Dots and Lines in the South China Sea: Insights from the Law of Map Evidence

Erik FRANCKX* and Marco BENATAR**
Vrije Universiteit Brussel, Belgium
efranckx@vub.ac.be and mbenatar@vub.ac.be

Abstract
On 7 May 2009, the People’s Republic of China (PRC) protested Vietnamese and joint Malaysian-Vietnamese submissions to the Commission on the Limits of the Continental Shelf (CLCS). In support of Chinese claims, a map was annexed to the letter of protest portraying a dotted U-shaped line engulfing the greater part of the South China Sea. Following a brief primer on the genesis of the U-line, this article aims to decipher the text of the protest letter accompanying the U-line, suggesting several possible interpretations. This contribution argues that the map is of doubtful probative value in the light of various factors fleshed out in international jurisprudence regarding map evidence. Attention will be paid to the reactions of third-party states to the U-line. This article maintains that effective protest on the part of regional states has prevented the map from becoming opposable to them.

Almost invariably, attempts of states to consolidate control and jurisdiction over insular features signify the onset of a barrage of cartographic materials. On the one hand, carefully crafted maps can be key in resolving international disputes, indicating the intention of the parties and providing precise geographical data. On the other hand, too eager a resort to maps is dangerous, for “like statistics, they can ‘lie’.”¹ The dispute over the maritime features in the South China Sea² is no exception.

². Use of the term “South China Sea” rather than, for instance, “East Sea” (Biển Đông) when viewed from a Vietnamese point of view (see infra note 47) or “West Philippines Sea” (see Philippines, “DFA Releases”, online: Department of Foreign Affairs <http://dfa.gov.ph/main/index.php/newsroom/dfa-releases> (several statements since June 2011)) has no legal implications whatsoever as to entitlements to the
Claimant states in South-East Asia have gathered a wealth of cartographic materials to back up their contentions, varying in substance and technical quality. One map that has recently resurfaced on the international level and made quite a splash is a Chinese official map of the South China Sea portraying the enigmatic “9-dotted-line” or “U-line.” The forceful reassertion of this document on a state-to-state level elicits a host of questions as to its origins, what it means, and, ultimately, what its value is in the ongoing maritime rows.

The aim of this study is to offer an international legal analysis of the aforementioned map. The paper starts off with a brief discussion of the history of the cartographic piece and some recent developments in this regard. Thereafter, the legal merit of various (and at times fickle) interpretations of the U-line will be assessed. We will derive arguments predominantly from the law of the sea to demonstrate that the Chinese claims connected to the 9-dotted-line are debatable as a matter of international law. The focus will then turn to case law pertaining to cartographic evidence. Factors derived from this body of jurisprudence lead us to conclude that the map would in all likelihood be accorded fairly weak probative force before a court of law. Finally, we will show that even if the map were to be legally significant, it could not be used against other interested parties in the dispute as a result of the latter’s effective protests.

I. CHINESE MAP

A. Background

The origins of today’s U-line date back to the activities of the Republic of China’s (ROC) Land and Water Maps Inspection Committee, formed in 1933. Its responsibilities included the surveying and naming of islands in the South China Sea and the production of maps showing these islands as falling under Chinese sovereignty.

The first officially endorsed dotted-line originated from the aftermath of the Second World War. The cartographic piece in question was produced by the ROC’s Department of the Territories and Boundaries of the Ministry of the Interior on waters or insular features. See Erik FRANCKX, Marco BENATAR, Nkeiru JOE, and Koen VAN DEN BOSSCHE, “The Naming of Maritime Features Viewed from an International Law Perspective” (2011) 11 China Oceans Law Review 1 at 39-40 (in English) and 69 (in Chinese). The same applies to the naming of insular features located in these water areas, which usually receive different names in the different languages of the countries surrounding the area. Because of the absence of any legal implications, the present article uses the specific nomenclature normally encountered in the English language. Only when the source itself uses a different nomenclature will the latter be used with the English translation in brackets.

3. Although sometimes referred to as the “historic claim line”, this characterization should be avoided. Most Chinese terms used to describe the line do not include the Chinese ideogram for “historic”. Daniel J. DZUREK, “The Spratly Islands Dispute: Who’s on First?” (1996) 2(1) Maritime Briefing (International Boundaries Research Unit, Durham University) at 11.

