 154, at 148.

157. *Id.* at 149.

158. Martine Rothblatt, *Exobioethics—Legal Principles for Interaction with Non-Terran Species*, 42 PROC. COLLOQ. L. OUTER SPACE 358, 359 (1999) (“any bother imposed on the life form should only be with its informed consent.”).

contacting us.<sup>159</sup> Rothblatt, however, considers her observations only a facet of space exploration.<sup>160</sup>

Pink clouds were not limited to the aliens issue; they appeared in the form of behavioral standards for “spacekind,” which included humans, robots, and other “thinking machines,”<sup>161</sup> space cemeteries,<sup>162</sup> town-planning regulations and a legal order for space colonies (UNCOPUOS also has a role in this regard),<sup>163</sup> and problems of citizenship for space inhabitants.<sup>164</sup>

### 3. “Other Regime” Analogies

Space law, as it is generally understood, has three parallels—air law, the law of the sea, and the Antarctic Treaty. The major similarity between these branches of law is that all regulate areas which have somewhat anomalous physical features. In the IISL, the idea of learning from “other regimes” was first shown by Escobar Faria in the Third Colloquium in 1960 by way of the Antarctic Treaty as a prototype for a future covenant for outer space.<sup>165</sup> The reason why Faria considered the Antarctic Treaty as model is that the Antarctic, like outer space, is a *res communes omnium*; the approach was considered to be effective, as it provided “a large decrease of power” of any state in Antarctica.<sup>166</sup> This principle was pursued to a large

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159. *Id.* at 360.

160. *Id.* at 359.

161. George S. Robinson, *Homo Spatialis: A Space Law Dilemma*, 22 PROC. COLLOQ. L. OUTER SPACE 195, 199 (1979) (quoting Yu. A. Petrov, *Habitability of Spacecraft*, in III FOUNDATIONS OF SPACE BIOLOGY AND MEDICINE 157 (M. Calvin & O.G. Gzenko eds., 1975)).

162. Mahulena Hofmann, *Space Cemeteries: A Challenge for the Legal Regime of Outer Space*, 43 PROC. COLLOQ. L. OUTER SPACE 380 (2000).

163. John R. Tamm, *Outer Space Colonization: A Planned Unit Development*, 22 PROC. COLLOQ. L. OUTER SPACE 217, 218 (1979). In describing space colonies, Tamm remarks, “[m]edical assistance must be on hand, but should a ready made security force, a complete legal system with established laws, courts, judges and others learned in the law be provided?” *Id.* at 218. If the colony happens to be international, Tamm considers it illogical to invoke UNCOPUOS. *Id.*

164. Patricia M. Sterns & Leslie Tennen, *The Art of Living in Space: A Preliminary Study*, 21 PROC. COLLOQ. L. OUTER SPACE 245, 253, 254 (1978).

165. Faria, *supra* note 125.

166. *Id.* at 124.

extent in the initial space law negotiations. Nearly three decades later, in 1988, Jiri Malenovsky noted that although the Antarctic is geographically identical to outer space in terms of accessibility and natural resources, there are historical, political, doctrinal, and legal similarities as well which are wholly applicable in the further development of space law.<sup>167</sup> However, by then, with five space treaties in hand, the Antarctic analogy had lost its charm; it was eclipsed by the law of the sea analogy.

In the 1960s and 1970s, the law of the sea was of interest to the space lawyers if for no other reason than the geographical similarities between outer space and the high seas including the seabed. However, with the successful conclusion of the United Nations Convention on the Law of the Sea (UNCLOS) in 1982, space lawyers paid more serious attention to the sea-space analogy. Gyula Gal emphasized the new logic of analogies in the special session *Comparison between Sea and Space in the Exploration and Exploitation Activities* of the Twenty Eighth Colloquium in 1985.

The analogy between social phenomena as objects of legal regulation may support not only application of law, but lawmaking too. Here analogous phenomena may serve as models, may promote understanding of correlation to existing ones of new objects of legislation, and consequently the setting-up of a suitable system of norms.<sup>168</sup>

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167. Jiri Malenovsky, *The Antarctica Treaty System—A Suitable Model for the Further Development of Space Law*, 31 PROC. COLLOQ. L. OUTER SPACE 312, 313 (1988). Malenovsky explains each similarity. Historically, “[b]oth Antarctica and outer space [were] . . . subjects of intense interest to the international community in the course of the International Geophysical Year . . . .” Politically, both the Antarctica Treaty and treaties on outer space were negotiated under the shadow of the Cold War; they constituted “confidence builders for East-West relations.” In legal terms, identical schemes were used in the formulation of the Antarctica Treaty and the Outer Space Treaty: both were first basic and general instruments that were later to be developed into specific and concretized conventions. Doctrinally, both regimes have identical governing principles, such as freedom of exploration. Most of the ideas expressed by Malenovsky are drawn from Chuck Stovitz & Tracy Loomis, *Space Law: Lessons from the Antarctic*, 28 PROC. COLLOQ. L. OUTER SPACE 165 (1985).

168. Gyula Gal, *Territorial Sea and Airspace—Passages to Free Spaces?*, 28 PROC. COLLOQ. L. OUTER SPACE 134, 134 (1985).

However, the drawbacks of analogies were also brought to light. According to Harry H. Almond, mere similarities between social phenomena do not constitute a valid ground for analogies.<sup>169</sup> From a strategic perspective, space activities are different from activities on the high seas, and so are policy goals. Principles with policy content embody the “rule-making” process, which is, in fact, a compromise between the claims and counterclaims made by states while creating rules and standards.<sup>170</sup> Although certain activities might fortuitously share common policy goals as a result of which principles correlate, this is not the general case.<sup>171</sup> Similar objections were raised by many commentators in the colloquia.<sup>172</sup>

Despite the relatively large number of papers read in the colloquia on the space-sea analogy, most of the authors were skeptical about a complete reliance on it. After the 1994 amendments to UNCLOS, which yielded new commercial policies for the mining and exploration of sea-bed resources, the space-sea analogy fell into oblivion.

Among all the branches of law, it was air law from which analogies were drawn most; air law has thus influenced space law to a large extent, although this is less apparent in the IISL.<sup>173</sup> In the first instance, space lawyers attempted to distinguish space law from air law, which was by then a definite branch of law governing aviation. They apprehended a conflict of interests between the 1944 Chicago Convention on International Civil Aviation, which had long accepted the fact that “every state has complete and exclusive sovereignty over the airspace above its territory”<sup>174</sup> with the nature of space

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169. Harry H. Almond, *General Principles of Law: An Appraisal of the Correspondence of Principles Relating to the High Seas to Outer Space*, 28 PROC. COLLOQ. L. OUTER SPACE 118 (1985).

170. *Id.* at 119.

171. Almond’s exposition has a “policy-oriented jurisprudence” touch, although he does not reject the value of analogies altogether. *See generally id.*

172. *See, e.g.,* Andrzej Gorbiel, *Question of Analogies Between Sea and Space International Law*, 28 PROC. COLLOQ. L. OUTER SPACE 142 (1985); T.E. Wolcott, *Environmental and Historical Differences Render Sea Law of Little Guidance to Development of Space Law*, 28 PROC. COLLOQ. L. OUTER SPACE 172 (1985).

173. It is paradoxical that air law’s influence was seen in the academic world more than in the IISL. Also see the section on “Teaching and Students.”

174. Convention on International Civil Aviation, art. 1, Dec. 7, 1944, 61 Stat. 1180, 15 U.N.T.S. 295.

activities.<sup>175</sup> On the whole, sovereignty concerns gave air law the image of a rival in the first few colloquia.<sup>176</sup> However, air law became a subject for analogizing when the potential for space flight became apparent, although sovereignty concerns persisted.<sup>177</sup> Scholars began to draw analogies from air law on issues such as registration of craft, rescue and return of personnel,<sup>178</sup> liability, traffic control, and so forth.<sup>179</sup> In more recent colloquia, air law analogies have been cited mostly in connection with the formulation of law and policies for aerospace vehicles and the pre-flight requirements of space tourists.

In sum, the general trend in the IISL in connection with the “other regime” analogies must be termed “situational adjustments” or characterized as “temporary charm.” The analogies served to a certain extent in offering common ground in some areas and were used at various levels of abstraction, e.g., principles, strategies, and applications. From the perspective of the IISL, the constructive side of analogizing was that it helped dispel scholarly skepticism regarding the negative effects of overlapping legal regimes.

#### 4. Commercialization: From Rules to Strategies

Commercial concerns entered the IISL, for the most part, in the aftermath of the Cold War. A realization that “commercialization” is

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175. For similar concerns, see Cooper, *supra* note 124, at 38; Michael Smirnov, *The Need for a New System of Norms for Space Law and the Danger of Conflict with the Terms of the Chicago Convention*, 1 PROC. COLLOQ. L. OUTER SPACE 105 (1958).

176. See, e.g., Julian G. Verplaetse, *Conflicts of Air- and Outer Space Law*, 3 PROC. COLLOQ. L. OUTER SPACE 145 (1960).

177. In this connection, see V.D. Bordunov, *Space Shuttle Flights and Correlation of Legal Regimes of Air Space and Outer Space*, 25 PROC. COLLOQ. L. OUTER SPACE 211 (1982). Technical aspects are presented in Gyula Gal, *The Space Shuttle Between Air and Space Law*, 24 PROC. COLLOQ. L. OUTER SPACE 103 (1981). See also George P. Sloup, *The Relationship of Air Law and Space Law: A View from the Space Shuttle, Including Its Internal and External Environments*, 19 PROC. COLLOQ. L. OUTER SPACE 202 (1976).

178. I.H. Ph. Diederiks-Verschoor, *Search and Rescue in Space Law*, 19 PROC. COLLOQ. L. OUTER SPACE 152 (1976).

179. For a general discussion on the areas of correlation between the two branches of law, see Martin Menter, *Relationship of Air and Space Law*, 19 PROC. COLLOQ. L. OUTER SPACE 164 (1976).

*inter alia* privatization<sup>180</sup> made scholars extend the scope of the existing state-centric space treaties to deal with various facets of commercialization and the resulting private participation in space activities.<sup>181</sup> This appraisal was followed by attempts to redefine concepts and principles.<sup>182</sup> As the full potential of space applications such as telecommunications, satellite remote sensing, satellite navigation, and space travel became known, scholars flooded the forum with ideas on business-related rights, e.g., intellectual property rights,<sup>183</sup> and claims relating to insurance,<sup>184</sup> fair business practices,<sup>185</sup> and societal benefits arising out of space applications.<sup>186</sup> Most often

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180. Georgy Silvestrov, *The Notion of Space Commercialization*, 33 PROC. COLLOQ. L. OUTER SPACE 88 (1990) (defining commercialization and presents its character, subjects, and scope).

181. Karl-Heinz Bocksteigel, *Reconsideration of the Legal Framework for Commercial Space Activities*, 33 PROC. COLLOQ. L. OUTER SPACE 3 (1990). A thorough review of the 1967 Outer Space Treaty and its scope in dealing with commercialization was conducted in the Fortieth Colloquium in 1997, the year marking the thirtieth anniversary of the Treaty.

182. Terms such as “launching state,” “space objects,” “astronauts,” and “debris” and principles such as state responsibility and liability and Common Heritage of Mankind were discussed. See Karl-Heinz Bocksteigel, *The Terms ‘Appropriate State,’ and ‘Launching State’ in the Space Treaties—Indicators of State Responsibility and Liability for State and Private Activities*, 34 PROC. COLLOQ. L. OUTER SPACE 13 (1991); Vladimir Kopal, *Issues Involved in Defining Outer Space, Space Object, and Space Debris*, 34 PROC. COLLOQ. L. OUTER SPACE 38 (1991); He Qizhi, *Review of Definitional Issues in Space Law in the Light of Development of Space Activities*, 34 PROC. COLLOQ. L. OUTER SPACE 32 (1991).

183. Bradford L. Smith, *An Industry Perspective on Space-Related IPR*, 38 PROC. COLLOQ. L. OUTER SPACE 15 (1995); Carl Q. Christol, *Persistence Pays Off: The Case of Hughes Aircraft Company v. USA, 1976-1999*, 42 PROC. COLLOQ. L. OUTER SPACE 199 (1999).

184. For instance, see David E. Reibel, *Space Insurance and the Legal Aspects of Allocating Risk and Liability among States and Private Entities*, 36 PROC. COLLOQ. L. OUTER SPACE 211 (1993). A national perspective on the issue is given in Hiroshi Yoshida, *Accidents of Space Activities and Insurance*, 36 PROC. COLLOQ. L. OUTER SPACE 221 (1993).

185. Bradford L. Smith, *Towards a Code of Conduct for the Exercise of Intellectual Property Rights (IPR) in Space Activities: Moderation of the Monopoly?*, 39 PROC. COLLOQ. L. OUTER SPACE 176 (1996).

186. Paul B. Larsen, *Use of Global Navigation Satellite System (GNSS) Evidence for Land Surveys: Legal Acceptability*, 38 PROC. COLLOQ. L. OUTER SPACE 285 (1995); Gabriella C. Sgrosso, *Sharing of Remote Sensing Data Concerning Environmental Protection for Public Interest*, 39 PROC. COLLOQ. L.

the potential regulatory framework was also provided. One common feature evident in those frameworks was the substantial shift in approach from rules towards strategic arrangements<sup>187</sup> involving participation by a multitude of non-state actors. This shift towards strategies was seen as the imposition of a new world order. Patrick A. Salin sensed such a shift.

It has become trivial to say that we are at the doorstep of a new society, a new era, etc. . . . It is early to typify the developments we see in our everyday lives and we may need to be more deeply involved in this new era to clearly take notice of the features of that evolution.<sup>188</sup>

In addition, there was the optimism that a new legal regime was likely to appear in the near future and that until then some sort of space legislation might evolve, mostly in the form of national space legislation and soft law instruments,<sup>189</sup> yet within the general framework of public international law.

### 5. Summary

The IISL has been successful in fulfilling the purposes and objectives set out in its statutes. However, what is of interest here is its epistemic culture and in particular what the ethos of the body is.<sup>190</sup>

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OUTER SPACE 94 (1996).

187. See, e.g., Michel Bourbonniere & Louis Haeck, *Space Imaging: Data Policy and Regulatory Structures*, 42 PROC. COLLOQ. L. OUTER SPACE 278 (1999); Stephan Hobe & Jana K. Hettling, *Challenges to Space Law in the 21st Century—Project 2001 Plus*, 45 PROC. COLLOQ. L. OUTER SPACE 51 (2002); Bertrand de Montluc, *Space Strategy for Europe*, 43 PROC. COLLOQ. L. OUTER SPACE 254 (2000); C. Heather Walker, *In the Giant's Footprint: Bringing MSS Services to Urban Areas*, 44 PROC. COLLOQ. L. OUTER SPACE 194 (2001).

