MAPPING THE LAW OF LEGALIZING MAPS: THE IMPLICATIONS OF THE EMERGING RULE ON MAP EVIDENCE IN INTERNATIONAL LAW

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Abstract: Parties to boundary and territory disputes often rely on maps favorable to their claims. Traditional international law, however, restricts the evidentiary value of maps so that they provide only collateral, rather than probative evidence of title. Although international tribunals have not yet abrogated the traditional rule on map evidence, their recent decisions show willingness to depart from it in certain circumstances. The emerging new rule on map evidence poses intriguing theoretical as well as practical questions. This Comment analyzes several decisions of the International Court of Justice and the Permanent Court of Arbitration to reveal the evolution in the status of map evidence in contemporary customary international law. These decisions show that today's tribunals bestow more evidentiary value on maps than ever before. The emerging new rule on map evidence may better conform to the domestic practice of states in dealing with map evidence as demonstrated by the examples of Australia and the United States. Finally, by applying the emerging rule to two territorial disputes in the Pacific Rim region—the Russo-Japanese dispute over the Southern Kuril islands, and the Korean-Japanese dispute over Dokdo island—we can surmise how it may influence the resolution of the thorny territorial problems.

I. INTRODUCTION

Maps often play a pivotal role in international boundary or territory disputes. Parties to a territory or boundary dispute often rely heavily on map evidence to prove their title over the disputed area or a particular line as the boundary.1 The subject of such territory or boundary conflicts is usually disposition of land—often island territories—which may have enormous impacts on the lives of ordinary people. For example, if a country loses its title over an island, numerous fishermen could lose their fishing grounds, which are hundreds of miles away from the disputed island.2

It is easy to imagine why a country would do its utmost to prove its title over a disputed territory by collecting evidence, which usually consists, in large part, of maps.3 International law, however, has a very distinctive

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† The author would like to thank the Pacific Rim Law & Policy Journal editorial staff for their support. Any errors or omissions are the author's own.

1 Keith Higget, Evidence, the Court, and the Nicaragua Case, 81 AM. J. INT'L L. 1, 18 (1987).


rule that limits the evidentiary value of maps. Traditionally, international tribunals were more restrictive in evaluating maps than almost any other kind of evidence. In most instances, they regarded maps as secondary evidence at best, and frequently as hearsay in character. Consequently, the evidentiary value of maps often becomes one of the most contentious issues in international boundary or territory disputes. Further complicating the matter, not all courts and tribunals accord the same value to map evidence.

The traditional approach on the evidentiary value of map evidence may, however, be losing its force under current international law. A look into the current practice of international tribunals reveals that maps are treated quite differently today from the traditional approach. Although the tribunals are not yet openly condemning the traditional rule, they are bestowing more evidentiary value to maps than ever before.

This Comment intends to provide some insights into the implications of this change. Theoretically speaking, the change in the attitudes of various international tribunals may be a sign that the relevant customary international law ("CIL") is in transition. For this reason, this Comment will provide a careful analysis of the decisions of major international tribunals, including the International Court of Justice ("ICJ"), the Permanent Court of International Justice ("PCIJ"), and the Permanent Court of Arbitration ("PCA").

This Comment will then analyze the approaches of national legal systems to show that the emerging new rule on map evidence is in closer conformity with another source of international law—general principles of

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4 Id. at 230.
5 Id. at 229-30.
6 Id.
7 See infra Part III.
8 SANDIFER, supra note 3, at 229-40.
9 Contemporary jurisprudence of the International Court of Justice ("ICJ") contains several examples. In the Minquiers and Ecrehos case, the defendant submitted a chart, which was admitted in evidence and used against the respondent, during the course of negotiations. Guenter Weissberg, Maps as Evidence in International Boundary Disputes: A Reappraisal, 57 AM. J. INT'L L. 781, 803 (1963) (construing Minquiers and Ecrehos (Fr. U.K.), 1953 I.C.J. 47 (Nov. 17)). Further, even though the parties introduced numerous unofficial neutral maps to illustrate their arguments, only one jurist opined that maps had little evidentiary value. Id. at 787. In the Frontier Land case, the applicant’s military map carried considerable weight in support of the view that the plots belonged to the plaintiff state; “in the Temple of Preah Vihear case, reliance was placed on the respondent’s maps to demonstrate a subsequent course of conduct and to confirm the conclusion that the defendant state was precluded from contending that she had not accepted the map line.” Id. at 803 (construing Frontier Land (Burk. Faso v. Mali), 1986 I.C.J. 554 (Dec. 22), and Temple of Preah Vihear (Thail. v. Cambodia), 1962 I.C.J. 6 (June 15)).
10 Hight, supra note 1, at 17.
12 One of the best ways to discover any change in CIL is to look into the decisions of international tribunals. MALCOLM N. SHAW, INTERNATIONAL LAW 65 (4th ed. 1997).
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law recognized by civilized nations ("GPL"). Domestic laws of two countries—Australia and the United States—will be examined for this purpose. Although the two countries do not, by any means, represent GPL in a general sense, a brief survey of other legal systems demonstrates that domestic laws reveal a common attitude regarding the evidentiary value of map evidence.

In practice, the emerging importance of map evidence under international law may have some significant consequences for countries involved in territory or boundary disputes. Countries which have stronger map evidence may have a significant advantage under the emerging evidentiary rule. Two territorial disputes within the Pacific Rim region will show the importance of map evidence and how the change in law may, albeit hypothetically, affect the outcome of the disputes, which in turn may change the attitude of the disputing parties.

Part II describes the traditional rule on map evidence, which may be too restrictive for international adjudications. Although international tribunals have not yet openly acknowledged their change of attitude, a careful analysis reveals the evolving status of map evidence under customary international law in Part III. Part III will also explain how this change better reflects the general practice of national courts, as is shown by the examples of Australia and the U.S. Part IV will then show what practical implications the transition may have in international disputes by using two disputes from the Pacific Rim region as examples—the Russo-Japanese dispute over the Southern Kuril islands, and the Japanese-Korean dispute over Dokdo/Takeshima island.

II. MAPS WERE ACCEPTED ONLY AS COLLATERAL EVIDENCE UNDER TRADITIONAL CUSTOMARY INTERNATIONAL LAW

Traditional customary international law has been reluctant to place much evidentiary value on maps in determining the location of a boundary. Even official maps issued or approved by a governmental agency have been ignored in many cases. There are three ways a map may be relevant in an international dispute. First, the parties may submit cartographic evidence as

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14 France and Germany showed a similar attitude towards map evidence. See infra note 136.
15 Weissberg, supra note 9, at 781.
16 Id. In a case where a treaty defined a boundary and a delimitation commission subsequently surveyed the area and prepared a map inconsistent with the treaty provision, the intent of the parties was held to be the governing factor; symbols on a map had little value when in conflict with the treaty. Id.
real evidence of their claims regarding the location of a boundary.\(^7\) Second, maps may offer proof of the exercise of sovereignty over a disputed area or as evidence of a litigant’s intention.\(^{18}\) That is, maps may be offered as evidence demonstrating “an act of a state such as agreement to a given boundary or state of affairs; they can also show an omission of a state such as acquiescence in an indicated boundary through failure to register sufficient protest against it.”\(^{19}\) Finally, maps may constitute evidence of particular types of facts. In this regard, “the technical and scientific maps and charts produced during the maritime delimitation cases of the early 1980s played a peculiar role.”\(^{20}\) They were used primarily “to persuade the [tribunal] that certain elements of the ‘relevant circumstances’ should be accorded a particular treatment.”\(^{21}\) Since the “relevant circumstances” often decide the outcome of maritime delimitation disputes, treatment of the constituting factors becomes a very sensitive issue.\(^{22}\) International law on the evidentiary power of map evidence covers all three types of circumstances where maps can be used as evidence.\(^{23}\)

Many leading scholars of international law have advocated the retention of the traditional status of maps in international law.\(^{24}\) As early as 1933, Professor Hyde, an acclaimed professor of international law, wrote that even a series of maps, no matter how scientifically accurate and numerous, does not necessarily prove the correctness of a boundary.\(^{25}\) According to Hyde, the boundaries described by maps may not be accepted as the legal basis of the proper frontier, “especially when they are contradicted by trustworthy evidence of title.”\(^{26}\) In another of his writings Hyde quotes from the 1927 Canada-Newfoundland Boundary Dispute in the Labrador Peninsula, where the Judicial Committee of the Privy Council ruled that maps, “even when issued or accepted by the departments of the