188. Patrick A. Salin, *The New Global Governance Dialogue on International Communications and Outer Space*, 44 PROC. COLLOQ. L. OUTER SPACE 181, 186 (2001). According to Salin, a new governance dialogue is slowly shaping international communications along with their outer space dimension. *Id.*

189. Stephan Hobe, *International Space Law in Its First Half Century*, 49 PROC. COLLOQ. L. OUTER SPACE 373, 379 (2006).

190. See IISL Statutes, [http://www.iafastro-iisl.com/additional%20pages/statutes\\_1.htm](http://www.iafastro-iisl.com/additional%20pages/statutes_1.htm) (last visited Jan. 21, 2008). Among the many purposes and objectives enshrined in the IISL Statutes, those contained in Article 2(g) are of

Scholarship in the IISL sought to progress in tandem with space activities. The expectation was that it would provide information on the normative and behavioral patterns space activities might generate and glimpses into the unexpected and untoward social consequences of science;<sup>191</sup> its failure to do so has become obvious. The failing science-law equation prompted lawyers to envisage legal issues which generated the pink clouds. The perseverance of the scholars created a legal structure for space and they kept the structure alive by interpretative maneuvers. Complete reliance on international law and its principles and values was the norm in the early days, for space activities were considered to be of common good, transcending national interests. Hence, whenever a new international legal regime was found to be successful, scholars vigorously followed its doings and freely borrowed concepts and principles; a failure of that regime, however, meant a swift exit on their part. This was particularly evident in the case of the law of the sea. More recently, a focus on commercial prospects has prompted an amazing reorientation which transformed space law in its entirety into a set of strategical working arrangements.

The whole process is characterized by a nomadism, for the IISL does not have any academic values to promote or an organized academic policy; these shortcomings are notwithstanding the Institute's statutory objectives, however, that are paradigmatic to any organization.<sup>192</sup> The IISL has failed to put forward space law as a coherent branch of law and is responsible for a disjunction with many of the fundamental values of international law which space law cherished during its initial days. Yet, the organization has a legal conscience, and is aware of the changing world of law. The most noteworthy contribution of the IISL is the many thousands of papers read at its colloquia, which have become references for the serious scholar.

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particular interest. "[F]ostering the development of space law and studies of legal and social science aspects of the exploration and use of outer space." *Id.*

191. This is a fairly cogent presentation of the content of Article 2(g) of the IISL Statutes. *Id.*

192. *See id.*



*E. Space Law in International Law Textbooks*<sup>193</sup>

According to a symposium<sup>194</sup> on the textbook tradition in international law, textbooks are considered “a treatment of the subject from which one learns, rather than . . . a source of information for those who already know a thing or two about the matters of which it treats.”<sup>195</sup> Textbooks in general are criticized as “intellectual fast food, lacking in both flavor and nutrition.”<sup>196</sup> However, in the context of a discipline such as international law—a topography where the mainstream is riddled with dissenters—textbooks are reflections of the mainstream view.<sup>197</sup>

Being a relatively new branch of law, space law did not enter the scheme of textbook authors of international law until the 1960s, although monographs on space law had appeared earlier.<sup>198</sup> Established authors of textbooks and the updaters of the successive editions of such textbooks have included space law in their general scheme for international law. In *Principles of Public International Law*,<sup>199</sup> Ian Brownlie considers outer space, *inter alia*, as a concept in the chapter entitled *Common Amenities and Co-operation in the Use of Resources*.<sup>200</sup> Yet, nowhere in that five-page treatment does he

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193. The idea of analyzing textbooks was suggested to me by Timo Koivurova, Research Professor, Northern Institute for Environmental and Miniroty Law, Arctic Centre. The analysis is limited only to the textbooks written in English.

194. See Symposium, *A Colloquium on International Law Textbooks in England, France, and Germany*, 11 EUR. J. INT'L L. 615 (2000).

195. Colin Warbrick, *Brownlie's Principles of Public International Law: An Assessment*, 11 EUR. J. INT'L L. 621, 628 (2000).

196. David Mitch, *The Role of the Textbook in Undergraduate Economic History Courses: Indispensable Tool or Superficial Convenience*, 50 J. ECON. HIST. 428, 428 (1990). Mitch expresses a doubt at the outset. “Can a textbook adequately capture the complexity of issues, the subtlety of argument, and the richness of evidence so as to convey to its readers the character of the discipline?” *Id.*

197. See Warbrick, *supra* note 195, at 627 (considering text books to be the mouthpiece of the mainstream involves generalization, although this view has been endorsed by scholars such as Warbrick).

198. For information on early space law text books, see generally CHENG, *supra* note 48 and CHRISTOL, *supra* note 63.

199. IAN BROWNLIE, *PRINCIPLES OF PUBLIC INTERNATIONAL LAW* (5th ed. 1998). Also, see other editions of Brownlie's work: 1st (1966), 2nd (1973), 3rd (1979), and 4th (1990).

200. *Id.* at 262-67.

prefix or suffix outer space with the term “law,” although he does give a succinct description of the clauses of selected treaties on outer space. Brownlie, however, is justified in his parsimony on the grounds that his focus is only on cooperation in the utilization of resources<sup>201</sup> and that within that scheme he treats outer space adequately. Indeed, Brownlie’s work is an attempt to present international law as a system and to avoid treating topics in depth.<sup>202</sup> To his credit, in the five pages the fundamental principles of international law run as a common thread knitting all space activities together. Brownlie contends “[t]here is no reason for believing that international law is spatially restricted . . . . International law, including the Charter of the United Nations, applies to outer space and celestial bodies.”<sup>203</sup> He does not leave even a little room to speculate that space law might have the status of a special branch<sup>204</sup> of international law.

Outer space, like state territory, archipelagoes, and the high seas, is treated as an object of international law in *Oppenheim’s International Law*.<sup>205</sup> The editors, Robert Jennings and Arthur Watts, provide a rather extensive treatment of space law, including a brief survey of all the treaties on space. To uphold Oppenheim’s penchant for “worded principles of law” and its preference over policies, Jennings and Watts adopt a dogmatic stance distancing them from any policy considerations for space.<sup>206</sup> Clauses of the five space treaties supplemented by references to secondary literature occur throughout the text.

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201. Brownlie’s description is primarily about the clauses which promote international cooperation in the utilization of outer space resources, e.g., Article 11(1) of the Moon Treaty, which declares the Moon and its natural resources to be part of the Common Heritage of Mankind. *Id.*

202. Warbrick, *supra* note 195, at 623.

203. BROWNIE, *supra* note 199, at 262-63 (internal quotation omitted).

204. The expression “special branch” is used in a technical sense to mean various subdisciplines of international law such as space law, the law of the sea, environmental law and trade law, and not to denote just any special activity regulated by international law.

205. OPPENHEIM’S INTERNATIONAL LAW 826-45 (Robert Jennings & Arthur Watts eds., 9th ed. 1992).

206. *Id.* For support, see Mathias Schmoeckel, *The Internationalist as a Scientist and Herald: Lassa Oppenheim*, 11 EUR. J. INT’L L. 699, 703-04 (2000). See also Lassa Oppenheim, *The Science of International Law: Its Task and Method*, 2 AM. J. INT’L L. 313 (1908).

Malcolm N. Shaw's *International Law* presents space law in conjunction with air law.<sup>207</sup> Shaw introduces space law as a branch of law that substantially modified the *usque ad coelum* concept. However, he proceeds further with the concept. "It soon became apparent that the *usque ad coelum* rule, providing for state sovereignty over territorial airspace to an unrestricted extent, was not viable where space exploration was concerned."<sup>208</sup> Although states could not find a precise point separating airspace from outer space, some functional separating point is marked and it has been agreed that beyond that point international law and its principles apply.<sup>209</sup> Next, randomly-chosen clauses of space treaties are presented as constituting the regime of outer space.<sup>210</sup> Telecommunications and the related regulations receive sparing consideration. A bestseller, Shaw's *International Law* is known for its comprehensiveness; the fifth edition has 23 topics. The treatment of most of the subjects gives consideration to the law school curriculum. Given the book's focus on students, Shaw's treatment of space law has only a pedagogical import; the book is, however, inappropriate for assessing the significance of space law.

In *Starke's International Law*, space law appears in the author's discussion on various dimensions and levels of territorial sovereignty.<sup>211</sup> Positioned within the territorial sovereignty discourse, Starke's book, upon a survey of selected clauses of the space treaties, makes certain generalizations as to the fundamentals of international space law. The book puts forward the view that, given the dynamic nature of space activities, "space law cannot be static; . . . it is evolutionary."<sup>212</sup>

Other textbooks in the field, such as Michael Akehurst's *A Modern Introduction to International Law*,<sup>213</sup> in its three-page discussion of outer space, maintains that much of the present law on

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207. MALCOLM N. SHAW, *INTERNATIONAL LAW* 284-92 (2d ed. 1986).

208. *Id.* at 285.

209. *Id.* at 286.

210. *Id.* at 286-89.

211. I.A. SHEARER, *STARKE'S INTERNATIONAL LAW* 161-71 (11th ed. 1994).

212. *Id.* at 171.

213. MICHAEL AKEHURST, *A MODERN INTRODUCTION TO INTERNATIONAL LAW* 288-90 (1984).

outer space is contained in the Outer Space Treaty. In another work, *International Law: A Student Introduction*, Rebecca M.M. Wallace hastily presents outer space as a territory not appropriated by any state, and that “the exploration [of outer space] is to be conducted ‘in accordance with international law, including the Charter of the United Nations . . . .’”<sup>214</sup> Antonio Cassese, in *International Law*, considers outer space as one among the spatial dimensions of state activities, and he gives a pithy account of the law associated with outer space within the frame of state activities.<sup>215</sup> In general, emphasis is laid on the principle of *res communis omnium*, although Cassese maintains that it is the ambiguity of treaty clauses which enables major powers to use outer space primarily for their own interests.<sup>216</sup>

All of the textbooks referred to above, regardless of the authors’ scholarly intentions and orientations, include space law in their structure. In relation to many other branches of international law such as environmental law, human rights, and law of the sea, the discussion on space law in the works is brief. In addition, most of the discussions on space law appear to be doctrinal discourses on, for example, territorial sovereignty or whilst discussing various sectors of state activities. None of the discussions breaks the mold of dogmatism; all the textbooks convey the impression that space law is about five treaties and a few resolutions. There is some level of homogeneity in the discussions in that all the works consider the exploration and use of outer space and the related regulations as inseparable from the province of international law.

### *F. Teaching and Students*

In law schools, space law is taught as a component of the general curriculum—mostly as public international law<sup>217</sup>—and as a special

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214. REBECCA M.M. WALLACE, *INTERNATIONAL LAW: A STUDENT INTRODUCTION* 94-96 (1986) (quoting Article 3 of the Outer Space Treaty). The book is generally considered a companion to any case book on international law.

215. ANTONIO CASSESE, *INTERNATIONAL LAW* 63-64 (2001).

216. *Id.*

217. There are also a few law faculties where space law is taught as part of private international law, commercial law, or other subjects. For instance, in the case of the University of Lapland, the Institute of Air and Space Law is constituted by the Faculty of Law under the Private International and Comparative Law Chair. In the University of Cologne, the Institute of Air and Space Law, although, when

branch of law in certain institutes.<sup>218</sup> In law schools, it is generally teachers of public international law who insert space law into their lectures on state jurisdiction or some other doctrine. If the lecturers are adherents of any dissenting schools of thought which reject doctrines, space law is ignored and they present their cause through topics such as human rights or international security. In special institutes, space law is connected to air law. All such institutes have resources and expertise in aviation and space law, which for the most part are used to attract partnerships from both the aviation and space industry.<sup>219</sup> On the academic side, the balance is considerably in favor of air law, be the focus the syllabus or master's and doctoral dissertation topics.<sup>220</sup> In addition, space law courses lay emphasis on practical issues, leaving the student mostly uninformed about the normative base governing legal relations as well as other societal factors influencing the decision-makers. New entrants thus build their views in a vacuum and approach the issues uncritically; they seek to

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under Prof. Karl-Heinz Böckstiegel, belonged to the Chair of International Business Law, has now come under the Public International Law Chair. For the history of the Institute in Cologne, see Horst Bittlinger & Marietta Benkö, *Institute of Air and Space Law University of Cologne 1925-2005*, available at <http://www.ilwr.de/index.php?lang=eng&pageid=23>.

218. See *supra* note 10.

219. On the evolution and trends in academia-industry tie-ups, see Shahid Yusuf, *University-Industry Links: Policy Dimensions*, in HOW UNIVERSITIES CAN PROMOTE ECONOMIC GROWTH 1-25 (Kaoru Nabeshima & Shahid Yusuf eds., 2007).

220. Research institutes, such as the IASL of McGill University, were established with the purpose of promoting high-quality research in aviation law. During its initial days, the IASL was patronized by many international aviation organizations, e.g., the International Civil Aviation Organization (ICAO) and other government agencies related to aviation. Even after including space law on its research agenda, the IASL continues to deal mostly with aviation law. The list of L.L.M. and doctoral theses presented before the IASL is available at <http://www.mcgill.ca/iasl/alumni/thesisllm/> and <http://www.mcgill.ca/iasl/alumni/thesis>. For support, see A.B. Rosevear, *McGill's Institute of Air and Space Law*, 14 U. TORONTO L.J. 257 (1962) and G.N. Pratt, *The Tenth Anniversary of the Institute of Air and Space Law, McGill University*, 11 INT'L & COMP. L. Q. 290 (1962). For an overview of space law teaching, see Gyula Gal, *Study and Teaching of Space Law*, in SPACE LAW: DEVELOPMENT AND SCOPE 219-26 (Nandasiri Jasentuliyana ed., 1992).

formulate rules and build governance structures which are far from the realities of international law and society.<sup>221</sup>

Educational activities, such as the Space Law Moot Court Competition, are held annually and are designed to develop space advocacy through practice and competition. The moot problem tends to be very similar from year to year, set to cover mainly the application of the five space treaties. Students are habituated to construct their memoranda, in addition to the space treaties, on characteristic textbook principles, whereby they totally lack any theoretically- and socially-rooted arguments; seldom does one go beyond the worded principles of *pacta sunt servanda* and *good neighborliness*. In most of the cases, the team which best presents the relevant facts and explains the scientific and technical questions in the light of space treaties make an impact on the judges. In effect, the venture minimizes space law by embedding in the students' mind the feeling that space law is an unworthy career option.