\(^{17}\) Hight, supra note 1, at 18.
\(^{18}\) Weissberg, supra note 9, at 803.
\(^{19}\) Hight, supra note 1, at 19. This may play an important role in the Russo-Japanese dispute, explained infra Part IV.
\(^{20}\) Hight, supra note 1, at 18.
\(^{21}\) Id.
\(^{23}\) See Hight, supra note 1, at 19.
\(^{26}\) Professor Hyde argued that even if maps effectively admitted the location of a boundary in a certain place, the governmental bodies that produced them could not be shown to have had the authority to make such admissions. Id.
Canadian Government, cannot be treated as admissions binding on that Government.\textsuperscript{27}

In 1939, Professor Sandifer, an expert on the law of evidence in international law, stressed the hearsay character of many of the maps introduced in evidence in boundary arbitrations as proof of contested geographical and political facts. He wrote:

It is necessary only to reiterate here that maps furnish an especially forceful illustration of the dangers inherent in the use of hearsay evidence. As to geographical facts, maps are hearsay evidence unless they are based upon an original survey of the natural features depicted by the map. As to political facts, they are hearsay in character unless the line portraying the boundary on the map was drawn or officially adopted by the officials responsible for the negotiation and definition of the boundary, or unless the map was prepared by an individual or commission designated to survey and chart the line. So far as the question of the extent of the sovereignty of any given state is concerned, therefore, maps are, in a very great majority of cases, hearsay or secondary in character.\textsuperscript{28}

As recently as 1997, Ian Brownlie, one of the most eminent scholars in international law, argued that the cautious approach by international tribunals, which severely restricts the role of map evidence, is appropriate in light of the relevant precedents.\textsuperscript{29} Brownlie offers an exhaustive list of categories of circumstances in which maps are given probative value, but a careful examination reveals these categories are not at variance with the traditional approach.\textsuperscript{30} Hence, Brownlie refers to the traditional view on map evidence as an "appropriately cautious approach."\textsuperscript{31}

\textsuperscript{27} Id. at 315; see also Indo-Pakistan Western Boundary (India v. Pak.), 17 R.I.A.A. 1, 87 (Perm. Ct. Arb. 1968).
\textsuperscript{28} Indo-Pakistan Western Boundary, 17 R.I.A.A. 1, 85.
\textsuperscript{29} BROWNLIE, supra note 24.
\textsuperscript{30} Brownlie's eight categories are: (1) Map evidence and treaty interpretation: maps as parts of the preparatory work; (2) Map evidence and the subsequent practice of the parties; (3) Contemporaneous practical interpretation by the parties attested by maps of other governments; (4) Maps as evidence of acts of jurisdiction; (5) Notoriety and openness of exercise of sovereignty evidenced by maps; (6) Admissions and acquiescence in the form of map evidence; (7) The opinion of authoritative official persons as a form of map evidence; (8) Maps as evidence of non-official professional opinion: evidence of general opinion of repute. Id. at 156-61.
\textsuperscript{31} Id. at 156.
One of the biggest problems with maps is that, "like statistics, cartography can 'lie.'" Thus, international jurists and tribunals have debated not so much the technical accuracy of the maps introduced as evidence, but rather their political correctness. The International Court of Justice, in its *Frontier Dispute* decision, sheds some light on why international tribunals were so critical of map evidence in this regard. Generally speaking, "a natural degree of enhancement or exaggeration" in the map may be "necessary even to perceive any difference between one sector and another" in the map; maps in such cases imply that people put "legal conclusions" in them. International tribunals, however, have traditionally ignored such maps almost in their entirety.

Traditional international law has restricted the evidentiary effects of maps more than any other kind of evidence. Judges, lawyers, and scholars have long warned against any reliance upon maps in international law. Consequently, international tribunals have generally restricted the role of map evidence to corroborate conclusions reached on the basis of other evidence.

### III. EVOLUTION OF THE NEW RULE ON MAP EVIDENCE IS TAKING PLACE IN TWO MAJOR SOURCES OF INTERNATIONAL LAW

Under Article 38 of the Statute of the ICJ there are three main sources of international law: "international conventions," "international customs,"

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32 Hight, *supra* note 1, at 19.
34 See infra Part III.
35 The ICJ stated:

[Other considerations which determine the weight of maps as evidence relate to the neutrality of their sources towards the dispute in question and the parties to that dispute. Since relatively distant times, judicial decisions have treated maps with a considerable degree of caution: less so in more recent decisions, at least as regards the technical reliability of maps. But even where the guarantees described above are present, maps can still have no greater legal value than that of corroborative evidence endorsing a conclusion at which a court has arrived by other means unconnected with the maps. In consequence, except when the maps are in the category of a physical expression of the will of the State, they cannot in themselves alone be treated as evidence of a frontier, since in that event they would form an irrebuttable presumption, tantamount in fact to legal title. The only value they possess is as evidence of an auxiliary or confirmatory kind, and this also means that they cannot be given the character of a rebuttable or *juris tantum* presumption such as to effect a reversal of the onus of proof.]

36 Hight, *supra* note 1, at 19.
37 Id.
38 Hyde, *supra* note 25, at 313.
39 BROWNLIE, *supra* note 24, at 156.
and "general principles of law recognized by civilized nations."\(^{40}\) Because there is no general treaty dealing with the evidentiary value of maps, the rules on map evidence fall under either the rubric of CIL or under GPL. International law scholars generally regard the rule on map evidence as part of the CIL,\(^ {41}\) which necessitates the analysis of several ICJ and PCA decisions recognizing and authenticating the rules of CIL with regard to map evidence.\(^ {42}\) However, the rule governing the evidentiary effect of map evidence may in fact fall under general principles of law rather than CIL. Thus, the laws of two countries—Australia and the United States—which possess detailed rules on map evidence, will be analyzed as examples to reveal the general principles of law on this issue.

A. Customary International Law on the Evidentiary Value of Maps is in Transition

International tribunals play a leading role in the development of CIL.\(^ {43}\) Article 38(1)(b) of the Statute of the ICJ, which is "generally regarded as a complete statement of the sources of international law,"\(^ {44}\) directs the Court to consider "international custom, as evidence of a general practice accepted as law."\(^ {45}\) The material sources of custom include international and national judicial decisions.\(^ {46}\) Judicial decisions of international tribunals are not, strictly speaking, a formal source of international law, but they are often referred to as authoritative evidence of the state of the law.\(^ {47}\) Formally, the role of international tribunals "is confined to ascertaining and applying law which binds only the parties in the case."\(^ {48}\) In actual practice, however, they play a considerable role in the development of international customary law.\(^ {49}\) Seeking a legal basis for their decisions, international tribunals gather and evaluate all available facts which can support the existence of a certain custom.\(^ {50}\) Because such facts are rarely complete and unequivocal, the tribunals' decisions on the existence of a binding rule "often amount[s] to


\(^{41}\) Brownlie, supra note 24, at 156-61.

\(^{42}\) Brownlie, supra note 40, at 20.

\(^{43}\) Anthony A. D'Amato, The Concept of Custom in International Law 43 (1971); Karol Wolke, Custom in Present International Law 71-76 (1964).

\(^{44}\) Brownlie, supra note 40, at 5.

\(^{45}\) Statute of Court, art. 38.

\(^{46}\) Brownlie, supra note 40, at 6.

\(^{47}\) Id. at 19.

\(^{48}\) Wolke, supra note 43, at 71.

\(^{49}\) Id.

\(^{50}\) Id.
choosing the less doubtful alternative."\textsuperscript{51} Hence, an international judicial organ ascertaining custom to some degree creates it.\textsuperscript{52}

Two major international tribunals, the PCA and the ICJ, have dealt with the issue of map evidence for many decades. Their decisions represent the current status of maps in international law. Five of their recent adjudications—two from the PCA and three from the ICJ—are especially helpful in identifying the current status of maps. The tribunals have dealt with the issue of the evidentiary value of maps quite bluntly in these cases. An analysis of the six decisions that follows reveals the heightened status of map evidence under the current CIL, and the factors the tribunals take into account when deciding the amount of deference they will give to maps.