Consequently, space law has been unsuccessful in attracting the finest minds among the new generation scholars in law; the field is seen as lacking substantial intellectual weight. For this reason, many students of international law are tempted to stay away from any serious space law studies. Even those who enter the field are at risk of internalizing the values of the discipline as they have been forged by existing institutions; afterward they become the new heroes and are glorified within the confines of the discipline but lack any real worldview. On balance, it seems that academic priorities are, to a great extent, responsible for the decline of space law.

### G. A Closed Group

Space law, since its genesis, has had to confront many conflicting issues and values in its efforts to deal with diverse national interests in space, all against the backdrop of common interests. The absence of any academic values and the general goal of "peaceful uses of outer

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221. The essence of this argument is drawn from Thio Li-ann, who used it while referring to a dogmatic bias from which contemporary scholars of international law suffer. See Thio Li-ann, *Formalism, Pragmatism, and Critical Theory: Reflections on Teaching and Constructing an International Law Curriculum in a New (Post-Colonial) Asia*, 5 SINGAPORE J. INT'L & COMP. L. 327, 340, 343 (2001).

space” has created a nomadism among scholars in the discipline. Yet, the pioneers and a few generalist international law scholars, despite the complexity of the task, preserved and elaborated the discipline in terms of the norms and values of international law. However, a perceptible change in the structure of the discipline’s beliefs, which afterward crept into the organizational structures, appears to have taken space law far away from international law. Ironically, those who effected the change were not entirely conscious of the cause of the shift. The discipline eventually developed a closed group, deemphasized and abandoned its traditional international law base, withdrew into itself, and stood insulated from any ideological, doctrinal, and theoretical influences. Space law has never made methodical use of its traditional concepts and approaches since, and has subsequently turned into a unique branch of law, one active in its own ambit.

### III. UNIQUE JURISPRUDENCE: A DEFENSE OF SPACE LAW

Had space law been a theoretically and doctrinally robust branch of law, reviewers might not have laughed at it and there would not have been room for an unabashed critique; no one mocks the law of the sea, trade law, or environmental law (although environmental law displays strikingly similar cultural characteristics to space law). Various uncomfortable questions encircle space law: How many principles are left for space law to project as its own? How many of them are functional in the new world order? How many of the beliefs and values of space law influence society? Does space law orient its students to current social demands?

However, answers cannot be put forward in haste. The critique provided above might be parochial, for it simply presents the epistemic culture of space law as is observable. In addition, what if space law has justifications for its present posture? Apparently, space law needs a chance to be heard. To this end, two contentions are derived from the above analysis, which are presented as opposing hypotheses:

- (1) Space law ought to be where it is and as it is and should remain separated from international law as a unique jurisprudence.

- (2) Although it has its own unique characteristics, space law is not a branch of law distinct from international law; there is some imbalance in the pattern of thinking on space law that prompts one to think that it is detached from international law.

*Working Method*

My working method here will be to integrate selected concepts and theories of epistemology in order to examine the true nature and foundation of the discipline. To this end, I first present a defense of space law as an independent discipline (Hypothesis 1) and, thereafter, a “counter-defense” arguing that it is to be seen as a facet of international law (Hypothesis 2).

This approach is based upon the fundamental epistemological dictum knowledge is true justified belief,<sup>222</sup> i.e., knowledge exists when a belief is true and the cognizor has justification for his or her true belief. The two hypotheses presented above resemble beliefs. Although the general position is that truth cannot have many faces,<sup>223</sup> this article assumes that truth is a relative phenomenon—relative in terms of culture or ontology—and that there can even be true contradictions. In order to find out the objective reality—the truth—a debate format is developed in which both hypotheses compete for justification.<sup>224</sup> In a debate, each side believes that what it thinks is the truth and puts forward justifications for its beliefs.

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222. This view forms the basis of epistemology and has been prevalent since the days of Plato. For a comprehensive survey of the history and development of epistemology, see generally *EPISTEMOLOGY: CONTEMPORARY READINGS* (Michael Huemer ed., 2002) (presenting an anthology of writings about epistemology). The fundamental view based on truth, belief, and justification has been subject to many alterations, the most influential critique being Edmund Gettier, *Is Justified True Belief Knowledge?*, 23 *ANALYSIS* 121 (1963).

223. Gottfried W. Leibniz emphasized that there cannot be anything like true contradictions. For his argument, see *GOTTFRIED W. LEIBNIZ, PHILOSOPHICAL ESSAYS* (Roger Ariew & Daniel Garber eds. and trans., 1989).

224. This debate format is inspired by the Socratic Method, although the article deviates considerably from the more sophisticated facet of the method. For more on the Socratic Method and its application, see Edward J. Conry & Caryn L. Beck-Dudley, *Meta-Jurisprudence: The Epistemology of Law*, 33 *AM. BUS. L.J.* 373 (1996).



Justification is an art.<sup>225</sup> Regrettably, philosophical precision is impossible in the context of justifying beliefs. As such, the technique of justification adopted in the present methodology is a hybrid one, one of belief structures in which one belief is justified by another belief.<sup>226</sup> For example, the belief that space law ought to be where it is and as it is and should remain separated as a unique jurisprudence is justified by another belief (hereinafter the primary belief), which I shall discuss shortly (A). However, the basicity of that belief does not rest upon another belief. In its place, I present a set of supporting beliefs (hereinafter sub-beliefs), whose basicity comes from the coherence of its components.<sup>227</sup>

Once both sides provide justifications for their respective beliefs, those beliefs will be kept in balance. The aim of the process is to determine the quantum of truth in the justifications of both sides. Philosophical precision is lacking in this context, too, but it is not altogether unworkable.<sup>228</sup> Truth in the present methodology is taken

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225. I call it “art” in consideration of the diverse modes of justification, although each mode is susceptible to criticism. For details, see David Hume, *Of Miracles*, in *EPISTEMOLOGY: CONTEMPORARY READINGS* 227-49 (Michael Huemer ed., 2002).

226. This approach draws on foundationalism. For details on knowledge structures in which one belief is justified by another, see ROBERT AUDI, *THE STRUCTURE OF JUSTIFICATION* 80-86 (1993).

227. This method has been borrowed from coherentism, which holds that beliefs are not justified by a basic belief but from the “epistemic neighborhood” of the belief. In other words, beliefs form a network, where they are justified on the merit of their coherence. See Mathias Steup, *Epistemology*, *STANFORD ENCYCLOPEDIA OF PHILOSOPHY* (Winter 2003), available at <http://plato.stanford.edu/entries/epistemology>. A hybrid of foundationalism and coherentism is propounded by Susan Haack, which she calls “foundherentism.” See generally SUSAN HAACK, *EVIDENCE AND ENQUIRY: TOWARDS RECONSTRUCTION IN EPISTEMOLOGY* (1993). On foundationalism and coherentism, see Robert Audi, *Foundationalism, Coherentism, and Epistemological Dogmatism*, 2 *PHIL. PERSP.* 407 (1988).

228. Scholars differ in their perspectives regarding truth. The most influential among these differing perspectives is the identity theory, which asserts that truth is when statements or judgments are in accordance with the way things are. However, even identity theory is subject to interpretations in the form of propositional truth and material truth. For the various interpretations, see Thomas Baldwin, *The Identity Theory of Truth*, 100 *MIND* 35 (1991); Julian Dodd & Jennifer Hornsby, *The Identity Theory of Truth: Reply to Baldwin*, 101 *MIND* 319 (1992); Robert Stern, *Did Hegel Hold an Identity Theory of Truth?*, 102 *MIND* 645 (1993). For a review of

as a state, i.e., a state of conformity between a belief and reality.<sup>229</sup> However, given the absence of a preconceived reality on the basis of which conformity can be determined,<sup>230</sup> that side which offers a superior symmetry between its beliefs and the justifications for them will gain merit. The symmetry thus achieved will be the measure of conformity. An evaluation of conformity between the beliefs and justifications is made to conclude the article.

### *A. Disjunction: A Voice of Disciplinary Renewal*

The finding that space law has become detached from international law is not disputed. However, “disjunction” implies neither a structural weakness nor conceptual erosion of space law. It is not a disintegration of certain dogmas, beliefs and values and the construction of new ones; it is a disciplinary renovation by means of specialization, functional identity, and a new academic and professional vocabulary. Above all, disjunction is an effort to salvage the discipline from becoming totally irrelevant in a new world order. Below, I explain in brief the major changes that law and the legal profession have undergone in the postmodern wave and argue that the disjunction of space law from international law reflects these changes.<sup>231</sup>

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various theories and a linguistic approach to the concept of truth, see Donald Davidson, *The Structure and Content of Truth*, 87 J. PHIL. 279 (1990).

229. This is the core of the identity theory.

230. The advantageous position of a preconceived reality can be found in the Christian epistemology, where Divine will is considered the only and ultimate truth. For a critical discussion, see Richard Davis, *James Fodor's Christian Theory of Truth: Is it Christian?*, 41 HEYTHROP J. 436 (2000).

231. Throughout the article, the concept of postmodern era/postmodernity is used in the sense of an axiomatic conviction that invisible, although not incomprehensible, forces are influencing the world today and that yesterday has become a relic in the archeology of the mind; tomorrow needs to be built. This definition is an amalgam of the views of prominent postmodernists such as Jean-Francois Lyotard, *Answering the Question: What is Postmodernism?*, in POSTMODERNISM: A READER 46 (Thomas Docherty ed., 1993) (“[P]ostmodern . . . [is] that which . . . puts forward the unrepresentable in presentation”); STEPHEN M. FELDMAN, AMERICAN LEGAL THOUGHT FROM PREMODERNISM TO POSTMODERNISM: AN INTELLECTUAL VOYAGE 29 (2000) (“[P]ostmodernism [is] . . . total acceptance of the ephemerality, fragmentation, discontinuity, and the chaotic”) (quoting David Harvey); and commentators. See also Elizabeth Atkinson, *The Response Anarchist*:

### *1. Law and the Legal Profession in a New World Order*

Law and the legal profession face considerable challenges in the rapidly changing global conditions. All *aspects* of law—theories, doctrines, pedagogy, research, and patterns of the production of knowledge—have changed. The changes do not occur in one aspect in isolation but are pervasive; their nature, however, varies slightly from one aspect to another because of the conceptual and functional diversity among them. Changes have occurred mainly in the form of 1) a loss of exclusivity;<sup>232</sup> 2) an increased segmentation in the application of abstract knowledge;<sup>233</sup> and 3) a move towards specialization.<sup>234</sup>

*Loss of exclusivity* is both a progressive and negative concept,<sup>235</sup> although it generally connotes forward motion. It has introduced a multidisciplinary dialectic in every scholarly discourse on law and at the same time allowed intrusion by nonprofessionals, such as paralegals, in professional activity.<sup>236</sup> At the academic level, there is an increasing interest in multidisciplinary studies, which has

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*Postmodernism and Social Change*, 23 BRIT. J. SOC. EDUC. 73, 74 (2002) (listing the characteristics of postmodernism while refuting the criticisms regarding the effectiveness of postmodernism). In the article, “postmodernism” and “postmodernity” have different meanings in the manner articulated by Dunn, who defines postmodernism as “a set of epistemological, theoretical, and political responses to postmodernity.” See ROBERT G. DUNN, *IDENTITY CRISIS: A SOCIAL CRITIQUE OF POSTMODERNITY* 2 (1998).

232. Herbert M. Kritzer, *The Professions are Dead, Long Live the Professions: Legal Practice in a Postprofessional World*, 33 L. & SOC’Y REV. 713, 720 (1999).

233. *Id.*

234. *Id.* at 726-27. Kritzer calls these changes collectively “post professionalism.” *Id.* Kennedy expresses a similar sentiment in David Kennedy, *The Politics of the Invisible College: International Governance and the Politics of Expertise*, 5 EUR. HUM. RTS. L. REV. 463, 464 (2001). However, Kennedy categorizes the changes as a rise of local identities, fragmentation, and specialization. *Id.*

235. Anthony Welch, *The End of Certainty? The Academic Profession and the Challenge of Change*, 42 COMP. EDUC. REV. 1, 13-14 (1998).

236. For a detailed discussion on paralegals and their role *vis-à-vis* professional lawyers, see HERBERT M. KRITZER, *LEGAL ADVOCACY: LAWYERS AND NONLAWYERS AT WORK* (1998). See also Richard Moorhead et al., *Contesting Professionalism: Legal Aid and Nonlawyers in England and Wales*, 37 L. & SOC’Y REV. 765 (2003).

transformed law beyond its traditional foundation.<sup>237</sup> Legal discourse is no longer contextualized in judicial decisions and doctrines. On the professional side, entry by nonprofessionals<sup>238</sup> and multidisciplinary practice<sup>239</sup> has challenged the professional autonomy of lawyers. The trend has prompted lawyers to gain knowledge of other disciplines, e.g., accounting, engineering, and management.

*Segmentation* of knowledge and *specialization* are interrelated in that specialization is a result of segmentation. One branch of law where segmentation (commonly known as “fragmentation”) has a serious impact is public international law.<sup>240</sup> Norm conflict<sup>241</sup> and the emergence of self-contained regimes<sup>242</sup> are examples of fragmentation. The trend has precipitated the assumption that general law should be modified or excluded from the administration of special areas of international law.<sup>243</sup> Special branches in effect initiated a reform by adopting complex working strategies in place of traditional rule-based international law. Scholars started to achieve a high level

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237. A scholarly project supporting this position is proposed in Edward L. Rubin, *The Practice and Discourse of Legal Scholarship*, 86 MICH. L. REV. 1835, 1891-1905 (1988).

238. KRITZER, *supra* note 236, at 729 (discussing the interplay between lawyers and non-lawyers in the world of legal advocacy).

239. See generally George C. Nonna, *Situating Multidisciplinary Practice within Social History: A Systemic Analysis of Inter-professional Competition*, 80 ST. JOHN'S L. REV. 849 (2006). The concern regarding multidisciplinary practice is expressed in passing in D. Michael Guerin, *The World is Flat . . . and What That Means to You*, 78 WIS. LAW. 2 (2005).

240. For a detailed discussion on the fragmentation of international law, see Martti Koskenniemi, *Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law*, REPORT OF THE STUDY GROUP OF THE INTERNATIONAL LAW COMMISSION (A/CN.4/L.682) (2006) [hereinafter ILC REPORT]; Anja Lindroos, *Addressing Norm Conflicts in a Fragmented Legal System: The Doctrine of Lex Specialis*, 74 NORDIC J. INT'L L. 27 (2005); Gerhard Hafner, *Pros and Cons Ensuing from Fragmentation of International Law*, 25 MICH. J. INT'L L. 849 (2004); Martti Koskenniemi & Päivi Leino, *Fragmentation of International Law? Postmodern Anxieties*, 15 LEIDEN J. INT'L L. 553 (2002).

241. Lindroos, *supra* note 240.

242. See generally Anja Lindroos & Michael Mehling, *Dispelling the Chimera of 'Self-Contained Regimes' International Law and the WTO*, 16 EUR. J. INT'L L. 857 (2005).