1. Decisions of the Permanent Court of Arbitration

a. The Rann of Kutch Arbitration (India v. Pakistan)

The Rann of Kutch Arbitration, also called the Indo-Pakistan Western Boundary Case, illustrates the typical attitude of international tribunals toward map evidence. The Rann of Kutch is "a desolate area encompassing approximately 8,000 square miles of salt wastes, brakish ponds, marsh and isolated, rocky, elevated bets."\textsuperscript{53} The dispute arose out of the territorial conflicts between India and Pakistan that took place along their borders in 1965.\textsuperscript{54} Through the good offices of the Prime Minister of the United Kingdom, the two states terminated military actions and agreed to refer the boundary dispute to arbitration.\textsuperscript{55}

In the arbitration award ("Award") of 1968, the PCA was wary of openly acknowledging the evidentiary effect of maps, but relied on maps in order to reach its decision. The Award generally did not give much weight to map evidence due to "demonstrable inaccuracy, vagueness and inconsistencies,"\textsuperscript{56} but survey maps were accorded much more weight than

\textsuperscript{51} Id.
\textsuperscript{54} Id.
\textsuperscript{55} Id.
\textsuperscript{56} Indo-Pakistan Western Boundary (India v. Pakistan), 17 R.I.A.A. 1, 535 (Perm. Ct. Arb. 1968). A thorough analysis revealed that none of the original survey maps of the disputed territory depicted the boundary claimed by one of the parties. Id. at 540. The Arbitration Tribunal ruled that none of the so-called compiled maps, which by and large incorporated the boundary depiction adopted in the so-called basic original survey maps, can have independent significance except on either of two grounds. First, a
other types of maps. The Tribunal stated that even though there was no historically-recognized and well-established boundary in the disputed region, the statements and the maps could be interpreted as acquiescence in such claims. This in turn could "amount to a voluntary relinquishment, whether conscious or inadvertent," of the other party's territorial rights in the area. Thus, while the Tribunal relied on map evidence in determining a wide range of issues, it was careful not to openly affirm the evidentiary value of maps in its rulings.

b. Arbitration Between Eritrea and Yemen

The PCA admitted and recognized a broad category of maps as evidence in this case. The dispute involved several groups of islands in the Southern Red Sea: the Mohabbakah islands, the Haycock islands, the Hanish-Zuquar Islands, and the Jabal al-Tayr and the Zubayr Group of Islands. Their location, partly along the shipping lanes connecting to the strategically critical Strait of Bab el-Mandeb ("Gate of Lament") and the southern approaches to the Suez Canal, raised a possible threat to international navigation.

party may argue that extraneous circumstances, such as express approval or other forms of official sanction by authorities outside and above the Survey Department, invested the maps with a greater degree of authority than would be conferred upon them by the mere fact of their issue. Second, the cumulative effect of the publication of official maps in conjunction with other acts or omissions by the British authorities, and the interpretation placed on the maps by those concerned at the time, could be such that the maps must be given decisive weight in determining the issues confronting the Tribunal.

See id. at 535-41.
Id. at 553.
Id.

The Tribunal clearly indicated this point when it ruled that "the evidence on record leaves no room for doubt that none of the maps produced in this case was a conclusive and authoritative source of title to territory, except [one map] on which the boundary delimitation made in the Resolution of 1914 was authoritatively depicted.... However... this depiction... covered only a portion of the boundary at issue." Id. at 566.

The importance of the Eritrea-Yemen case was indicated by the membership of the Arbitral Tribunal. In conformity with the Arbitration Agreement (Article 1), Eritrea appointed as Arbitrators two Members of the International Court of Justice, then President Stephen M. Schwebel and Judge Rosalyn Higgins, and Yemen appointed two of the leading international counsel, Mr. Keith Highet and Dr. Ahmed Sadek El-Kosheri. Eritrea-Yemen Arbitration (Award, Phase I: Territorial Sovereignty) (Oct. 9, 1998) available at http://pca-cpa.org/PDF/EY%20Phase%201.PDF (last visited Jan. 23, 2005). Following the agreement of the Parties to this effect, on Jan. 14, 1997 the four Arbitrators appointed the former President of the ICJ, Sir Robert Y. Jennings, as President of the Tribunal.


Id.
Eritrea claimed the islands primarily on the basis of the Treaty of Lausanne (1923) whereby the Ottoman empire relinquished its rights to them. Eritrean government argued that Italy gained sovereignty over the islands in 1923 and Eritrea inherited the sovereignty from Italy. Yemen, on the other hand, claimed the islands principally on the basis of a theory of reversion, arguing that the islands were historically Yemeni and after the Ottoman Empire left in 1923, the islands reverted back to their original owner (Yemen). The Tribunal rejected both arguments.

After rejecting the principal arguments of the two parties, the Tribunal applied the "principles, rules and practices of international law." In this regard, the Tribunal noted that the parties used maps for different purposes and stated that they had relevance to the dispute in several different ways. The parties to this case attributed different values to the overall significance of maps. Eritrea’s position was that “map evidence in general... was contradictory and unreliable” and could not be used to establish valid claims to territory. Yemen’s position was exactly the opposite. It provided four bases for its use of maps: “as ‘important evidence of general opinion or repute;’ as evidence of the attitudes of governments; to reveal the intention of the Parties in respect of state actions; and as evidence of acquiescence or admissions against interest.”

The PCA divided the maps into different time periods and ruled on their evidentiary value. It is noteworthy that the Court admitted and recognized a broad category of maps as evidence. More importantly, the Court evaluated the relevant maps according to their period of production. It divided the production period into six categories and distinguished the

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64 Eritrea-Yemen Arbitration at 99, para. 363.
65 Id.
66 Id. at paras. 31-34.
67 Id.
68 Id. at 125-26, paras. 448-50.
69 Id. at 9-10, 23, 30-31, paras. 31, 81, 102, 103.
70 Eritrea-Yemen Arbitration at 99, para. 363.
71 Id. at 99-100, para. 367.
72 Id.
73 The Tribunal made an interesting comment about the use of maps by the United Nations:
Yemen has introduced maps from the period of early 1950s to demonstrate that the United Nations considered the Islands not to be part of Eritrea. The key evidence is a United Nations map from 1950. Eritrea has vigorously contested the accuracy of this map, its provenance, authenticity and effect, saying that “[n]o official map was adopted by the United Nations.”
Id. at 101-2, para. 376. The Tribunal ruled that a publication of a map by the United Nations does not amount to its “recognition of sovereign title to territory.” Id. at 102, para. 377. It was so regardless of whether the map was attached as an official commission map, as evidence of compromise, or merely as an illustration. Id. at para. 378.
values each of them held. Although the Court reached its ultimate decision on the basis of evidence other than maps, it commented that the map evidence would have been of greater importance had there been no other evidence in the record. Even where maps produced by the parties were beset with contradictions and uncertainties, the Court ruled that one party’s map evidence was superior in scope and volume to that of the other. This decision not only demonstrates the Tribunal’s willingness to recognize the evidentiary value of maps, but also implies that contradictory maps introduced by the parties do not necessarily cancel out each other’s evidentiary value. This is significant because it would be common for opposing parties to introduce contradicting maps.

Further, with regard to a number of maps produced by third parties such as independent or commercial cartographic sources, or the intelligence, mapping and navigational authorities of third party states, the Court ruled that although it must be wary of this evidence in the sense that it cannot be used as indicative of legal title, it is nonetheless “important evidence of general opinion or repute.” Maps produced by neutral sources will therefore receive higher deference from the tribunals.

2. Decisions of the International Court of Justice on Maps as Evidence

a. The Temple of Preah Vihear Case (Cambodia v. Thailand)

The Temple case is often referred to as the turning point for evaluating map evidence in international tribunals. The subject of this dispute was sovereignty over the region of the Temple of Preah Vihear. The dispute originated from the boundary settlements reached in 1904-1908 between France (then the Protectorate over Cambodia) and Siam (as Thailand was then called). The Treaty of February 13, 1904, ("Treaty") was especially at issue. Article 1 of the Treaty provided that the general character of the frontier along the eastern section of the Dangrek range, in

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74 See Eritrea-Yemen Arbitration at 104, para. 388.
75 Id. at 101, para. 375.
76 Id. at 104, para. 388.
77 Id. at 102, paras. 380-81.
78 Weissberg, supra note 9, at 792.
80 Id.
81 Id.
which the Temple was situated, was to follow the watershed line. In accordance with Article 3 of the Treaty, a Franco-Siamese Mixed Commission was formed to delimit the frontiers. The Commission subsequently surveyed and fixed a frontier, but no record on the Dangrek region was made.

The final stage of the delimitation was the preparation of maps. The Siamese government, which did not possess adequate technical means, requested French officers to map the frontier region. A team of French officers, some of whom had been members of the Mixed Commission, completed eleven maps in the autumn of 1907 and transmitted them to the Siamese government. One of these maps was a map of the Dangrek range showing Preah Vihear on the Cambodian side. Cambodia relied mainly on this map to claim sovereignty over the Temple. Thailand, on the other hand, contended that the map, not being the work of the Commission, was not binding. Further, Thailand argued that the true watershed line would place the Temple in Thailand.

The map in question was never formally approved by the Mixed Commission. However, the Court found that there was “no reasonable doubt” that the map had an “inherent technical authority” of its own, and an origin which was “open and obvious.” Even though the Court held that the map did not have a “binding character . . . at the moment of its production,” Cambodia prevailed. The Court saw the issue not in terms of whether the Commission had discretionary power to depart from the watershed line, but whether the parties had adopted the map and its line, which was far to the north from the watershed boundary, as representing the outcome of the work of the Commission, thereby conferring on it a binding character.

Since the Temple case, maps have explicitly gained greater import. Where the relationship between the map and the treaty was ambiguous, the

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82 Id.
83 Id.
84 Id.
86 Id.
87 Weissberg, supra note 9, at 793.
89 Id.
90 Id.
91 Id.
92 Id.
93 Id.
95 Weissberg, supra note 9, at 801.
Court treated the map as if it were part of the treaty.\textsuperscript{96} The ICJ found that the map had never been approved by the Commission, the appropriate authority, and thus did not have a binding character.\textsuperscript{97} Nevertheless, the Court based its final decision on the map.\textsuperscript{98} Such an approach is noteworthy, for, in essence, it amounted to a finding that, in a conflict between a map not even referred to in the agreement or signed by the parties and a boundary definition described in a treaty, the map prevailed.\textsuperscript{99} According to the ICJ, in the interest of certainty, stability, and finality of frontiers, an unsigned map in derogation of a treaty provision would supersede the text as a matter of treaty interpretation.\textsuperscript{100} This approach was a significant departure from earlier decisions.\textsuperscript{101}

b. Case Concerning the Frontier Dispute (Burkina Faso v. Mali)

The Case Concerning the Frontier Dispute (Burkina Faso v. Mali), on its face, represents the conservative stance of international tribunals when dealing with map evidence.\textsuperscript{102} Both parties to the dispute were formerly French colonies, Upper Volta and French Sudan respectively.\textsuperscript{103} After failing to reach an agreement concerning three hundred kilometers of their common frontier, which was regarded to be rich in minerals, the parties submitted the colonies' dispute to the ICJ.\textsuperscript{104} The two parties submitted an

\textsuperscript{96} Id.
\textsuperscript{97} Id. at 793.
\textsuperscript{98} In the eyes of the majority, the respondent state had accepted, adopted, recognized or acquiesced in the erroneous map as representing the outcome of the delimitation and had precluded itself from contesting its validity; approval was given as early as 1908 as a result of certain circumstances, such as the wide distribution of the maps and their acknowledgement by the Minister of the Interior. Id. at 801-2.
\textsuperscript{99} Id. at 798.
\textsuperscript{100} Id. at 802.
\textsuperscript{101} Id.
\textsuperscript{102} The Court ruled that,

[M]aps merely constitute information which varies in accuracy from case to case; of themselves, and by virtue solely of their existence, they cannot constitute a territorial title, that is, a document endowed by international law with intrinsic legal force for the purpose of establishing territorial rights. Of course, in some cases maps may acquire such legal force, but where this is so the legal force does not arise solely from their intrinsic merits: it is because such maps fall into the category of physical expressions of the will of the State or States concerned. This is the case, for example, when maps are annexed to an official text of which they form an integral part. Except in this clearly defined case, maps are only extrinsic evidence of varying reliability or unreliability which may be used, along with other evidence of a circumstantial kind, to establish or reconstitute the real facts.

\textsuperscript{103} Martin Dixon & Robert McCorquodale, Cases and Materials on International Law 234 (3d ed. 2000).
\textsuperscript{104} Id.
abundant and varied “collection of cartographic materials” and argued in considerable detail their probative force.\textsuperscript{105}

The Court, as usual, denounced the role of maps by saying that maps were merely extrinsic evidence which may be used, along with other evidence, to establish the real facts.\textsuperscript{106} The Court went on to say that although the parties presented the Court with a considerable body of maps, for a region that is nevertheless described as partly unknown, no indisputable frontier line could be discerned.\textsuperscript{107} The Court’s detailed explanation on the evidentiary value of maps in this case has been repeatedly quoted in other cases.\textsuperscript{108} It stresses the Court’s reluctance to admit any change in the evidentiary power of maps by elaborating on the problems map evidence might entail.\textsuperscript{109} The Court also stated that it could not uphold any information given by the map where it was contradicted by other trustworthy information.\textsuperscript{110}

The Court’s statements renouncing the role of maps, however, seems to be mere rhetoric. Ultimately, the Court ruled that “[t]wo of the maps

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\item \textsuperscript{105} Frontier Dispute, 1986 I.C.J. pt. 7 (summary of judgment).
\item \textsuperscript{106} Id.
\item \textsuperscript{107} Id.
\item \textsuperscript{109} The Court gave indications as to why the evidentiary value of map evidence might be in transition when it ruled:
\begin{quote}
The actual weight to be attributed to maps as evidence depends on a range of considerations. Some of these relate to the technical reliability of the maps. This has considerably increased, owing particularly to the progress achieved by aerial and satellite photography since the 1950s. But the only result is a more faithful rendering of nature by map, and an increasingly accurate match between the two. Information derived from human intervention, such as the names of places and of geographical features (the toponymy) and the depiction of frontiers and other political boundaries, does not thereby become more reliable. Of course, the reliability of the toponymic information has also increased, although to a lesser degree, owing to verification on the ground; but in the opinion of cartographers, errors are still common in the representation of frontiers, especially when these are shown in border areas to which access is difficult. Other considerations which determine the weight of maps as evidence relate to the neutrality of their sources towards the dispute in question and the parties to that dispute. Since relatively distant times, judicial decisions have treated maps with a considerable degree of caution: less so in more recent decisions, at least as regards the technical reliability of maps. But even where the guarantees described above are present, maps can still have no greater legal value than that of corroborative evidence endorsing a conclusion at which a court has arrived by other means unconnected with the maps. In consequence, except when the maps are in the category of a physical expression of the will of the State, they cannot in themselves alone be treated as evidence of a frontier, since in that event they would form an irrebuttable presumption, tantamount in fact to legal title. The only value they possess is as evidence of an auxiliary or confirmatory kind, and this also means that they cannot be given the character of a rebuttable or \textit{juris tantum} presumption such as to effect a reversal of the onus of proof.
\end{quote}
\item \textsuperscript{109} Id. at 586, para. 62.
\end{itemize}
\end{footnotesize}
produced appear to be of special significance.\textsuperscript{111} The Court found that one of the maps, even while lacking a legal title, was a visual portrayal both of the available texts and of information obtained on this ground, because it had been drawn up by a body neutral to the parties.\textsuperscript{112} After noting the date on which the maps were made and the neutrality of the sources, the Court relied heavily on one of the maps and explained that the probative value of a map may play a "decisive role" where all other evidence is insufficient, or does not clarify an exact line.\textsuperscript{113}

Despite the reserved attitude on its face, this case therefore provides some useful insights into how international tribunals treat map evidence in practice. According to the Court, the value of maps depends on their technical reliability and their neutrality in relation to the dispute. Consequently, while rhetorically denouncing the importance of maps, international tribunals may actually be treating maps as important, even decisive, evidence in ascertaining boundary lines or territorial titles.

c. Case Concerning Sovereignty Over Pulau Ligitan and Pulau Sipadan (Indonesia v. Malaysia)

One of the most recent cases on map evidence decided by the ICJ plainly demonstrates the discrepancy between the traditional theory on map evidence and the practice of international tribunals. In the Case Concerning Sovereignty over Pulau Ligitan and Pulau Sipadan (Indonesia v. Malaysia), the ICJ ruled on the Indonesian and Malaysian claims to the territory of Ligitan and Sipadan islands and the validity of map evidence submitted by the parties.\textsuperscript{114} Both Parties produced a series of maps in support of their respective interpretations of the 1891 Convention between the Netherlands and Great Britain, previous colonial owners of the relevant territories. Indonesia contended that the maps it had produced "[we]re consistent in depicting the boundary line as extending offshore to the north of the known locations of the islands of Ligitan and Sipadan, thus leaving them on what is

\textsuperscript{111} These were the 1:500,000 scale map of the colonies of French West Africa, 1925 edition, known as the Blondel la Rougery map, and the 1:200,000 scale map of West Africa, issued by the French Institut Géographique National and originally published between 1958 and 1960. \textit{Id.}
\textsuperscript{112} \textit{Id.}
\textsuperscript{113} \textit{Id.}
\textsuperscript{114} The islands of Ligitan and Sipadan are both located in the Celebes Sea, off the northeast coast of the island of Borneo. The present dispute crystallized in 1969 in the context of discussions concerning the continental shelf delimitations of Indonesia and Malaysia. Sovereignty over Pulau Ligitan and Pulau Sipadan (Indon. v. Malay.), 2002 I.C.J. 102, para. 31 (Dec. 17) available at http://www.icj-cij.org/icjwww/idocket/iinma/iinmajudgment/iinma_ljudgment_20021217.PDF (last visited Jan. 23, 2005).
now the Indonesian side of the line." In Malaysia's view, contrary to what Indonesia contended, some of the Dutch maps clearly showed the boundary terminating at the east coast of Sebatik. Malaysia asserted that even Indonesian maps published since 1969 did not show the islands as Indonesian. Malaysia moreover argued that on the majority of these latter maps the islands of Ligitan and Sipadan were either not shown at all, or were in the wrong place. In support of its interpretation of the Convention, Malaysia relied in particular on the map annexed to the 1915 Agreement between Great Britain and the Netherlands. According to Malaysia, this was the only official map agreed upon by the parties.