243. *But see* ILC REPORT, *supra* note 240, para. 129.

of specificity in their knowledge in order to deal with new challenges. From such a perspective, fragmentation is a phenomenon of specialization.

Special branches of knowledge have created special areas of practice, but practitioners have to face the challenges of nonprofessionals, e.g., paralegals, posed by the loss of exclusivity. In order to combat the situation, practitioners need to be super-specialists and in this process they seek the help of law schools, which impart advanced professional skills far beyond those of nonprofessionals. Universities also adapt by introducing courses of vocational relevance, building closer university-business partnerships and adding an instrumental flavor to teaching priorities.<sup>244</sup> In sum, the process involved is a reawakening, followed by changes in the “professional vocabulary,”<sup>245</sup> patterns of discourse, structure of knowledge and institutions, and methodology.

## 2. The “Progressive Sensibility” of Space Law<sup>246</sup>

In its first era, space law functioned as a branch of international law characterized by a treaty regime that aimed at ensuring peaceful uses of outer space for the benefit of humankind. However, in the wake of the commercialization of outer space, and prompted by the forces of globalization, space law started responding to continuing global changes. In the initial response, a “hybrid public-private [commercial space] environment,”<sup>247</sup> whereby the state provides infrastructure and incentives to the private sector to compete in the market, replaced the state governed and state controlled system. Consequently, what had been a defense and research and development

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244. For support, see generally Yusuf, *supra* note 219.

245. Specifically on the professional vocabulary of international lawyers and the trends therein, see David Kennedy, *The Twentieth-Century Discipline of International Law in the United States*, LOOKING BACK AT LAW’S CENTURY 386 (Austin Sarat et al., 2002).

246. I have coined the expression “progressive sensibility” on the analogy of Kennedy’s “internationalist sensibility” and “renewalist sensibility.” My understanding of the renewalist wave in international law is to a certain extent shaped by Kennedy’s treatment of the subject in David Kennedy, *A New World Order: Yesterday, Today, and Tomorrow*, 4 TRANSNAT’L L. & CONTEMP. PROBS. 330 (1994).

247. Gabrynowicz, *supra* note 65, at 1051.

orientation in space activities shifted towards a market orientation.<sup>248</sup> New actors in the space sector developed new strategies and policies to facilitate the development of the market,<sup>249</sup> resulting in a substantial change in the pattern of knowledge production and focus of research. To be in the race, space lawyers must master the art of corporate management and indulge in the rhetoric of business. They compete with management professionals in areas such as identifying and analyzing an industry's strengths, weaknesses, opportunities, and threats, and assisting in the formulation of optimal policies. In the process they also maintain a social perspective by considering the political, legal, and technological influences likely to impact the industry. Modern space lawyers have come far from the mold of ivory tower theoreticians preoccupied with doctrines; instead, they rightly understand society with its present realities and use that understanding to organize technology for the progress of the world.

On the academic side, throughout the formative and functional years of space law, scholars practiced, professed, and defended the ideals and conceptions of international law. The general principles of international law were considered the factor which fastened space law to the "system"<sup>250</sup> of international law, and space law was interpreted and applied in accordance with those principles.<sup>251</sup> However, in recent years, space law scholars have started to share the common feeling of discontent with the institutions, norms, and principles that govern the international system.<sup>252</sup> They understand their pivotal role

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248. See generally Hanneke L. Van Traa-Engelman, *Commercialization of Space Activities: Legal Requirements Constituting a Basic Incentive for Private Enterprise Involvement*, 12 SPACE POL'Y 119 (1996).

249. For a comprehensive proposal in this connection with insights drawn from the aviation industry, see PHILIPPE MALAVAL & CHRISTOPHE BENAROYA, *AEROSPACE MARKETING MANAGEMENT* (2002). See also Mike W. Papin & Brian H. Kleiner, *Effective Strategic Management in the Aerospace Industry*, 70 AIRCRAFT ENGINEERING & AEROSPACE TECH. 38 (1998).

250. International law has been characterized as a "system" by many scholars, the most prominent being Ian Brownlie.

251. Such rules for interpreting international law are provided in Article 31 of the Vienna Convention on the Law of Treaties, May 23, 1969. See also Mohammed Bedjaoui, *Classicism and Revolution in the Elaboration of the Principles and Rules of Space Law*, in PERSPECTIVES ON INTERNATIONAL LAW 441-62 (Nandasiri Jasantuliyana ed., 1995).

252. Bedjaoui, *supra* note 251, at 443. Bedjaoui observes: "Over some 20

in leading space law to the new world order and in that role the futility in clinging to the outmoded concepts of international law. They naturally ask, “How can international law provide the stage, when it itself is disorganized”—with its fragmentation, overlapping regimes, proliferation of international tribunals with overlapping jurisdictions, and lack of unity in discourse? To what extent will the practice of its doctrines enable young graduates to advance space law and meet the demands of the new market society? Scholars, quite obviously, have opted to shun everything that stands in opposition to the discipline’s advance to the new world order. Accordingly, students are kept away from hollow doctrines and the contextless application of principles; instead, they are vocationally trained to serve the needs of space-related industries such as transportation, telecommunications, remote sensing, and tourism. Academic courses have replaced coursebook-study with practical problems, e.g., case studies and short-term industrial placements. Universities have also built research consortia to meet the demands of the market. In sum, the application, development, and exploration of knowledge has assumed an unprecedented dimension.

All of these changes characterize the “progressive sensibility” of space law—a rational yearning to cross the threshold into a new world—in the larger scheme of disciplinary reform. Radical steps such as closing the group to certain external influences to which the discipline was previously responsive, de-rooting traditional foundations, and restructuring practice and the pattern of discourse point to the fact that space law, like all branches of knowledge, is in a transition from one world order to another new one. When world is at the trough of a cycle, it is quite natural for branches of knowledge to experience an internal agitation amid a reformist consciousness.

The assertion that the changes one witnesses in space law are an inevitability imposed by the world order on all branches of knowledge and that space law has adequately modified its contents and culture to accommodate the global conditions justifies the hypothesis that space law ought to be a closed group and should remain separated from

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years, the international community has conceived and elaborated a space law with fundamental principles and rules of conduct; the purpose here is to try to decode these principles and rules, to determine the objectives which explain their selection, to see whether they meet lasting needs or temporary requirements in the conquest of space, and perhaps to explain a certain current trend towards disillusionment.” *Id.*

international law as a unique jurisprudence. Below (in B, C, and D), the article presents a set of sub-beliefs justifying this assertion. The sub-beliefs, even though they support the assertion independently, are more compelling in combination.

The first sub-belief is that receptiveness to change is an inherent characteristic of space law. I demonstrate this with reference to the responsiveness shown by the discipline in the past, mainly to policy, technology, and ideology. My arguments also explain why space law did not heed lessons of the Jenks-McDougal debate.

### *B. Receptiveness: An Inherent Quality*

Law is a social institution that develops on its own internal dynamics.<sup>253</sup> The internal dynamics of law work through interactions between various structures and actors, e.g., courts, legislatures, lawyers, and scholars. Internally, law is rational, meaning that it is “structured according to standards of analytical conceptuality, deductive stringency, and rule-oriented reasoning.”<sup>254</sup> But law and legal systems are not insulated from external influences, which “are selectively filtered into legal structures and adapted in accordance with a logic of normative development.”<sup>255</sup> In practice, an external stimulus acts upon the internal dynamics, resulting in a legal change and substantially modifying the social order, a phenomenon which Gunther Teubner has termed a model of “socio-legal covariation.”<sup>256</sup> Generally, it is the forces of politics, ideology, and intellectual movements *inter alia* that act as the stimuli for legal change.

As regards space law, in the past the discipline has shown a high degree of receptiveness to such forces, in particular technological developments. When space technology became the focal point of

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253. This is the neo-evolutionary view of law. For neo-evolutionists, law changes in reaction to its own impulses. The prominent scholars who share this view are Niklas Luhman, Jürgen Habermas, Philippe Nonet, and Philip Selznick. For details, see generally PHILIPPE NONET & PHILIP SELZNICK, *LAW AND SOCIETY IN TRANSITION: TOWARD RESPONSIVE LAW* (1978) (describing a cross-sectoral emphasis on the relationship between law and social order).

254. Gunther Teubner, *Substantive and Reflexive Elements in Modern Law*, 17 *L. & SOC'Y REV.* 239, 253 (1983) (referring to Habermas).

255. *Id.* at 249 (reviewing neo-evolutionist scholarship).

256. *Id.* at 257.



states' common expectations, there emerged conflicts of interests between technologically advanced countries and those aspiring to comparable levels. What was an emerging branch of law came to incarnate a "law of outer space" to reduce the conflict of interests by assuming functional responsibilities such as regulation, control, and effective management of technology, and afterward sculpt normative structures on the basis of these functional responsibilities. Although it emerged in response to an external stimulus—a technological boom—space law has since substantially broadened the parameters of law in general and its pattern of thinking, e.g., the idea of humankind as a legal subject has provided a disciplined consideration to the social and cultural needs of humanity in an unprecedented manner. In addition, by drawing on the many common-interest-oriented principles, the institutional structures of space law have evoked a sense of "community" among the states in a more vivid and solid manner.<sup>257</sup> These instances, on the whole, exemplify the internal dynamics of law reacting to the external stimulus of a technological boom.

Similar reactions to policy and politics are observable in the past, particularly when Cold War witnessed a fluctuating balance of power and technological superiority between the superpowers. With the proliferation of the Soviet arsenal, the United States contrived several defense initiatives, such as "Mutual Assured Destruction" (MAD).<sup>258</sup> For international law, MAD rendered meaningless "[t]he notion of necessity as one of the traditional cumulative criteria of lawfulness."<sup>259</sup> However, there circulated several misgivings at the U.S. policy desks about the safety of MAD, prompting them to seek alternatives. One alternative that gained popularity was "mutual arms control,"<sup>260</sup> which prompted the superpowers to settle for demilitarization. This strategic stance inspired the ongoing negotiations for a space treaty in UNCOPUOS; the protection from

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257. Nicolas M. Matte, *Institutional Arrangements for Space Activities: An Appraisal*, 6 ANNALS AIR & SPACE L. 439, 455 (1981).

258. For details of the MAD doctrine, see Nicolas G. Fotion, *Mutual Assured Destruction*, in AN ENCYCLOPEDIA OF WAR AND ETHICS 320-24 (Donald A. Wells ed., 1996).

259. W. Michael Reisman, *International Law After the Cold War*, 84 AM. J. INT'L L. 859, 860 (1990).

260. ROBERT M. LAWRENCE, STRATEGIC DEFENSE INITIATIVE: BIBLIOGRAPHY AND RESEARCH GUIDE 3-7 (1987).

any “aggressive military” provided in Article IV of the OST carries the marks of this strategic position. Currents of superpower politics in this context infiltrated into the internal structures of law, putting space law onto a new normative course.

*Receptiveness to Intellectual Movements: The Failure of Policy-Oriented Jurisprudence*

Earlier in this article, space law was criticized for its insensitivity to intellectual movements using the example of McDougal’s policy-oriented jurisprudence, which was a critique of what was at the time the generally accepted pattern of thought in international law. However, while accepting that space law was indeed insensitive to the movement, it is submitted that this insensitivity owed to the erroneous design of the policy-oriented jurisprudence.

Policy-oriented jurisprudence is an intellectual movement which addressed international law in general and space law (and certain other branches of international law) in particular. An intellectual movement is said to have impacted a discipline when the ideas and strategies for the promotion of the movement influence and adequately alter the beliefs, values, and methodologies of the discipline.<sup>261</sup> The extent of impact generally depends on a correlation between the objectives, ideas, and method of advocacy of the movement and the normative state of the discipline.

Policy-oriented jurisprudence, whose overriding goal was the dignity of men and women in an increasingly universal public order,<sup>262</sup> offered a “comprehensive, contextual, problem- and policy-oriented analysis of social problems and the legal responses designed to address them.”<sup>263</sup> However, the promotion of the theory by its proponents evoked the feeling that international law (space law in particular) was being transformed, by altering the very nature of its knowledge, towards the power-oriented realist paradigm.<sup>264</sup> It is thus no wonder that Phillip Allott sensed in McDougal’s language “a

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261. This impact of an intellectual movement on a discipline differs to a certain extent from the impact intellectual movements have on a society. For a presentation in this vein, see Stuart A. Umpleby, *The Design of Intellectual Movements*, PROC. OF INT’L SOC’Y FOR SYS. SCI. (2002).

262. MCDUGAL ET AL., *supra* note 98, at v.

263. Wiessner & Willard, *supra* note 95, at 97.

<sup>264</sup> See PHILIP ALLOTT, *EUNOMIA: NEW ORDER FOR A NEW WORLD* xviii (1990).

rebuke to traditional international law.”<sup>265</sup> “[There is] extreme subjectivism [in] . . . writing, which is assertoric rather than didactic; concerned almost to the point of being passionate. It is unashamedly and intentionally value-laden.”<sup>266</sup>

In the same vein, policy-oriented jurisprudence met with stiff resistance from space law scholars, who were accustomed to a rule-oriented approach and whose faith was embedded in positivist thinking. They could not perceive McDougal’s theory as anything but advocacy of realist thinking in space law- and policy-making. However, had McDougal’s theory been presented as a set of intellectual techniques to detect the community process and in that way facilitate the shaping of relevant policies for a just world public order in space, scholars would have been convinced of the methodological rigor of the theory in effectively advancing the rule-oriented system. The theory’s crusader image, however, eclipsed its intellectual pragmatism and utility.

This section set out to illustrate that receptiveness is an inherent quality of space law, yet this is not to say that the discipline is particularly vulnerable to sweeping changes. Space law displayed a sense of calculated adaptivity by maintaining a balance between the actions of the catalysts—a technological boom, political trends, and intellectual movements—and the normative requirements of the age. Its resistance to the campaigning of policy-oriented jurisprudence illustrates its rational selectivity. These defenses do not, however, render space law a criticism-free zone; it has been accused of moving towards complex strategies, thereby jettisoning not only its rule orientation but even its communitarian focus. The next section illustrates that, in making such a move, which is a receptive one, space law has built a rational coherence with the free-market ideology of a modernizing world. It is this coherence which justifies the strategic orientation of space law.

### *C. When in the Market, Be a Marketer*

With the end of the Cold War, economic systems all over the world entered a transition from state-controlled planned economies to

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265. Philip Allott, *Language, Method and the Nature of International Law*, 45 BRIT. Y.B. INT’L L. 79, 123 (1971).