The Court started out by quoting its opinion on map evidence from the Burkina Faso v. Mali decision. It was apparent that it had no intention of openly departing from the traditional view. Nevertheless, one of the maps played a pivotal role in this case. The Court accepted the map as conclusive evidence because there was proof that both parties had agreed upon it. Whether there is sufficient proof that the parties agreed upon a map is often a hotly debated issue. If proven, it will undoubtedly increase the evidentiary value of the map. Further, if one of the parties can submit maps actually produced by the other party, preferably by a government, the

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115 Id. at para. 83.
116 Id. at para. 84.
117 Id.
118 Id.
119 Id. at para. 85.
121 Id. at para. 88.
122 The Court discounted the legal value of most of the maps. After carefully analyzing the inconsistencies and the specific purposes of these maps, it deemed them to be inconclusive. The Court also observed that no map reflecting the agreed views of the parties had been appended to the Convention, which would have officially expressed the will of Great Britain and the Netherlands as to the prolongation of the boundary line. Id. at paras. 47-48, 90-91.
123 The Court, nevertheless, showed a different attitude towards the map annexed to the 1915 Agreement. Id. It was important that this map was the only one which was agreed between the parties to the 1891 Convention. Id.
124 The Court ruled that:

[It] considers that an examination of the map annexed to the 1915 Agreement reinforces the Court's interpretation of that Agreement. The Court observes that the map, together with the map annexed to the 1928 Agreement, is the only one which was agreed between the parties to the 1891 Convention. The Court notes on this map that an initial southward extension of the line indicating the boundary between the Netherlands possessions and the other States under British protection is shown beyond the western endpoint of the boundary defined in 1915, while a similar extension does not appear beyond the point situated on the east coast of Sebatik; that latter point was, in all probability, meant to indicate the spot where the boundary ended. In sum, with exception of the map annexed to the 1915 Agreement . . . the cartographic material submitted by the Parties is inconclusive in respect of the interpretation of Article IV of the 1891 Convention.

Sovereignty over Pulau Ligitan and Pulau Sipadan, 2002 I.C.J. 102, at paras. 72, 91.
evidentiary value of such maps will receive more deference. This issue may
play an important role in the Territorial Dispute between Japan and Korea
over Dokdo/Takeshima.125

While international tribunals still encounter maps as frequently as in
the past, their decisions reveal that the approach to the evidentiary value of
maps has undergone considerable change. The arguments for the traditional
approach126 advanced until the 1940s127 are no longer applicable today as
they were in the past.128 The outdated observations that argue against
accord any evidentiary value to maps only show the gap that has been
created between the theory and practice of international law on map
evidence.

B. The Emerging Rule on Map Evidence Will Better Conform to General
Principles of Law

1. General Principles of Law Should Reflect Domestic Rules on Map
Evidence

Even if the custom of according greater probative value to maps has
not yet reached the status of CIL, its further development would correspond
to GPL. GPL is one of the major sources of international law under
the ICJ Statute.129 There are conflicting opinions as to the nature of this
source, but the majority view regards GPL as comprising of the rules and
principles common to major legal systems.130 According to this view, if
international law is to be accepted as a system of law, it must incorporate the
procedural and administrative rules which are inherent in the concept of
every legal system.131 International law may have large gaps as a legal

125 See infra Part IV.
126 These include Drs. Hyde and Sandifer. Weissberg, supra note 9, at 801.
127 The Permanent Court of International Justice produced a typical example of the traditional
approach in its Advisory Opinion on the Jaworzina Question. Hyde, supra note 26, at 316 (construing
Advisory Opinion on the Jaworzina Question, 1923 P.C.I.J. (ser. B) No. 8). In this case, the Court carefully
pointed out that maps could be used only as secondary evidence. Id. However, it is interesting to note that
even though the Court did not expressly rule on the evidentiary value of maps in general, it proceeded to
confirm one of its conclusions based, in part, on maps submitted to it. The Court ruled that "[i]t is true that
maps and their tables of explanatory signs cannot be regarded as conclusive proof, independently of the text
of the treaties and decisions; but in the present case they confirm in a singularly convincing manner the
conclusions drawn from the documents and from a legal analysis of them, they are certainly not
contradicted by any document." Id.
128 Weissberg, supra note 9, at 803.
129 Statute of Court, art. 38.
130 Dixon, supra note 40, at 38-39.
131 Id.
system because it deals with fewer cases than many domestic legal systems, and there is no formal legislation to provide rules to govern new situations.\textsuperscript{132} GPL can help to close these gaps.\textsuperscript{133} In other words, GPL is often borrowed from the common denominators of national legal systems to fill in the gaps where neither the treaty law nor the CIL can resolve the dispute.\textsuperscript{134} Every international dispute should be capable of being determined as a matter of law.\textsuperscript{135}

GPL regarding the treatment of map evidence can be particularly helpful in supplementing the CIL gaps on the evidentiary value of maps. Unlike international law, most national legal systems do not treat map evidence differently than other general documentary evidence.\textsuperscript{136} The examples of treatment of maps in the national laws of Australia and the United States are illustrative because they provide more explicit rules in this regard than many other countries. An examination of the laws of the two countries shows that domestic rules of evidence can inform CIL on the evidentiary value of maps.

Rules of evidence represent a good example of the kind of GPL prevailing in domestic forums that should be applied in international law. Several pronouncements of the Mexican-American Claims Commission stand for the proposition that international tribunals should adopt the GPL prevailing in domestic forums relating to evidence.\textsuperscript{137} When it comes to the appraisal of evidence, the American Commissioner in the Mexican-United States Claims Commission said in 1927 that “the Commission can and must give application to well-recognized principles underlying rules of evidence and of course it must employ common sense reasoning in considering the evidential value of the things which have been submitted to it as evidence.”\textsuperscript{138} Speaking for the Commission in a subsequent case in 1930, the same Commissioner said that “[w]ith respect to matters of evidence, [international tribunals] must give effect to common sense principles

\textsuperscript{132} Shaw, supra note 12, at 78.
\textsuperscript{133} Id.
\textsuperscript{134} JEFFREY DUNOFF, INTERNATIONAL LAW: NORMS, ACTORS, PROCESS 32 (2002).
\textsuperscript{135} ROBERT JENNINGS & ARTHUR WATTS, OPPENHEIM'S INTERNATIONAL LAW 13 (9th ed. 1992).
\textsuperscript{136} For example, France, Germany, and Korea all showed a similar attitude towards map evidence. For French case law on this issue, see Cour d'Appel Toulouse, Cambre Civile 1, June 2, 2001, No. de Decision: 2000/03425; Cour d'Appel Toulouse, Cambre Civile 1, Dec. 14, 1998, No. de Decision: 1997/03196; Law No. 00-439 of Jan. 16, 2001, DC (Loi relative à l'archéologie preventive). For German case law on this issue, see, e.g., OVG NRW 19 A 546/02 (Mar. 26, 2004).
\textsuperscript{137} BIN CHENG, GENERAL PRINCIPLES OF LAW AS APPLIED BY INTERNATIONAL COURTS AND TRIBUNALS 307-08 (1987).
\textsuperscript{138} Id.
underlying rules of evidence in domestic law." A GPL rule that reflects the evidentiary rules of domestic courts will better serve its original purpose.

2. **Australian Law Accords Stronger Evidentiary Value to Maps Than Traditional International Law**

Australian law generally does not discriminate against maps as evidence. Maps, as part of general documentary evidence, enjoy the same status as that of photographs and writings. Most jurisdictions in Australia seem to adhere to this rule. Although there is always some danger that a party can forge maps, that danger is deemed to be no greater than that for any other type of document, and is not itself ground to reject maps offered as evidence. This is so for both private and public maps.

Maps play a variety of roles in domestic courts as documentary evidence. The most important role of maps in Australian courts is that of evidence in boundary delimitation disputes. Australian courts rely on maps when there is a dispute as to whether the demarcation lines in a map represent the true intention of the parties. Such a dispute could arise when the description in a map conflicts with the text of the agreement between the parties. The courts in these circumstances pay great deference to public maps. For example, in the *State of Australia v. State of Victoria*, the High Court of Australia held that if a boundary was later found to have been marked and located in the wrong place, no judicial authority could correct the error. The Court's deference to the map was even more prominent because the Court made the decision despite the existence of conflicting maps. The Court acknowledged the evidentiary value of maps even though the maps were not uniform in representing a certain boundary line.

It noted that admiralty charts and standard maps would—until discovery of an error—show the boundary, and that it would be very hard for any litigant to displace such a presumption or evidence. Because the courts confer

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139 Id.
142 Id. at 26-34.
143 Public maps are those produced by public officers for the purpose of public use; all the other ones are private maps. Id. at 62-63.
144 Foreign Evidence Act 1994, sec. 3 (Austl.).
145 State of South Australia v. State of Victoria (1911), 12 CLR 667, 668.
146 Id. at 679-80.
147 Id. at 692, 695.
148 Id. at 738.
such a strong presumptive validity to maps, modern Australian statutes often contain specific provisions regarding the evidentiary value of maps when the legislators need to limit their validity.149

At common law there is a presumption that private documents, including private maps, more than thirty years old, produced from the proper party, should be held valid.150 Most Australian jurisdictions even reduced the age requirement to twenty years.151 "The scope of the presumption covers... due compliance with all the formalities required to make the documents effective."152 Although the evidentiary value of private maps may also depend on various other factors, this presumption, which applies to maps as documentary evidence, explains why maps in general hold a different status in Australian law than in traditional international law.

As for public documents, those produced by the proper authority are generally evidence of their contents.153 There is no need to otherwise prove the accuracy of the document's contents.154 In Wilton and Co. v. Phillips, the court ruled that "[a] public document coming from the proper place or a certified copy of it is sufficient proof of every particular stated in it."155 The strength of this pronouncement has caused some critics to argue that when the court used the phrase "sufficient proof," it meant nothing more than "sufficient in the absence of other credible evidence to the contrary."156 Nevertheless, other courts have also held that a public document is evidence of everything stated in it. In In Re Stollery: Weir v. Treasury Solicitor, the court upheld the view that a public document is evidence of everything stated in it.157 Furthermore, in R. v. Halpin the Court ruled that "[a]ll statements on the return are admissible as prima facie proof of the truth of their contents."158

149 See, e.g., Defense Force Discipline Regulations, 1985, sec. 92 (Austl.) (providing that "[i]n any proceedings a map, chart or plan purporting to be published by or on behalf of the Commonwealth or of a State or Territory or of the government of another country is evidence of the matters set out on the map, chart or plan unless the contrary is proved"); Crimes at Sea Act, 2000, sec. 16 (Austl.) (providing that "[t]he map is intended to be indicative only. The provisions of this scheme and of the body of this Act prevail over the map if there is any inconsistency").

150 BROWN, supra note 141, at 57.
151 Id. The period in the United Kingdom is also twenty years. Evidence Act 1938, 1 & 2 Geo. 6, § 4 (Eng.).

152 BROWN, supra note 141, at 57.
153 Id. at 66 (citing Wilton and Co. v. Phillips (1903) 19 TLR 390).
154 Id.
155 BROWN, supra note 141, at 66 (citing Wilton and Co. v. Phillips (1903) 19 TLR 390).
156 Id. at 66-67.
157 Id. at 67.
158 (1975) 3 WLR 260, 265, cited in BROWN, supra note 141, at 68.
A specific example of such a public document can be found in section 59 of the Evidence Act of 1910. This law allows officially certified copies of maps or photographs to serve as evidence of the existence and location of features in the map. Based on the nature of the statute, it appears that the legislature intended such public maps to provide evidence of features depicted in them. In short, Australian law and the attitudes of Australian courts show that domestic laws are more generous towards map evidence than traditional international law.

3. The Evolving Status of Map Evidence in U.S. Courts

Traditionally, American courts have seldom accepted maps as conclusive evidence in resolving boundary disputes. This was similar to the rule under traditional international law. However, contemporary American law of evidence has evolved to such a degree that it has become impossible to overstate the importance of exhibits such as maps in modern trials. As long as they are properly authenticated as to accuracy, reliability, completeness, and fairness, maps are generally admissible into evidence to enable the court or the jury to visualize and better understand and apply the evidence in the case. Furthermore, the “ancient document” rule enables an original map over thirty years old to be admissible to evidence in proving the location of a boundary line.

a. Traditional Status of Maps as Evidence

Historically, American courts ignored the evidentiary value of maps as much as international tribunals did under traditional international law. A classic example of this approach is the case of Melish’s map, adopted in Article III of the Treaty between the United States and Spain on the boundary west of the Mississippi river. Article III provided, in part, that the boundary should follow “the course of theRio Roxo, westward, to the

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159 BROWN, supra note 141, at 69.
160 Id. at 70.
161 As explained supra Part II, the traditional rule on map evidence in international law usually rejected even official maps as evidence proving the existence or location of a boundary line.
162 See United States v. Texas, 162 U.S. 1, 36-38 (1895).
163 SANDIPER, supra note 3, at 235-36.
164 Id.
165 Id.
166 Id.
167 Id. at 230.
168 Id.
degree of longitude 100 west from London and 23 from Washington," and concluded, "the whole being laid down in Melish's map of the United States published at Philadelphia, improved to the first of January, 1818."\(^{169}\) In fact, it happened that the 100th meridian of longitude was located on Melish's map more than one hundred miles further west than its correct astronomical location.\(^{170}\) The Supreme Court of the United States was called upon to decide whether the contracting parties had intended to adopt the true astronomical line or the line as laid down on Melish's map in \textit{United States v. Texas}. It held that it was the former.\(^{171}\)

One of the principal dangers inherent in the use of maps as evidence lies in the fact that a layman may accept them as carrying greater weight than documentary portrayal of the same facts.\(^{172}\) The United States Supreme Court held in this regard:

\begin{quote}
But it is said, the maps of the early explorers of the river and the reports of travelers, prove the channel always to have been east of the island. The answer to this is that evidence of this character is mere hearsay as to facts within the memory of witnesses, and if this consideration does not exclude all books and maps since 1800, it certainly renders them of little value in the determination of the question in dispute. If such evidence differs from that of living witnesses, based on facts, the latter is to be preferred. Can there be a doubt that it would be wrong in principle, to dispossess a party of property on the mere statements—not sworn to—of travelers and explorers, when living witnesses, testifying under oath and subject to cross-examination, and the physical facts of the case, contradict them?\(^{173}\)
\end{quote}

This shows that the traditional stance of U.S. courts towards map evidence was very similar to that of international law. Because maps were often copied from existing maps, courts accepted them only as ordinary

\(^{169}\) \textit{SANDIFER, supra} note 3, at 230 (citing \textit{WILLIAM M. MALLOY, 2 TREATIES AND CONVENTIONS, INTERNATIONAL ACTS, PROTOCOLS AND AGREEMENTS BETWEEN THE UNITED STATES OF AMERICA AND OTHER POWERS} 1652 (1910)).

\(^{170}\) \textit{Id.}

\(^{171}\) \textit{United States v. Texas}, 162 U.S. 1, 36-38 (1895).

\(^{172}\) \textit{SANDIFER, supra} note 3, at 235-36.

hearsay evidence.\textsuperscript{174} The attitude of the courts, however, dramatically changed in contemporary U.S. law.

\textbf{b. The New Trend in the United States}

Current U.S. law grants maps the same evidentiary value as other documentary evidence. In fact, it has become impossible to overstate the importance of maps in modern trials.\textsuperscript{175} Demonstrative materials such as maps are often essential to the successful outcome of litigation.\textsuperscript{176} It is important to see, therefore, what value map evidence has in contemporary American courts, and whether the courts have laid a proper foundation for establishing such value.\textsuperscript{177}

First, American courts accept today that, an original map, over thirty years old, found in proper custody, authorized or recognized as an official document, and free on its face of suspicion, is admissible in evidence as an "ancient document" to prove the location of a boundary line.\textsuperscript{178} In addition, as long as a map is properly authenticated as to accuracy, reliability, and completeness, courts can admit it into evidence to enable the adjudicator to visualize and better understand and apply the evidence in the case.\textsuperscript{179}

American courts use map evidence in several categories of cases: (1) cases involving rights to and title in as well as uses of real property; (2) cases involving the rights and liabilities of the owners and possessors of tracts of land vis-à-vis persons on the land and neighboring landowners; and (3) accident cases involving vehicles and pedestrians.\textsuperscript{180}