266. *Id.*

market economies,<sup>267</sup> which have their theoretical underpinnings in neoclassical economics. Among the many axioms of neoclassicism,<sup>268</sup> focused as it is on the maximization of wealth as the ultimate objective of social organization, the ones that gained a strong foothold in the contemporary market economies were the emphasis on efficiency and unfettered markets. Whereas efficiency is a means to increase wealth: “[p]olicies, which do not promote efficiency . . . will be opposed,”<sup>269</sup> and unfettered markets promote the maximization of consumer preferences in relation to goods and services and favor competition.<sup>270</sup>

In governing modern market economies, power is transferred from the state to the business sector—the standard neoclassical model. In this model, “there are markets for everything, now and for the future; everybody knows everything, and they know the same things; and there are no public goods, no externalities, no transaction costs, and no increasing returns.”<sup>271</sup> State intervention is favored only in exceptional cases, e.g., providing a suitable legislative code guaranteeing private ownership and ensuring effective competition and free exchange of goods, ensuring law and order, military defense and a welfare system, entering into agreements of various types with

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267. See, e.g., EMERGING MARKET ECONOMIES: GLOBALIZATION AND DEVELOPMENT (Grzegorz W. Kolodko ed., 2003) (capturing the causes and impacts of, as well as national and regional perspectives on, the transformation).

268. The assumptions of neoclassical economics are: “1) all human behaviour is individualistic; 2) all human behaviour is exclusively self-interested; 3) all human behaviour is rational and humans are no more than “rational utility maximizers”; 4) welfare is merely and wholly the satisfaction of an individual’s material preferences; 5) efficiency is the exclusive measure of desirability; and 6) unfettered markets are the best way to permit people to achieve their self-interested objectives and achieve allocative efficiency.” Benedict Sheehy, *The Importance of Corporate Models: Economic and Jurisprudential Values and the Future of Corporate Law*, 2 DEPAUL BUS. & COMM. L.J. 463, 470 (2004). Sheehy derives the assumptions from the seven laws set out in DANIEL M. HAUSMAN, *THE INEXACT AND SEPARATE SCIENCE OF ECONOMICS* 51 (1992).

269. Sheehy, *supra* note 268, at 472.

270. See *id.* at 472-73.

271. Adam Przeworski, *The State in a Market Economy*, in *TRANSFORMING POST-COMMUNIST POLITICAL ECONOMIES* 411, 412 (Joan M. Nelson et al. eds., 1997) (appraising and evaluating scholarly perspectives on the role of the state in a market economy and proposing methods of effective state intervention in markets).

other countries, and implementing political decisions.<sup>272</sup> The state is not allowed to take part in any of the internal market processes, which are sustained by the effective strategies and marketing practices adopted by firms. Such strategies pertain to ensuring long-term viability by modifying products and services, successful execution of management decisions, performance enhancement, pricing techniques and customer-focused promotions, to name a few.<sup>273</sup> In order to effectively shape and implement strategies, firms require essential information to be at the disposal of key decision makers; they look at professionals to fulfill this need.

In the early 1980s, new space-inspired technologies were found to have high market potential, one example being telecommunications, with its profound implications for everyday life. Subsequently, new interest groups, which Nathan C. Goldman collectively calls the “citizens’ space lobby,” were formed.<sup>274</sup> They advocated once-outlandish ideas of bringing space to society. “[T]hese space groups often represent the first expressions of later careers in space business.”<sup>275</sup> Goldman goes on to capture the general mood at the time:

Many entrepreneurs in start-up companies and engineers in established ones receive much inspiration from their memberships in these [groups]. Existing trade associations such as Aerospace Industries Association (AIA) and new organizations such as the Space Business Roundtable (Houston, Texas) signify the growing legitimacy of space advocacy. These people are now part of a new reality . . . .<sup>276</sup>

By the 1990s, most space activities had taken on a market orientation.<sup>277</sup> The flood of space activities into the marketplace

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272. ARNE JON ISACHSEN ET AL., UNDERSTANDING THE MARKET ECONOMY 4 (1992).

273. Kwaku Appiah-Adu, *Marketing in Emerging Countries: Evidence from a Liberalized Economy*, 15 MKTG. INTELL. & PLAN. 291, 293-98 (1997) (articulating the strategies required for Ghana).

274. NATHAN C. GOLDMAN, AMERICAN SPACE LAW: INTERNATIONAL AND DOMESTIC 111 (1988).

275. *Id.*

276. *Id.* at 112.

277. *Id.* at 112-13. Goldman classifies market-oriented space activities into

rendered state-centric space law inadequate for a market, leaving states the role of overseeing and safeguarding the market. One group of scholars indulged in interpretative theorizing so that the scope of existing space treaties would be adequately broadened to include private participation in space-related markets.<sup>278</sup> They persevered with the old knowledge structures of space law and upheld the interventionist role of states in markets. The rest of the scholars in the field, who had already broken through the shell of professional exclusivity, traversed the threshold of the commercial space activities and followed the complex legal and strategic process of the markets. Their proficiency in areas such as market analysis, risk assessment, and strategic counseling would remedy the uncertain regulatory environment in the markets.

The splitting up of space law scholars into these two camps, while creating a two-fold discipline, maintained a complementarity between space law and the state-supervised and market-oriented nature of space activities. In tune with the normative and structural changes, the academic and research institutions in space law adopted the vocabulary of business for the dissemination of knowledge, which was criticized as misrepresenting the reality to students. The next section proves those criticisms to be ill founded.

#### *D. Progressive Thinking: Episteme and Pedagogy in Space Law*

##### *Episteme*

Two types of criticisms were voiced against space law academia: 1) the IISL was dysfunctional and 2) academic institutions were

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five sectors: 1) the communications satellite industry; 2) transportation; 3) services; 4) earth- and space-based installations; and 5) remote sensing and manufacturing.  
*Id.*

278. See, e.g., Edward A. Frankle, *Once a Launching State Always the Launching State? A Needless Conflict of Treaty Regimes*, 44 PROC. COLLOQ. L. OUTER SPACE 32 (2001); Dimitri Maniatis, *Spring Break 2023—The Law Governing Liability for Damage Caused by Space Objects: From State Responsibility to Private Liability*, 22 ANNALS AIR AND SPACE L. 369 (1997) (suggesting that the existing liability regime adapts to modern realities by a unification of private law); Julie C. Easter, *Sea of Tranquility: The Effect of Space Tourism on Outer Space Law and World Policy in the New Millennium*, 26 SUFFOLK TRANSNAT'L L. REV. 349 (2003) (highlighting the inadequacies of existing treaties and proposing a new framework for space tourism and proprietary rights in space).

promoting the internalization of wrong values. The dysfunctional nature of the IISL lay in its nomadic progress, its failure to bring coherence and its promoting disjunction with international law. The IISL clearly displayed behavior that could give rise to these accusations, but its actions have been erroneously interpreted. Interpretations have been made based on a presumption that the IISL is a movement—revolving around a manifesto—which has strayed from its ideals. Expectations that a coherent body of thought or a shared set of core values among individual viewpoints would emerge from the IISL are also a result of this presumption. However, the IISL is quite far from being a movement; it is in all probability an epistemic community, which according to Peter Haas, is “a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area.”<sup>279</sup> Article 2 of the IISL Statute succinctly endorses that it is an epistemic community. “The purposes and objectives of the Institute [the IISL] shall include: (g) The conduct of such other activities as may be considered desirable in fostering the development of space law and studies of legal and social science aspects of the exploration and use of outer space.”<sup>280</sup>

In its work, the IISL has displayed the characteristics of an epistemic community by providing actors in the space sector with optimal policy choices (particularly evident during the demilitarization negotiations in the 1960s), depictions of global public interests in space, information on the extent to which law can safeguard as well as encourage technological innovations, and accounts of law and its interrelation with the scientific process.<sup>281</sup> Given that the existential logic of any epistemic forum is to provide interpretations of social and physical phenomena and thereby remove uncertainties in international policy coordination,<sup>282</sup> a singular focus on issue areas cannot be expected of them. In the case of the IISL, even if its thinking has tended towards the unusual—its concern for

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279. Peter M. Haas, *Introduction: Epistemic Communities and International Policy Coordination*, 46 INT’L ORG. 1, 3 (1992) (detailing the structure, role, and behavioral characteristics of epistemic communities).

280. IISL Statutes art. 2(g), [http://www.iafastro-iisl.com/additional%20pages/statutes\\_1.htm](http://www.iafastro-iisl.com/additional%20pages/statutes_1.htm) (last visited Jan. 21, 2008).

281. See generally *id.*

282. See Haas, *supra* note 279, at 3-4.

aliens—the justification stands that it was consideration for the public excitement over and awe of space exploration that prompted many scientific agencies to turn to the institute for information on the societal impact of deep exploration of the universe. Finally, as regards the shift from one analogy to another, cited as an instance of nomadism in the approach of the IISL, analogizing in the IISL was not the standard practice of identifying with another regime and perceiving similarities but a methodical reckoning in that analogies in the space law context have helped more in finding out the differences between two regimes than in determining similarities. It was an awareness of the normative gap between the regimes that prompted scholars to discard the old analogies and look for new ones.

### *Pedagogy*

In the postmodern era, knowledge structures underwent substantial transformations, with the art of rhetoric and patterns of academic discourse being no exceptions. The validity of knowledge is determined by asking question such as “Is it true?”; “Is it marketable?”; “Is it sellable?”;<sup>283</sup> Can it be quantified? In other words, the validity of knowledge is determined on the basis of economic efficiency and effectiveness, a criterion which Jean-Francois Lyotard calls “performativity.”<sup>284</sup> These changes are reflected in various curricular solutions and teaching methods and set educational institutions altogether on a competitive track.<sup>285</sup>

Under the postmodern influence, as the ideals of science changed into technological dynamism, space law sought to restructure its knowledge and application. As a first step, the IISL carried out an appraisal of the teaching methods used by various institutions.<sup>286</sup> Most of the contributors at a session dedicated to the issue recommended broadening the scope of the curriculum in order to come to terms with the new technological and commercial realities. Consequently, space law courses were tailored to meet the needs of

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283. Harland G. Bloland, *Postmodernism and Higher Education*, 66 J. HIGHER EDUC. 521, 536 (1995) (quoting Jean-Francois Lyotard, *THE POSTMODERN CONDITION* 108 (1984)).

284. *Id.*

285. *See id.* at 538-39.

286. In this connection, see various contributions to the special IISL session *Space Law Teaching and the History of Space Law*, 29 PROC. COLLOQ. L. OUTER SPACE 205 (1986).



the industry with a large dose of practically and strategically oriented training. A new awareness of current market realities, rather than communitarian perspectives, was imparted to the students, which prompted them to take up competitive careers in astronautics; it is quite obvious that such students decide to stand outside the bounded conventions of social enquiry. This is to say that wrong values were instilled into the students by space law institutes: the institutions simply responded effectively to the demands of the learners for useful, technical, and market-related knowledge.

In the meantime, the loss of state authority in the postmodern world led to a substantial reduction in state funding for higher education, prompting many institutions to mobilize funds from external sources such as multinational corporations to support their research. The outcome of this trend, according to Harland G. Bloland, has been “that research is judged on its ability to aid in the competitive position of the multinational organization[.]”<sup>287</sup> In such a situation, space law institutes need to build effective networks and partnerships with industries. To win the confidence of industry partners, institutes need to show their expertise in market strategies rather than engage in value-loaded conceptualization.

### *E. Methodological Summary and Conclusion*

The anomalous normative and functional characteristics displayed by space law derive from a natural impulse to transcend the present realities of the world order and to create a paradigmatically superior branch of law. This is the primary belief pursuant to which space law claimed to be a unique jurisprudence.<sup>288</sup> The primary belief is supported by three sub-beliefs: 1) that the rational adaptivity towards the catalysts of change in the past guarantees the progressive sensibility of space law;<sup>289</sup> 2) that each functional change space law has effected can be attributed to a global force;<sup>290</sup> and 3) that every structural change—in pedagogy as well as episteme—has been effected on the basis of certain value systems (in the present context,

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287. Bloland, *supra* note 283, at 541.

288. *See supra* Part III.A.1-2.

289. *See supra* Part III.B.

290. *See supra* Part III.C.

postmodernism).<sup>291</sup> Even though each sub-belief can be justified on its own merits, what supports the primary belief is the coherence of the three, which can be read to mean that space law has a built-in survival mechanism to protect itself against any crisis due to change. It is the dynamics of this survival mechanism that have inspired the “progressive sensibility” of space law and subsequently moved the discipline to close its doors to certain influences likely to be detrimental to its functioning. In its new posture, space law is internally robust and externally dynamic and deserves a dignified place in intellectual and educational forums.

#### IV. A COUNTER-DEFENSE

The arguments put forward on behalf of space law are based on the conviction that in the modern world there has been an inevitable and steady deterioration of society and its institutions, a complex state of affairs which international law has proved absolutely inadequate in comprehending and rectifying. It is the resulting disarray that prompted space law to seek normative escape routes. However, in response to the arguments made on behalf of space law, neither the contentions regarding the jumbled state of affairs of the contemporary world order are disputed nor is space law’s normative course or structural changes questioned. What is disputed is the assertion that space law has turned into a sheltered group and entirely dissociated itself from international law.

This part of the article argues that the waves of global change were detected by a group of scholars in international law before the change impacted the special branches of that field. Following the lead of its scholars, international law has acquiesced, streamlined its ways of thinking and organized its functions accordingly, notwithstanding the presence of numerous scholars in the middle of the road. The renewal program of international law has reallocation schemes for virtually every one of its components, including the role of treaties, the tasks of international organizations, terminologies, and the nature and functions of special branches. The transformations within and in the operation of space law have taken place in harmony with the renewal program of international law. If there linger any

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291. See *supra* Part III.D.

misgivings on the relationship between space law and international law, they are attributable to a conventionalist understanding of the relationship between international law and its special branches; the bond between international law and space law stands on a new footing.