The first of these broad categories includes cases involving boundary disputes, restrictive covenants, mining claims, oil and gas leases and rights, water and irrigation rights, eminent domain, and zoning.\textsuperscript{181} Maps of this class may range in coverage from thousands of square miles—showing, for example, the pattern of lumbering operations claimed to be unlawful or contrary to a lease agreement—to disputed boundary claims at a particular corner of two city lots.\textsuperscript{182} Courts accord these types of maps great

\textsuperscript{174} SANDIFER, supra note 3, at 236.
\textsuperscript{175} 44 AM. JUR. 2D Proof of Facts § 707 (2004).
\textsuperscript{176} Id.
\textsuperscript{177} Id.
\textsuperscript{178} Steele v. Fowler, 41 N.E. 2d 678, 683 (Ind. App. 1942).
\textsuperscript{179} Id.
\textsuperscript{180} 2 AM. JUR. Trials § 669 (1964).
\textsuperscript{181} Id.
\textsuperscript{182} Id.
evidentiary value. In fact, in some cases maps submitted by one party have been reprinted in court reporters as integral parts of a court’s opinion.\(^\text{183}\)

The second class of cases include those involving public and private nuisances, lateral and subjacent support, land slippage, encroachments, landowner’s liability for conditions on his land to invitees, trespassers, and attractive nuisances.\(^\text{184}\) In these cases, courts allow maps to show conditions on the land as well as the land’s boundaries.\(^\text{185}\) In one case, plaintiff’s attorney used a map covering an area of many blocks to show that the route taken by a young boy from his home to a particular destination took him on a shortcut over defendant’s property where he was injured, and that the path was one in common use.\(^\text{186}\)

Additionally, there are other kinds of cases in which maps receive high deference. These are cases where maps portray jurisdiction to tax, election contests, voting rights, and other boundaries of political subdivisions.\(^\text{187}\) For instance, a map that influenced the opinion of the United States Supreme Court in *Gomillion v. Lightfoot* was reproduced in an appendix to the decision.\(^\text{188}\) It showed that the shape of a municipality had been changed from a square to “an uncouth, 28-sided figure” in order to exclude certain voters from the municipality.\(^\text{189}\)

Finally, courts most commonly use maps in litigation growing out of pedestrian and traffic accidents.\(^\text{190}\) Here they may depict stretches of highway hundreds of yards long, streets and intersections of lesser area, or even just curb-lines and parts of streets and sidewalks.\(^\text{191}\) Such maps are valuable in accurately reproducing the scenes where accidents took place, lines of sight, stopping distances, and other important elements of the landscape, and they often serve as bases for theories of liability.\(^\text{192}\)

The emerging new rule will better conform to the GPL on map evidence. The legal systems of Australia and the United States demonstrate that domestic laws do not differentiate maps from other types of evidence. Consequently, if the rule on map evidence in international law falls under the rubric of GPL, instead of CIL, it would be natural for the rule to reflect these domestic laws.

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\(^{184}\) 2 AM. JUR. Trials § 669 (1964).
\(^{185}\) Id.
\(^{186}\) Id.
\(^{189}\) Id. at 340.
\(^{190}\) 44 AM. JUR. 2D Proof of Facts § 707.
\(^{191}\) Id.
\(^{192}\) Id.
IV. THE EMERGING RULE ON MAP EVIDENCE MAY HAVE IMPORTANT PRACTICAL IMPLICATIONS ON TERRITORIAL DISPUTES IN THE PACIFIC RIM REGION

No legal theory can solve all the territory or boundary disputes. Such disputes are generally too vital to a state’s national interests to yield just because a legal rule, let alone a procedural one, has changed. However, it is equally true that countries engaged in such disputes continuously try to reinforce their legal positions by developing more evidence and invoking the rules of international law to their own advantage. Thus, a change in international law that would reinforce a party’s position in a territorial dispute may have the practical effect of providing greater incentives for the involved countries to resolve the dispute.

A. A Map May Contribute to the Settlement of the Russo-Japanese Dispute Over Southern Kurils/Northern Territories

The territorial dispute between Russia and Japan over the Southern Kuril islands ("Southern Kurils") represents a dispute that the emerging rule on map evidence can help resolve. Although Russia is in actual possession of these islands, an ancient Japanese map, Seiho-okuni-eze (or Shoho-gokokuezu), may support Japan’s position that it has held the title historically. Since Russia does not currently have the resources to effectively develop these barren islands even if it had the intention, it would be beneficial for both parties to develop them jointly. A firm international rule that accords greater evidentiary value to maps could, along with other factors, help Russia move towards this solution by strengthening the legal claims of Japan.

Russia and Japan contested control of Sakhalin and the Kuril Islands for as long as the history of the islands is verifiable. The territorial dispute concerns four islands off the northeast coast of Hokkaido: Shikotan, Kunashiri, Etorofu (or Iturup), and the Habomai group. Japan describes them as their Northern Territories, while Russia calls them the Southern Kurils. The former Soviet Union occupied the disputed islands at the end of World War II, and since then Japan has argued persistently for their return. Although Japan and Russia have much to achieve by cooperating with each other, the Kurils issue has continued to strain the Russo-Japanese relations. Valentin A. Povarchuk, The Unresolved Dispute Over the Northern Territories/Southern Kurils and Russo-Japanese Relations 1-12 (1999) (unpublished Senior Honors Thesis, Cornell University) (on file with author).

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194 Id. at 2, 5-12.

writers disagree as to who was actually the first to discover and settle the Kurils.\textsuperscript{196} Although it is difficult to ascertain who was the first, it seems reasonable to conclude that by the end of the eighteenth century, Russia had closer ties with the northern Kurils, while Japan had closer ties with the southern islands.\textsuperscript{197}

Japan’s claim over the four islands is primarily based on its historical title.\textsuperscript{198} It asserts that the Japanese explorers were the first to discover and explore these islands.\textsuperscript{199} According to Japan, Japanese merchants and officials visited and traded with the Ainu, the indigenous people of the Kurils, since the early seventeenth century, which is at least a century earlier than the arrival of the Russians.\textsuperscript{200} Japanese maps produced in the seventeenth and eighteenth centuries depicted all of the Northern Territories and Sakhalin as belonging to Japan.\textsuperscript{201} Japan also claims that even after the Russians began to inhabit the Kurils, it prevented them from occupying the disputed islands.\textsuperscript{202} Japan bases its argument on the documents produced before World War II, which show that Russian influence never extended over the four disputed islands.\textsuperscript{203}

Russia disputes, among other things, the Japanese version of the early history of the islands.\textsuperscript{204} Russia claims that it had developed all of the Kuril Islands long before Japan had even claimed the island of Hokkaido as its territory.\textsuperscript{205} According to Russia, Japanese claims are invalid because the Kuril Ainu became Russian citizens between 1711 and 1738, and sovereignty of the islands passed to Russia.\textsuperscript{206} Russia further asserts that in the latter part of the eighteenth century only a small part of the southern peninsula of Hokkaido was colonized by the Japanese.\textsuperscript{207}

Both parties base their claims on the theory of occupation in addition to other theories of legal title.\textsuperscript{208} Occupation is a method of acquiring

\textsuperscript{196} Id.
\textsuperscript{197} Id. at 730.
\textsuperscript{198} Amy B. Quillen, Comment, The "Kuril Islands" or the "Northern Territories": Who Owns Them? Island Territorial Dispute Continues to Hinder Relations Between Russia and Japan, 18 N.C. J. INT’L L & COM. REG. 633, 639 (1993).
\textsuperscript{199} Id.
\textsuperscript{200} Id.
\textsuperscript{201} Id.
\textsuperscript{202} Id.
\textsuperscript{203} Id.
\textsuperscript{204} Quillen, supra note 198, at 642.
\textsuperscript{205} Id.
\textsuperscript{206} Id.
\textsuperscript{207} Id.
\textsuperscript{208} Povarchuk, supra note 193, at 53-56.
territory which belongs to no one (*terra nullius*) under certain conditions.\(^{209}\)

It must be effective and intended as a claim to sovereignty over the area.\(^{210}\) Historically, occupation has often been preceded by discovery, but mere discovery was considered insufficient to constitute title to territory since the seventeenth century.\(^{211}\) Acquiring territorial title required something more: a symbolic act of taking possession.\(^ {212}\)

Japan and Russia claim occupation of the disputed islands from the seventeenth or eighteenth century.\(^{213}\) According to the principle of intertemporal law, only the rules valid at the time of the act can be applied in international law.\(^{214}\) Although it is not clear whether the islands could be regarded as *terra nullius*, there is merit for the occupation theory under seventeenth century international law norms because the existence of indigent people, the Ainu in this case, often did not bar claims for occupation until the eighteenth or nineteenth century.\(^{215}\) Mere discovery, however, gives a nation only an inchoate title, an option to consolidate the title by fulfilling the elements of occupation.\(^{216}\) Maps may play a pivotal role in this context by weighing in as evidence of jurisdictional or administrative acts.\(^{217}\) For example, in the *Rann of Kutch Arbitration* or the *Arbitration between Colombia and Venezuela*, maps were upheld as evidence that a party exercised or recognized its jurisdiction over an area.\(^{218}\) Further, in the *Minquiers and Ecrehos* case, Judge Levi Carneiro indicated that maps can be used as evidence that a country’s occupation has been broadly recognized.\(^{219}\) Finally, there is a strong argument that even “mere realization or sighting” was considered to constitute legal title until the sixteenth century.\(^{220}\)

 Should international law accord more evidentiary value to maps, it could strengthen the Japanese claim of occupation of the disputed islands because Japan can provide map evidence to support its claim. In 1644, the

\(^{209}\) SHAW, supra note 12, at 342.