### *A. The Renewalist Program of International Law*

The ideas and beliefs of international law have a glorious history in the sense that notwithstanding the sporadic turbulence of war, there was a sort of symmetry in the ideas governing the relationship between states. The symmetry took the form of effectiveness of principles, the strength of norms, the harmony between social and legal values, the determinacy of law and the robustness of the legal systems. One significant reason for this symmetry was the low intensity in state interactions, which never required high performance from those ideas. With the intensification of state interactions the classical ideas became dysfunctional, and the theoretical constructs held up by such ideas started to crumble. An extensive reform began in the early twentieth century that saw the creation of institutions, codification of doctrines, and promotion of formalism,<sup>292</sup> with the supporting ideas of interstate relations recharged/replaced to serve the new arrangements. By the latter half of the century, even with new structures and rules and an expanding topography, international law had left its past glory—the symmetry—behind it. It started to experience an inexplicable friction in its functioning—overlapping regimes and proliferating institutionalism (with overlapping mandates), which resulted in the antiquation of fundamental values, indeterminacy of principles, fragmentation, and inconsistency between practice and established values. Innumerable odd questions and bizarre concepts related to collective security, free trade, self-contained regimes, global governance, and so forth, floated around the periphery of international law.<sup>293</sup> For the first time, the cynical voice

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292. David Kennedy, *International Law and the Nineteenth Century: History of an Illusion*, 65 *NORDIC J. INT'L L.* 385, 390-97 (1996). According to Kennedy, the renewalist image of the twentieth century for international law is based on a rejection of the significance of the nineteenth century. *Id.*

293. Deborah Z. Cass, *Navigating the Newstream: Recent Critical Scholarship in International Law*, 65 *NORDIC J. INT'L L.* 341, 342 (1996) (introducing the reason

of a “legal left” or a “Newstream” concerned over the utility and effectiveness of existing knowledge and institutions of international law was heard.<sup>294</sup>

Given the relativist nature of the Newstream approaches, no off-the-rack program was available,<sup>295</sup> although transcendental visions for inner development<sup>296</sup> or a critical project<sup>297</sup> occasionally flashed across the scholarly horizon. Despite the variations in approach, disenchantment with doctrines or an emphasis on the mode of rhetoric was, however, a frequent and widespread phenomenon among the Newstreamers. With reference to these two characteristics of the Newstream, the next section reveals the new relationship that has come to exist between general international law and its special branches—space law in particular—and thereby affirms the primary belief that the “progressive sensibility” emphasized by space law has been dictated by international law.

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for the emergence of a Newstream scholarship within the overall articulation of the Newstream agenda).

294. What constitutes the legal left is a matter of doubt. Generally, Critical Legal Theorists (“the Crits”), who campaign for a deconstruction of existing structures of law, are considered the legal left. However, Thomas Franck has recently juxtaposed the Crits with the realists, who attacked legal formalism and put forward an interest-based theory of law. Franck asks, if the legal left is understood as a group of critics of traditionalism such as the realists, “where does that position the [so called] left?” Thomas M. Franck, *Is Anything “Left” in International Law?*, 1 UNBOUND: HARV. J. LEGAL LEFT 59, 62 (2005). For a seminal work on Critical Legal Studies, see ROBERTO M. UNGER, *THE CRITICAL LEGAL STUDIES MOVEMENT* (1983). For an insightful review of the early critical legal scholarship, see Alan Hunt, *The Theory of Critical Legal Studies*, 6 OXFORD J. LEGAL STUD. 1 (1986).

295. Koskenniemi describes the Newstream as “best understood as a critical sensibility that examines international law from a wide range of intellectual strands: philosophy, political theory, sociology, anthropology, cultural and women’s studies and so on in order to reassess its meaning, contemporary relevance and future role.” Martti Koskenniemi, *Preface to the Special Issue: New Approaches to International Law*, 65 NORDIC J. INT’L L. 337, 340 (1996). Koskenniemi, however, does not consider the Newstream to be a movement or a program. *Id.*

296. See generally ALLOTT, *supra* note 264.

297. See generally MARTTI KOSKENNIEMI, *FROM APOLOGY TO UTOPIA: THE STRUCTURE OF INTERNATIONAL LEGAL ARGUMENTS* (2005).

### *1. Lex Specialis and Lex Generalis: Beyond Doctrines*

It is the general understanding that doctrines link special branches to general international law.<sup>298</sup> This relationship operates on the basis of the maxim *lex specialis derogat legi generali*.<sup>299</sup> However, when doctrines which have been the adhesive die out in a new world order, the linkage is certain to rupture. Contemporary international law scholarship is resplendent with writings analyzing the extent of the rupture, although the analyses end with the consolation that there is still life left in the doctrines. However, progressive-minded scholars do not anguish over the fate of doctrines; for them rhetoric/discourse patterns are the factor uniting isolated “units” of international law into a coherent whole.<sup>300</sup> This view retains the traditional understanding that international law is a “structural whole,”<sup>301</sup> with units<sup>302</sup> or

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298. Simma and Pulkowski have demonstrated that this is in fact the reality. They demonstrate the linkage between general international law and self-contained regimes (the expression “special branches” has become somewhat archaic) such as the WTO, EC law, diplomatic law, and human rights using the principle of state responsibility. They conclude that “general international law provides a systemic fabric from which no special legal regime is completely decoupled.” Bruno Simma & Dirk Pulkowski, *Of Planets and the Universe: Self-Contained Regimes in International Law*, 17 EUR. J. INT’L L. 483, 529 (2006). Rosalyn Higgins supports this position, noting that experiments within the International Court of Justice have shown that no special branch can be litigated outside the domain of international law. Rosalyn Higgins, *Respecting Sovereign States and Running a Tight Courtroom*, 50 INT’L & COMP. L. Q. 121, 122 (2001).

299. On the concept, application, and functional difficulties of this maxim with respect to international law, see generally Lindroos, *supra* note 240.

300. David Kennedy has reformulated rhetorical modes as the factors uniting international law with units such as “state,” “politics,” and “international society.” See David Kennedy, *A New Stream of International Law Scholarship*, 7 WIS. INT’L L.J. 1 (1988).

301. Piaget defines a structure as “a system of transformations . . . the notion of structure is comprised of three key ideas: the idea of wholeness, the idea of transformation, and the idea of self-regulation.” JEAN PIAGET, *STRUCTURALISM* 5 (Chaninah Maschler trans., 1971). The idea of law being a structure has been recognized since Hans Kelsen. See HANS KELSEN, *GENERAL THEORY OF LAW AND STATE* 123-61 (RUSSELL & RUSSELL 1961) (1945). However, in Kelsen’s view, international law is merely a superior element and not a structure in itself. Yet, many other twentieth century international law scholars in their routine analyses employed the idea of a structure from various dimensions, formally and informally. Even the notion “system,” whereby general international law is linked to the special branches by way of doctrines, evokes the idea of a structure. *Id.*

“elements” being fragments of that whole. Scholars of international law routinely indulge in discourse, a process which generates a certain set of values unique to the “whole.” This type of rhetoric and its operation are well articulated by linguists in “critical discourse analysis,” a method which helps one to identify the role of language in the social process.<sup>303</sup> Without detailing the role of language in the social process,<sup>304</sup> suffice it to say that all postmodern social architectures, including international law, are constituted by discourse. A discourse exists in three forms 1) as texts, 2) as discursive practices, and 3) as social practices.<sup>305</sup> *Texts* are “either written or spoken discourse”<sup>306</sup> which comprise various societal interactions, e.g., diplomatic correspondence, telecasts, scholarly rhetoric. *Discursive practice* is the method of embedding a text into its context, using various techniques.<sup>307</sup> In *social practice*, texts are interpreted in terms of the context and social dynamics are assessed.<sup>308</sup> In other words, “for any discursive event . . . text producers and interpreters draw upon the socially available resources . . .”<sup>309</sup> A social stir is created when all three forms of discourse perform a linear operation.

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302. The term “units” is used in a rather broad sense to cover everything (including politics, international organizations, and diplomacy) that international law maintains by means of linkages to its “whole,” special branches being one such unit. This understanding is gained from David Kennedy’s assertion “law is nothing but an attempt to project a stable relationship between spheres it creates to divide.” Kennedy, *supra* note 292, at 8.

303. For a seminal work on critical discourse analysis, see generally NORMAN FAIRCLOUGH, *CRITICAL DISCOURSE ANALYSIS: THE CRITICAL STUDY OF LANGUAGE* (1995) (discussing the role language plays in shaping the order of discourse). On the role of language in the social process, see NORMAN FAIRCLOUGH, *DISCOURSE AND SOCIAL CHANGE* (1995). For a review of the literature on critical discourse analysis covering its methodology, range and operation, see Jan Blommaert & Chris Bulcaen, *Critical Discourse Analysis*, 29 ANN. REV. ANTHROPOLOGY 447 (2000). These works have informed the account presented here, although it does not strictly adhere to the method in all of its particulars.

304. Readers interested in the role of language in shaping society are directed to the sources cited *supra*, note 303.

305. Blommaert & Bulcaen, *supra* note 303, at 448-49.

306. FAIRCLOUGH, *CRITICAL DISCOURSE ANALYSIS*, *supra* note 303, at 4.

307. *Id.* at 10.

308. Blommaert & Bulcaen, *supra* note 303, at 449.

309. FAIRCLOUGH, *CRITICAL DISCOURSE ANALYSIS*, *supra* note 303, at 10.

What generates a discourse? Discourse originates in the mind. The postmodern mind, however, is not a phenomenon in its own right; it is, to quote Richard Tarnas, “an open-ended, indeterminate set of attitudes that has been shaped by a great diversity of intellectual and cultural currents . . . .”<sup>310</sup> The receptiveness to such diverse attitudes owes to the mind’s subjectivity, which has evolved incrementally from the level of the cerebrum through the “interaction of organism and environment.”<sup>311</sup> “Interaction” is the mind’s reflexivity to certain signals transmitted by society, dictated by the cortex of the brain.<sup>312</sup> In this reflexive process, the mind consistently analyzes the meanings linked to the social customs and habits embedded in it and, whenever required, reorganizes those meanings and understandings.<sup>313</sup> This reflexivity and subsequent reorganization are carried out through language and actions. Here lies the structuring role of discourse. In practical terms, the linear operation of the three elements of discourse—texts, discursive practice, and social practice—constitute interaction.

When actors of international law engage in similar interactions, or discourse, values are formed. The actors associate the values with various units, including special branches, again through discourse. When there is a conflict between units or between a unit and the whole, the discourse modes reduce conflicting values into harmony<sup>314</sup> although the plurality of values remains,<sup>315</sup> both in the whole as well as among the units. Discourse maintains an axiological harmony.

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310. RICHARD TARNAS, *THE PASSION OF THE WESTERN MIND: UNDERSTANDING THE IDEAS THAT HAVE SHAPED OUR WORLD VIEW* 395 (1991).

311. J.D. Stoops, *Society and the Subjective Mind*, 44 *PHIL. REV.* 99, 103 (1935). No analysis of the formation of the subjective mind should overlook the explanatory power of Freud’s psychoanalysis. *See generally* SIGMUND FREUD, *THE EGO AND THE ID* (James Strachey ed., Joan Riviere trans., rev. ed. 1989).

312. Stoops, *supra* note 311, at 112.

313. *Id.*

314. In St. Augustine’s philosophy of axiological monism, God acts as the single value to which all conflicting values can be reduced. *See* CH. PERELMAN, *THE NEW RHETORIC AND THE HUMANITIES: ESSAYS ON RHETORIC AND ITS APPLICATIONS* 62-72 (1979). Perelman presents various positions akin to St. Augustine’s, but concludes that philosophical pluralism acts as a safety valve against “the coercion imposed in the name of a unique value . . . .” *Id.* at 71.

315. On the plurality of values in the traditional international law context, see Josef L. Kunz, *Pluralism of Legal and Value Systems and International Law*, 49

While the far-reaching global changes occurred, scholarly minds in space law were psychologically committed to the positivist idea of rules and principles. The reflexive sense of those minds lay dormant under the weight of doctrines, which were impressed upon them by the parent structure—international law. Any scope there might have been for self-criticism was reduced to nothing by certain fixations. Every time the mind responded to a stimulus, it looked at the parent structure for a world-view; every signal from society was perceived in terms of the values held by international law. In effect, there was no direct interaction between the mind and society where space law was concerned. At the same time, certain scholars of international law, who were directly interacting with society,<sup>316</sup> sensed a change in the patterns of international life. This was followed by an evaluation of the “self” and the designs of knowledge and structures of international law, the outcome of which was an ambivalent feeling—one nihilistic yet self-assured.<sup>317</sup> However, the scholarly minds interacted effectively with the new environment: new methods and patterns of discourse and ways of working in the discipline were laid down which *inter alia*, as elsewhere, recast the relationship between special branches and international law. In the new scheme, relative autonomy was granted to special branches with regard to certain functions, e.g., framing optimal policies and strategies, setting standards, settling disputes, and educating students.

If these functions are taken together, space law resembles a closed group working on its own. However, the new posture failed to remedy one major handicap in the discipline: if previously it was the aura of doctrines which blinded the scholarly minds in space law to a worldview, it is now the autonomy granted by international law that does so. Interaction with society is nevertheless pursued by the scholarly minds in international law who dictate the progress of space law and of other special branches as well. In other words, the

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AM. J. INT’L L. 370 (1955).

316. Even then, among the international law scholars, only a fraction who embraced a multidisciplinary approach had direct interaction with society. The heavy doctrinal conceptualism left the rest no different than their counterparts in space law.

317. I owe this view to a general reading of Outi Korhonen, *New International Law: Silence, Defence or Deliverance?*, 7 EUR. J. INT’L L. 1 (1996).



apparent self-sufficiency of space law is an illusion,<sup>318</sup> the space law group has committed the grave mistake of assessing the ontology of the discipline on the basis of its illusory autonomy.

*B. Comparable Trends: The Law of the Sea, Human Rights Law, and Environmental Law*

The emphasis on the progressive-mindedness of space lawyers is encouraging. The subsequent assertion of self-sufficiency for the discipline is also justifiable if one sympathizes with the system of reasoning to which space law was habituated. However, the sentiment that the internal robustness and external dynamism of the discipline constitute a secession from international law is a failure to comprehend the prescriptions of international law. The approach of space law is, nevertheless, not the only one of its kind. Cultural characteristics similar to those of space law can be observed in other special branches of international law as well. This section concisely captures the epistemic characteristics of three such special branches—the law of the sea, human rights, and environmental law—with an emphasis on the scholarly sensibilities prevailing in them during postmodernity.<sup>319</sup>

*Law of the Sea (LOS)*

“The law of the sea is a microcosm of international law,”<sup>320</sup> and has developed parallel to international law.<sup>321</sup> Having been nurtured by the ethical ingenuities and imaginative flights of reflection of the natural lawyers, LOS went on to become the subject of the most comprehensive codification ever seen in international law. The “Grotian tag” attached to the discipline drew many early aspirants to choose LOS for developing their understanding of international

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318. ILC REPORT, *supra* note 240.

319. This presentation of the epistemic culture of and scholarly sensibilities in all three branches of law is not based on a comprehensive review of the scholarly works in the respective branches. The objective of this section is only to emphasize certain trends the branches share with space law.

320. M.H. Mendelson, *The Flux and Reflux of the Law of the Sea*, 5 OXFORD J. LEGAL STUD. 285, 285 (1985).

321. *See* R.P. ANAND, ORIGIN AND DEVELOPMENT OF THE LAW OF THE SEA 1-9 (1981). However, Anand disputes that the euro-centricism of international law is also present in the law of the sea. *Id.*

law.<sup>322</sup> It would not be an overstatement that the expositions of every medieval scholar of international law have a theoretical reliance upon LOS. Whereas traditional scholarship on LOS focused on mapping physical zones of the sea and the pinning of relevant doctrines to those zones, later scholars focused on legitimacy in the exploration of ocean resources and navigation. Over a period of four centuries since Grotius, the discipline imparted meaning to doctrine, ideology, policy, diplomacy, and litigation in international law.

The conclusion of the United Nations Convention on the Law of the Sea (UNCLOS) in 1982 marked the victory of diplomacy over ideology, yet LOS was to plummet to more formidable clashes between ideology and law.<sup>323</sup> The scholarly omnipresence of McDougal and his policy jurisprudence was felt in this phase.<sup>324</sup> Within a decade, the rise of free trade and the subsequent alterations of UNCLOS<sup>325</sup> also gave rise to a skeptical scholarship, mostly from the southern hemisphere.<sup>326</sup> When the free-trading market economy boomed, maritime activities expanded in tandem with the demands of the market. In response, LOS was fragmented into specialized

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322. For an account of Grotius' perspective on the law of the sea and the various factors which influenced his writings on the subject, see FRANS DE PAUW, *GROTIUS AND THE LAW OF THE SEA* (1965).

323. This clash and its causes have been effectively articulated in MARKUS G. SCHMIDT, *COMMON HERITAGE OR COMMON BURDEN?* (1989). The major protester against the UNCLOS regime was the United States, whose objection was primarily based on ideological grounds and "directed against the creation of an 'unaccountable and self-perpetuating world bureaucracy dedicated to regulating and taxing free enterprise.'" *Id.* at 307 (quoting William Safire, Essay, *A Decent Respect*, N.Y. TIMES, Feb. 4, 1985, at A19). There was also dissatisfaction with the deep seabed regime. *See generally* R.P. Anand, *UN Convention on the Law of the Sea and the United States*, 24 INDIAN J. INT'L L. 153 (1984).

324. *See, e.g.*, MYRES S. MCDUGAL & WILLIAM T. BURKE, *THE PUBLIC ORDER OF THE OCEANS: A CONTEMPORARY INTERNATIONAL LAW OF THE SEA* (1987) (discussing how the law of the sea is an important part of the overall decision-making process involved in earth- and space-related law).

325. *See* Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea, 33 I.L.M. 1309 (1994). *See also* The Secretary-General, *Report of the Secretary-General on Outstanding Issues Relating on the Law of the Sea, delivered to the General Assembly*, U.N. Doc. A/48/950 (June 9, 1994).

326. *See, e.g.*, Yogesh Tyagi, *Towards UNCLOS IV?*, 27 J. WORLD TRADE 143 (1993).

subdisciplines under stylish labels, e.g., admiralty law (maritime issues and offenses), shipping law (issues relating to vessels such as carriage of goods and passengers, ship recycling, etc.), and marine law (to some extent used synonymously with LOS, although it gives priority to issues relating to fisheries, pollution, the market, insurance, and so forth). New outlets—consultancies, NGOs, and law firms—were opened to provide expertise on marine, admiralty, and shipping-related issues. However, the most significant spin-off of the new situation was the heterogeneity in the LOS community; with the entry of new professionals such as attorneys, ex-sailors, and managers into the field, lawyers, discussing on and invoking various principles and precedents of LOS, have become few in number. The research themes and the nature of texts in the discipline have slanted noticeably towards applications and strategies in preference to doctrines and rules.

Traditional LOS scholars are struggling to retain their past glory within the scholarly community. Issues that were once part of their domain of analysis are being effectively deliberated and executed by other professionals; while the conventional scholarly discourse is caught up in verbosity, “fieldworkers” get to the bottom of issues with the aid of various organizational models and tools.<sup>327</sup> However, this situation cannot be considered a complete seizure by non-legal professionals, for task allocation to relevant bodies or professional groups seems to be a workable strategy for developing UNCLOS.<sup>328</sup>

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327. One issue where this seizure by the non-legal professionals is apparent is marine pollution. Where most of the scholarly discourse on marine pollution vacillates over the articulation of the procedural crisis within UNCLOS or suggestions regarding institutional reform or national concerns, management professionals devise objective-level projects providing technical support to implementation operations, e.g., the Decision Support System—a management strategy to combat oil spills, particularly in coastal areas. See S. Zahra Pourvakhshouri & Shattri Mansor, *Decision Support System in Oil Spill Cases*, 12 *DISASTER PREVENTION & MGMT.* 217 (2003) (reviewing the literature on various oil spill prevention strategies).

328. Alan Boyle has presented various strategies for developing UNCLOS, e.g., reinterpreting UNCLOS, using soft law mechanisms and regional agreements for furthering the objectives of UNCLOS, and integration with other multilateral treaties. Alan Boyle, *Further Development of the Law of the Sea Convention: Mechanisms for Change*, 54 *INT’L & COMP. L. Q.* 563 (2005). For a case in point regarding the development of UNCLOS, see Kari Hakapää, *Jurisdictional Developments and the Law of the Sea Convention: Some Observations on Vessel-*

If ultimate realization of all schemes is the concern of “somebody else,” what is left for the traditional LOS scholars? Do they not face an “existential crisis?”<sup>329</sup> Asking such questions is in one sense committing the same folly as the space lawyers did (who perceived the autonomy bestowed upon them as liberation from international law), for allocation of tasks to other professionals corresponds to the reorganization of international law’s internal strategies on the basis of the scholars’ interaction with society; traditional LOS scholars engage in that interaction.<sup>330</sup> In addition, implementation of every scheme requires the assistance of scholarly discourse and ratiocination in perceiving a workable approach

#### *Human Rights Law*

Contemporary international lawyers will hesitate before they assert exclusivity for the discipline of human rights—as will philosophers, sociologists, and political theorists: heterogeneity is built into the modern human rights community—scholars, lawyers, activists, and the media. Scholars of international law started to discuss human rights under the rubric Human Rights Law (HRL) after the adoption of the UN Charter and the Universal Declaration of Human Rights, the situation Nagendra Singh positively depicted as the end of the “Albuquerque age” and the “dawn of a new era for humanity.”<sup>331</sup> The next three decades of HRL scholarship was that of

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*Source Pollution, in* STOCKHOLM DECLARATION AND THE LAW OF MARINE ENVIRONMENT 277 (S. Mahmoudi & N.H. Nordquist eds., 2003).

329. Martti Koskenniemi, *What Should International Lawyers Learn from Karl Marx?*, 17 LEIDEN J. INT’L L. 229, 230 (2004) (articulating the extent to which Marxian teachings can help to overcome international lawyers’ existential crisis). “Existential crisis” for Koskenniemi is the uncertainty which an international lawyer feels in the modernist wave and is not strictly limited to the confusion resulting from the fragmentation within a special branch. *Id.*

330. A risk is involved here. If a traditional LOS scholar lacks a multidisciplinary approach and continues to perceive the actions of fieldworkers in terms of his or her traditional way of reasoning, he or she will develop an “existential crisis.” This frame of mind on the part of the traditional LOS scholar is likely to generate a feeling of self-sufficiency among the new professionals of the LOS community.

331. NAGENDRA SINGH, ENFORCEMENT OF HUMAN RIGHTS IN PEACE & WAR AND THE FUTURE OF HUMANITY 5 (1986). On the further development of human rights law, see Theodore S. Orlin & Martin Scheinin, *Introduction, in* THE JURISPRUDENCE OF HUMAN RIGHTS LAW: A COMPARATIVE INTERPRETATIVE APPROACH 1, 3-17 (Theodore S. Orlin et al. eds., 2000).

rational appraisals and critiques of the human rights instruments and institutions of the UN system.<sup>332</sup> It was an effort to positivize HRL. In contrast, a parallel scholarship burgeoned in the United States highlighting the unconstitutionality of the UN's treaty dimension of human rights: the domestic application of the human rights provisions of the UN Charter and other instruments prompted scholarly skepticism towards the authoritarianism of the UN human rights machinery.<sup>333</sup> Regardless of the divergence in opinion, human rights lawyers at that time had exclusivity of discourse. In those discourses, the state—the principal “abuser” as well as “guarantor” of human rights—was the object of accusations as well as accolade.<sup>334</sup> With globalization, as global interactions intensified, there was a sudden rise in human rights awareness, resulting in crosscutting human rights, e.g., the right to development, right to environment, collective rights, minority rights and women's rights, what Messer classifies as “third and fourth generation” human rights.<sup>335</sup> The exponential increase in

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332. See, e.g., HERSCH LAUTERPACHT, *INTERNATIONAL LAW AND HUMAN RIGHTS* (1973) (discussing the impact of the UN Charter and Bill of Rights on human rights); John Carey, *Progress on Human Rights at the United Nations*, 66 AM. J. INT'L L. 107 (1972); Josef L. Kunz, *The United Nations Declaration of Human Rights*, 43 AM. J. INT'L L. 316 (1949); Theodor Meron, *Norm Making and Supervision in International Human Rights: Reflections on Institutional Order*, 76 AM. J. INT'L L. 754 (1982); Myres S. McDougal & Gerhard Bebr, *Human Rights in the United Nations*, 58 AM. J. INT'L L. 603 (1964) (although McDougal and Bebr considered the UN human rights system a legacy of the great historic movements of the past, it is far from perfect. They suggested that the United Nations should “clarify and demonstrate” to the people of the world that the Organization can provide them with *inter alia* an opportunity to maximize their own personal values); Egon Schwelb, *International Conventions on Human Rights*, 9 INT'L & COMP. L. Q. 654 (1960); Louis B. Sohn, *United Nations Machinery for Implementing Human Rights*, 62 AM. J. INT'L L. 909 (1968); Edgar Turlington, *The Human Rights Commission at the Crossroads*, 45 AM. J. INT'L L. 534 (1951).

333. See, e.g., E.H.C., *The Declaration of Human Rights, the United Nations Charter and Their Effect on the Domestic Law of Human Rights*, 36 VA. L. REV. 1059 (1950) (highlighting, however, the inviolability of the Charter in concluding the article).

334. Sumner B. Twiss, *History, Human Rights, and Globalization*, 32 J. RELIGIOUS ETHICS 39, 39 (2004).

335. Ellen Messer has classified human rights on a chronological basis into four categories: 1) first-generation human rights (civil and political rights), introduced by the Western nations in the aftermath of World War Two; 2) second-generation human rights (socio-economic and cultural rights), added by the socialist

new actors (abusers as well as guarantors) such as transnational corporations, NGOs, and social movements was another notable change in the theory and practice of HRL.<sup>336</sup>

Professional fragmentation and the emergence of new practitioners struck HRL at this phase, with “cause lawyers” and “activist-scholars” being the archetypal examples. Cause lawyers (most activists themselves) work hand in hand with the human rights monitoring and reporting agencies for the enforcement of rights,<sup>337</sup> whereas scholar-activists engage in interactions with society in order to enrich their worldview. In this way, they aid the cause lawyers in their endeavor, since they supposedly have a finer-grained worldview than generalist HRL scholars: scholar-activists have a higher perceptivity towards the given social situation, which facilitates a fair presentation and interpretation of the rights in question.<sup>338</sup> The situation seems to bear out “Lawrence Freidman’s observation that ‘law is too important to be left to lawyers.’”<sup>339</sup> Does it mean that conventional HRL scholars/lawyers are inferior in the human rights community? Or, do they, like LOS scholars, face an existential crisis? The Herculean image of scholar-activists is somewhat overemphasized. Having no doubt about their greater perceptivity to social situations, the genuineness of their worldview is doubtful. Even while appraising the social relevance and the power of the arguments of various activist-scholars, one must avoid the projection of their respective orientation, be it ethnic, political, ideological, or gender-based.<sup>340</sup> The resulting worldview, which is the basis for every further action by them, will be predisposed towards one or another

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states; 3) third-generation human rights (solidarity or development rights), added by the former colonies of Asia and Africa; and 4) fourth-generation human rights (indigenous rights), introduced by indigenous peoples. Ellen Messer, *Anthropology and Human Rights*, 22 ANN. REV. ANTHROPOLOGY 221, 222-23 (1993).

336. Twiss, *supra* note 334, at 50-56 (detailing the emergence and role of each new actor).

337. On the tasks and work of a cause lawyer, see Lisa Hajjar, *Cause Lawyering in Transnational Perspective: National Conflict and Human Rights in Israel/Palestine*, 31 L. & SOC’Y REV. 473 (1997).

338. For support, see Frank Munger, *Inquiry and Activism in Law and Society*, 35 L. & SOC’Y REV. 7 (2001) (presenting the orientation and arguments of various scholar-activists).

339. *Id.* at 8.

340. *See id.*

orientation. Acceptance of all such worldviews coming from different quarters implies a plurality of worldviews which, in effect, undermines the universality of human rights established by international law.<sup>341</sup> In sum, *law is too important to be left to activists*. However, when interaction with society is left to conventional generalist HRL scholars, who have a broad frame of mind, sterilized of any sort of orientations, the resulting worldview is likely to be less parochial. Yet, considering the relatively higher perceptive power of scholar-activists, conventional HRL scholars accept the plurality of worldviews and engage in discourse to bring coherence to the worldviews fetched by the scholar-activists, thereby maintaining the universality of human rights. However, if HRL scholars attempt to bring coherence through their conventional pattern of thinking, i.e., by threading the worldviews together using doctrines and rules, it is likely that they will develop a sense of futility in their task and anguish over their loss of identity; a multidisciplinary critical outlook and pattern of discourse can overcome such feelings of futility and anguish.

#### *Environmental Law*

In the year 1968, when Garrett Hardin's *Tragedy of Commons* exposed the threat that political realism poses to the global environment, it set in motion a chain of legal controls for the protection of the environment.<sup>342</sup> At the domestic level, after a grand legislative exercise—a cost and effect analysis with the principles of torts<sup>343</sup>—certain dimensions of environmental pollution mainly

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341. The universality of human rights has been laid down in Article 55 of the UN Charter and has been reaffirmed in the preamble of the Vienna Declaration on Human Rights, 1993. See Vienna Declaration and Programme of Action, A/CONF.157/2 (July 12, 1993).

342. See generally Garrett Hardin, *The Tragedy of Commons*, 162 SCIENCE 1243 (1968). According to Hardin, self-interest or the desire to maximize one's gain can threaten the existence of a commons, which has limited resources for the community. *Id.* The answer to the tragedy, according to David Wilkinson, is rational use of the commons aided by systems of "self-regulation." See DAVID WILKINSON, ENVIRONMENT AND LAW 7 (2001).