\(^{210}\) Id.

\(^{211}\) Id. at 343.

\(^{212}\) Id. The state or individuals whose actions are later ratified by their State must perform activities that could establish the title. Id.

\(^{213}\) Povarchuk, supra note 193, at 37-41.

\(^{214}\) SHAW, supra note 12, at 346-47.

\(^{215}\) ROBERT JENNINGS & ARTHUR WATTS, supra note 135, at 687 n.4.

\(^{216}\) BROWNLIE, supra note 24, at 144.

\(^{217}\) Id. at 157. Map evidence played such a role in the Indo-Pakistan Western Boundary (India v. Pakistan), 17 R.I.A.A. 1, 535 (Perm. Ct. Arb. 1968).

\(^{218}\) E. LAUTERPACHT, 50 INTERNATIONAL LAW REPORTS 176-77, 514-18.

\(^{219}\) Minquiers-Ecrehos (Fr. v. U.K.), 1953 I.C.J. 47, 105 (Nov. 17) (Separate Opinion of Judge Carneiro).

\(^{220}\) SHAW, supra note 12, at 343.
Japanese lord Matsumae had already compiled and sent to the rulers of Japan a map named Seiho-okuni-uzu (or Shōhō-gokokuezu), a remarkable proof that by that point he already considered the Kuril Islands to be a part of his domain. The strengthened Japanese claim may help to encourage the settlement of the dispute. Because certain bases for compromise already exist, Russia and Japan may be able to resolve the issue in a mutually beneficial way. Ideally, the two countries could combine forces for joint development of the islands.

B. Maps May Also Aid in Resolution of the Korean-Japanese Dispute Over Dokdo/Takeshima

The dispute between Japan and South Korea over the jurisdiction of the island Dokdo/Takeshima is another good example of how an evolution of the rule on map evidence could affect the outcome of a dispute. While both Korea and Japan claim historical title over this small island, Korea is currently in possession of the territory. Japan has urged Korea to refer the matter to the ICJ, but Korea has made it clear that it has no intention of doing so. The historical maps, which constitute a large portion of the evidence of both sides, are generally more in favor of the Korean position. Consequently, a clearer international law supporting the evidentiary value of these maps could induce Korea into seeking an international adjudication of the dispute.

The legal title over the small island of Dokdo (Takeshima in Japanese), has been one of the most contentious issues between Japan and South Korea for over half a century. Japan bases its claim over Dokdo mainly on historic activities of the Japanese people in the seventeenth

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221 Povarchuk, supra note 193, at 37.
222 Id. at 126.
224 Id. at 174.
225 HEE KWON PARK, THE LAW OF THE SEA AND NORTHEAST ASIA: A CHALLENGE FOR COOPERATION 84 (2000). Dokdo/Takeshima is a rocky island located in the East Sea/Sea of Japan between Japan and South Korea. Id. It consists of two main volcanic islets with approximately thirty two small rocks circling them. While Korea currently has effective possession of the island, Japan has been claiming it since 1952. The issue of sovereignty over these barren islets emerged as a major source of contention between South Korea and Japan on January 18, 1952, when the Korean government included the area around Dokdo within the Syngman Lee Line Zone—a Korean version of the fishery zone or the Exclusive Economic Zone—under "the sovereignty and protection of the Republic of Korea." Id. Contesting the legitimacy of the Zone itself, the Japanese government challenged Korea's territorial jurisdiction over the islet on the ground that it had historically been part of Japan's territory. Id. at 85. The controversy was rekindled recently, when the issue of delimiting the EEZ arose during the negotiations on revisions to the bilateral fisheries agreement of 1965. Id.
century. Alternatively, Japan argues the island was *terra nullius* until 1905, when a Japanese prefecture annexed the island as part of its territory. Japan has been urging Korea to refer the issue to the ICJ on this basis. South Korea, on the other hand, consistently maintains that Dokdo has been part of the Korean territory since the earliest historical times. Korea states that it is entitled under international law to sovereignty over the island, because it established its historical title by peaceful and continuous possession. As both countries claim historical title over the island, historical documentary evidence supporting each party's contentions becomes essential. A large portion of such documentary evidence consists of historical maps.

Map evidence of title demonstrates that Korea has a stronger claim to the island territory. Historical maps, including some from Japanese sources, show that Korea's connection with Dokdo has been stronger, easily surpassing any historical ties of Japan. In addition to its own historical maps, Korea can take advantage of a number of Japanese maps which depict Dokdo as Korean territory. Japan, on the other hand, can only rely on some of its own maps. This provides a significant advantage for Korea, since international tribunals accord more credence to the maps produced by a neutral party. If a map produced by a neutral party is deemed to be free of any political bias, then a map produced by the party with adverse interests may receive even greater deference. Therefore, maps might prove to be a decisive factor to the outcome of the adjudication if Korea and Japan refer their dispute to an international tribunal.

So far, the weak status of maps under traditional international law has not provided any incentive for Korea to agree to an adjudication of this matter. Consequently, the emerging rule on the use of map evidence, which affords more evidentiary value to maps, may change this situation. If the emerging rule becomes formally adopted by international tribunals, the

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226 *Id.* at 85.
227 *Id.* at 84.
228 *Id.* at 85.
229 *SUN PYO KIM & HYUNG KI LEE, supra note 223, at 133.
231 *HEE KWON PARK, supra note 225, at 88.
232 For example, 1678-1752 Tongguk-chido (Map of Korea), 1821-46 Chosun Chondo (Complete Map of Korea), and 1822 Haejwa-chondo indicate the exact location of Dokdo as part of Korean territory. Sibbett, *supra* note 230, at 1657.
233 *Id.* at 133.
235 *Id.* at 88-83, paras. 54-56.
change may encourage Korea to settle the matter permanently by agreeing to submit the dispute to international adjudication.\footnote{Although possession is said to be nine-tenths of the law, countries often seek judgments of international tribunals regarding their territorial disputes "not as ends in themselves but rather as elements in a much broader strategy for the resolution of the crises of which the disputes formed but a small part." JOHN COLLIER & VAUGHAN LOWE, THE SETTLEMENT OF DISPUTES IN INTERNATIONAL LAW: INSTITUTIONS AND PROCEDURES 9 (1999). Numerous examples show us that territorial disputes almost always have the potential of progressing into strategic crises. Jin-Soo Bae, Analysis of Dokdo's Military Crisis Possibility, 2 STRATEGY 21, 69 (1998). Further, "[i]nternational tribunals can be an expedient way of breaking a negotiating impasse in situations where a government’s freedom to negotiate is constrained by domestic considerations." COLLIER & LOWE, supra.}

V. CONCLUSION

The traditional rule on map evidence in international law is undergoing significant revisions. Many international decisions reveal that international tribunals are willing to acknowledge the evidentiary value of map evidence more than ever before. Although the tribunals do not yet expressly condemn the traditional rule, one can observe a new trend in the tribunals’ recent decisions. It seems to be only a matter of time until the tribunals openly acknowledge the transition in CIL and incorporate the new rule.

The emerging rule on map evidence is a better reflection of GPL, another source of international law. International law needs to take into account common sense principles underlying rules of evidence in domestic laws. An analysis on how domestic laws of certain countries deal with map evidence demonstrates that there are good reasons for according greater evidentiary value to maps in international law. The laws of Australia and the United States provide us with insights into this issue. Domestic laws generally give much more evidentiary value to map evidence than international law.

The emerging rule on the use of map evidence in international disputes may have very significant implications. Among such implications is the ability to facilitate resolution of international territorial and boundary disputes. Maps form a great part of the evidence in such disputes. Thus, the transition to a new rule that affords maps more evidentiary value may turn out to be a decisive factor in inducing adjudication or settlement of international conflicts. The territory/boundary disputes between Japan and Russia and Japan and South Korea illustrate this point.