343. For a brief portrayal of the history of environmental legislation in the United States, see Robert V. Percival, *Environmental Law in the Twenty-First Century*, 25 VA. ENVTL. L.J. 1, 4-10 (2007). On the implications of the environmental legislative boom of the 1970s for various segments of American society, see PHILIP SHABECOFF, *A FIERCE GREEN FIRE: THE AMERICAN*

required international legislative responses.<sup>344</sup> However, scholars of international law were concerned over the inadequacy of the existing international legal order to deal with various environmental issues. They sought alternative frameworks, e.g., ones within which “principles from traditional fields of international law can be combined into a coherent order of ‘international environmental law’ [IEL]”<sup>345</sup> and “international ecostandards” whereby standards set by technical experts within the treaty framework regulate environmental protection.<sup>346</sup> Accordingly, IEL, in contrast to other special branches, diverged from traditional international legal methods although not from the ambit of the doctrines of international law per se.<sup>347</sup>

In the 1980s, when scholars conclusively agreed that there existed (at least latent) “relative normativity” in international law,<sup>348</sup> IEL, impoverished due to the “modesty” of international law principles<sup>349</sup> and benumbed by the decentralized nature of the international legal

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ENVIRONMENTAL MOVEMENT 121-39 (2003).

344. For example, according to Alexandre Kiss, transboundary pollution and pollution of the interrelated components of the natural environment such as oceans, air, and international rivers require international legislative action. Alexandre Kiss, *The International Protection of Environment*, in *THE STRUCTURE AND PROCESS OF INTERNATIONAL LAW* 1069, 1069-87 (R. St. J. Macdonald & D.M. Johnston eds., 1986).

345. Note, *New Perspectives on International Environmental Law*, 82 *YALE L.J.* 1659, 1660 (1973).

346. Paolo Contini & Peter H. Sand, *Methods to Expedite Environmental Protection: International Ecostandards*, 66 *AM. J. INT’L L.* 37 (1972).

347. For example, Gunther Handl had emphasized the applicability of the principle of territorial sovereignty with regard to transboundary pollution. See Gunther Handl, *Territorial Sovereignty and the Problem of Transnational Pollution*, 69 *AM. J. INT’L L.* 50 (1975). He attempted to analyze the extent to which a claim made by a state against the transboundary pollution caused to its territory by another state while performing an activity that is lawful per se can be sustained on the grounds of violation of sovereignty. He affirmatively concludes that existence of material damage to the state or its populace can sustain such a claim. *Id.*

348. See, e.g., Prosper Weil, *Towards Relative Normativity in International Law?*, 77 *AM. J. INT’L L.* 413 (1983).

349. Ian Brownlie, *A Survey of International Customary Rules of Environmental Protection*, in *INTERNATIONAL ENVIRONMENTAL LAW* 1-11 (Ludwik A. Teclaff & Albert E. Utton eds., 1974). Brownlie characterizes customary international law in the absence of any institutions as “modest,” analyzes the principle of state responsibility in environmental issues. *Id.*



system, found in the legislative convenience of the secondary forms of normativity, e.g., “soft law,” a prospect for its development and effectiveness. The resulting innovativeness in environmental lawmaking “ultimately constitut[ed] a powerful factor pushing forward towards a transformation of the fundamental basis of international law.”<sup>350</sup> This mechanical utility of environmental law situated it within the structure of international law.

However, in the postmodern era, IEL used its much hyped methodological innovation to slip away from the frontiers of international law. The postmodern era, according to Tuomas Kuokkanen, for IEL “is marked by an increased reliance on technical expertise, recognition of the ambivalent . . . relationship between man and nature, the integration of fields previously considered separate, and the balancing of economic interest and environmental concerns.”<sup>351</sup>

In other words, a dramatic increase in environmental consciousness, the use of interdisciplinary optics to appraise environmental policies and regulation<sup>352</sup> and a strategy- and management-oriented approach towards environmental problems<sup>353</sup> signaled the move to postmodernity. In a profoundly integrated (postmodern) world driven by economic ideologies, environmental matters assumed a materialistic dimension and environmental protection, in particular, embraced an objective approach. New strategies and multi-expert systems compatible with the new situation, e.g., Environmental Impact Assessment, bid every environmental professional to toe the line, and international lawyers judiciously rose to the occasion with a new sense of self-identity and a reformulated

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350. ALEXANDRE KISS & DINAH SHELTON, INTERNATIONAL ENVIRONMENTAL LAW 2 (1991).

351. TUOMAS KUOKKANEN, INTERNATIONAL LAW AND THE ENVIRONMENT: VARIATIONS ON A THEME xxix (2002).

352. Although synergy with science is generally put forward as the case in question, the relevance of other branches of knowledge, for instance, philosophy, in interpreting and shaping environmental policies, strategies, and regulations cannot be overlooked. See JOSEPH R. DES JARDINS, ENVIRONMENTAL ETHICS: AN INTRODUCTION TO ENVIRONMENTAL PHILOSOPHY (3d ed. 2001) (providing insights into how far philosophy can guide in the formulation of methods and decision making concerning environment).

353. KUOKKANEN, *supra* note 351, at 261-86 (presenting a larger management framework under the rubric “environmental governance”).

plan of action. They, in addition to performing specialist functions, employed state-of-the-art methods within the traditional international law frameworks,<sup>354</sup> e.g., strategizing and managing within the climate change regime.<sup>355</sup> On balance, the situation resembled an advantageous purchase in the face of losing their professional exclusivity in environmental protection.

### *C. Methodological Summary and Conclusion*

In this counter-defense, international law, while concurring with the overall streamlining of space law, refuted the latter's claim of being severed from international law on the grounds that the streamlining has been designed only by the scholars of international law. This is the primary belief (A). The presentation of the epistemic culture of the three branches of international law set out the sub-beliefs (B). However, in this context, it is only the coherent understanding of the attitudes and mores of the scholars of all three of these branches of international law that supports the primary belief and not that of a single branch in isolation. This is apparent from the dissimilar response and adaptations made by the scholars in each branch; while scholars of LOS and HRL retreated from certain specialist roles and committed themselves solely to the task of sustaining and building normativity through societal interaction, IEL scholars traversed the complexities of postmodernity by expanding their knowledge bases and skills. A collective assessment makes obvious the postmodern challenges faced by these branches of law. The commonality between the internal dynamics of these branches of international law and that of space law supports the primary belief as to the defining role of international law.

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354. However, Bodansky asserts that "the distinctive characteristics of international environmental problems" do not even require international environmental lawyers to be international lawyers. See Daniel Bodansky, *Does One Need to Be an International Lawyer to Be an International Environmental Lawyer?*, 100 AM. SOC'Y INT'L L. PROC. 303, 306 (2006).

355. For a comprehensive account of the structure and functioning of the climate change regime under the United Nations Framework Convention on Climate Change and its Kyoto Protocol, see FARHANA YAMIN & JOANNA DEPLEDGE, *THE INTERNATIONAL CLIMATE CHANGE REGIME: A GUIDE TO RULES, INSTITUTIONS AND PROCEDURES* (2004).

## V. CONCLUSION

Having thus far justified the respective beliefs, space law and international law now stand ready for a relative evaluation of the justifications in terms of reality. Reality in the present methodology is to be ascertained within the frame of a descriptive coherence, i.e., a belief or judgment is true when “its content embraces, or at least belongs to, the one coherent system of the world.”<sup>356</sup> Although the article earlier hinted at the difficulty in ascertaining a preconceived reality, a coherent system of order materialized from the arguments of both sides. The coherence is that opinions from both sides converge on the vicissitudes of the world order (even though both sides are programmed to debate contradicting hypotheses or beliefs), e.g., the impact of postmodernity on space law and international law has been verified as corresponding to one another logically. To illustrate, the contentions of space law predicated on its “progressive sensibility” have been vouched for by international law as being in accordance with the script it has for its special branches in a new world order. Hence the point of convergence of opinions is the idea of an inevitably changing world, which constitutes the *reality*. Accordingly, the weight of the arguments of both sides can be gauged on the basis of the extent of coherence an argument has with the idea of an inevitably changing world. In other words, any argument which is irreconcilable within the structure of postmodernism can be dismissed.

Once we subtract the points of convergence from the whole set of arguments made by both sides, what remains is space law’s assertion regarding its disjunction from international law and its resulting feeling of self-sufficiency. It is the only assertion which international law has chosen to oppose. Therefore, an assessment of the truth centers on this point of divergence.

For space law, disjunction from the structural complex of international law is a rational action, as space law is cynical about the reliability of international law given the latter’s disorganized state—a postmodern phenomenon. The disjunction—a postmodern response—was carried out through a decomposition technique, which separated various elements of space law, e.g., profession, education, episteme,

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356. Baldwin, *supra* note 228, at 39. See also *supra* Part III (Working Method).

and working methods, from any significant influence of international law and conferred a new meaning on them. However, as convincing as the idea of the “progressive mindedness” of space law is, the notion of severance from international law is equivalently weak. There is little doubt that postmodernism has a fragmentary nature, but it is also true that a fragmented subject has the capability of “self-management.”<sup>357</sup> On this point, space law gains merit. However, self-management is one among the many features of an iceberg-like phenomenon; it would be folly to generalize about postmodernism on the basis of a single feature. Although it progresses with diverse and inexplicable techniques, postmodernism has a functional property common to those techniques, one example being the “spoke structure” of intersecting circles depicting social life in a postmodern world.<sup>358</sup> The spokes link every *interconnected* sphere to a center, which can be a value system or a conglomeration of beliefs. Postmodernism adopts this basic character in its “regime-building” process. To understand the real architecture and functioning of the spoked structure, the interpreter should have an interdisciplinary approach; a monodisciplinary outlook can only reveal visions of one’s own realm and its peripheries; neither the center nor the spokes, which connect the center to the realm, will be visible.

Space law committed the folly of judging postmodernism through a myopic eye, failing to see beyond the changes in its realm, and decided that it had detached itself from international law—the center. However, as pointed out in the counter-defense, such a mind-set can be found in other branches of international law as well. In addition, the feeling of self-sufficiency among the special branches of international law has been aggravated by a group of scholars who in an orthodox fashion adhere to the traditional international law framework. The plight of this group has, however, been hinted at the counter-defense in the examples of LOS, HRL, and IEL. It is a group which advances with its old techniques of reasoning totally unaware

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357. Joel F. Handler, *Postmodernism, Protest, and the New Social Movements*, 26 L. & SOC’Y REV. 697, 701 (1992). Handler highlights the self-managing capacity of fragmented subjects in the context of postmodern politics. *Id.*

358. See Bernice A. Pescosolido & Beth A. Rubin, *The Web of Group Affiliations Revisited: Social Life, Postmodernism, and Sociology*, 65 AM. SOC. REV. 52, 62-66 (2000). For a diagrammatic representation of the spoke structure, see Fig. 3, *id.* at 63.

of global realities. Even if aware, they prefer silent adherence, fearful of undermining traditional foundations and ostracism from the scholarly community.<sup>359</sup> The group persists in building concept structures with traditional tools and reading the social meanings of such structures through the traditional lens. The process results in attributing strange meanings to postmodern actions, which culminates in a sense of dysphoria and a severe identity crisis among the members of the group. Members of the group who are aware that international law has been fragmented believe that an assemblage of the fragments can overcome any postmodern challenge.<sup>360</sup>

The renewalist program of international law, initiated by the Newstreamers, designed new working methods and patterns of thinking. Their scheme has a system of channeling the constant fluctuations of society directly to the scholarly mind, which through discourse keeps the discipline up to the requirements of postmodernity. The Newstream program of reawakening the mind to the reality that society is constitutive of the mind itself<sup>361</sup> assimilates the real pulse of postmodernity. When manifest as discourse, the constitutive power of the mind, structures and deconstructs, unites and disunites, coheres and incoheres the various values of postmodern international law.

While the overall balance between the justifications and the derived reality tilts in favor of international law, space law cannot be indicted for any serious misrepresentation of the facts. It can certainly claim to have a progressive sensibility, for the discipline responded constructively to the calls of postmodernity thanks to the built-in survival mechanism present in every branch of law. However, the use of wrong patterns of thinking and obsolete concepts, fueled by the existence of a mainstream that lacked an identity, produced a mistaken feeling of self-sufficiency and independence within the discipline.

The article has accomplished five objectives. First, it has provided a theoretical account of the theory and practice of space law,

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359. Korhonen, *supra* note 317, at 15.

360. This is the view of the critics of postmodernism. See Steven L. Winter, *For What It's Worth*, 26 L. & SOC'Y REV. 789, 791 (1992) (highlighting the contradiction in a critic's address).

361. See Philip Allott, *Reconstituting Humanity: New International Law*, 3 EUR. J. INT'L L. 219 (1992) (articulating humankind's changing perceptions of reality towards the world).

a discipline about which little has been studied philosophically. The lack of philosophical criticism has doomed every effort to regulate space activities to be guided by defective normative conceptions, resulting in an overemphasis on archaic instruments, neglect of certain intellectual movements and failing visions. By providing a critique of space law, the article exposed certain weaknesses of the system which have been obscured by the panegyrics of a certain group. However, the debate format of the article dispelled many of the criticisms as being unsustainable and attempted to strike a fair balance between the critique and the reality.

Second, a supra-doctrinal approach to space law was taken, in view of the fact that doctrines are ill-suited tools for clarifying the ontology of a discipline that has existed as a matter of pride and tradition. Hence, while criticizing and justifying beliefs, the article used a logic and vocabulary free from any doctrinal influence. The approach has broken the shell of the ignorant bliss within which the discipline rested, revealing its dilemma in the tumult of postmodernity, and signaling the need to guide the discipline towards a new world order.

Third, the article endeavored to view the fragmentation of international law through the eyes of space law, a fragmented regime. Examining fragmentation has not been the primary objective of the article, but was included given its significance in situating a discipline within postmodernism; it gave the reader an “inverse perspective” on the phenomenon—a sensory illusion that he or she was evaluating fragmentation, while he or she was in fact evaluating only the mechanics of space law<sup>362</sup> and international law’s resistance to the contentions of space law.<sup>363</sup> In the process, the article observed that fragmentation is not a negative phenomenon but an important development in the renewalist program of international law. However, doctrines no longer have a harmonizing effect on international law.

Fourth, by having McDougal debate with Jenks, the article situated a grand intellectual scheme, otherwise loosely hanging in space law, within the socio-epistemic history of the discipline.

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362. *See supra* Part III.

363. *See supra* Part IV.

Fifth, and finally, the article is the second in a series of critical studies on space law,<sup>364</sup> the central objective of which is “to lead the discipline into the new world order by preventing it from becoming no more than a relic for the archeology of international law” and to set out an alternative vision which considers the universe as an amalgam of human consciousnesses and which transcends the contemporary society-oriented perspectives on the use and exploration of space.

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364. For the introduction to this series, see Sreejith, *supra* note 61.