4. LI Jiming and LI Dexia, “The Dotted Line on the Chinese Map of the South China Sea: A Note” (2003) 34 Ocean Development and International Law 287 at 289. In a letter to the UN Secretary-General, the PRC stated that “since [sic] 1930s, the Chinese government has given publicity several times [sic] the geographical scope of China’s Nansha Islands and the names of its components”, but it does not mention cartographic activities. Thus, while this could mean that the PRC officially endorses the naming activities of the Committee, the same cannot be inferred for maps. See People’s Republic of China, “Letter to the Secretary-General of the United Nations—CML/8/2011” (14 April 2011), online: UN <http://www.un.org/Depts/dos/clcs_new/submissions_files/mysvnv33_09/chn_2011_re_pbl_c.pdf>. 
December 1946. On this map, the U-line consisted of eleven intermittent dashes enclosing the greater part of the South China Sea and its mid-ocean features. Starting at the Sino-Vietnamese boundary, the first two segments passed through the Gulf of Tonkin. The third and fourth parts of the line separated the Vietnamese coastline from the Paracel Islands and Spratly Islands, respectively. The fifth and sixth segments on the interrupted line went past the James Shoal (4° N), the southernmost maritime feature claimed by the PRC and the ROC. Moving in the northeast direction, the subsequent two dashes were located between the Spratly Islands, on the one hand, and Borneo (Indonesia, Malaysia, and Brunei) and the Philippines (Palawan Province), on the other hand. The ninth, tenth, and eleventh segments separated the Philippines from the ROC.

Following the removal of the Nationalists from the mainland, cartography illustrating the same dashes can be found emanating from the PRC. Thus, from then onwards, occurrences of the U-line could be observed on either side of the Taiwan Strait. One particular change needs to be noted: since 1953, PRC maps of the South China Sea depict nine instead of eleven segments (the dashes in the Gulf of Tonkin were erased).

B. PRC’s Letter to the UN Secretary-General (7 May 2009)

On the international level, the controversy surrounding the 9-dotted-line came to the fore before the United Nations (UN) in 2009 in connection with the Malaysian-Vietnamese joint submission and Vietnamese individual submission to the CLCS.

5. Zou Keyuan mentions the existence of an even earlier line in the South China Sea drawn by a Chinese cartographer, Hu Jinjie, in 1914 and subsequently in the 1920s and 1930s. Such lines can also be found in some atlases from this period. Nonetheless, it must be stressed that:
   1. These earlier apparitions are prior to the first official map depicting the “U-line”.


9. Li and Li, supra note 4 at 290. This view is contradicted by Zou Keyuan, who states that the two segments were removed in the 1960s. See Zou, supra note 5 at 34-35.


The CLCS issues recommendations to coastal states wishing to establish the outer limit of their continental shelves beyond 200 nautical miles (nm). The timing of the submissions by the Vietnamese and Malaysian governments can be explained by their respective deadlines in May 2009. In response to these initiatives, the PRC officially submitted to the Secretary-General of the United Nations in two separate letters of the same date the following identical reaction, hereby for the first time endorsing the U-line, of which a map was attached, at the international level in a state-to-state dispute:

China has indisputable sovereignty over the islands in the South China Sea and the adjacent waters, and enjoys sovereign rights and jurisdiction over the relevant waters as well as the seabed and subsoil thereof (see attached map). The above position is consistently held by the Chinese Government, and is widely known by the international community.

A reading of the note verbale allowed one scholar from Chinese Taipei to discern several Chinese assertions:

1. Sovereignty over the South China Sea islands and their adjacent waters (the attached map indicates the following maritime features within the interrupted line by name: Xisha Qundao, Nansha Qundao, Zhongsha Qundao, and Dongsha Qundao).

13. Because Malaysia and Vietnam ratified the UNCLOS on 14 October 1996 and 25 July 1994, respectively, the normal deadline for their submissions, according to its Annex II, art. 4, should have been in 2006 and 2004, respectively. But since many states encountered difficulties in meeting this Annex II deadline, the State Parties to UNCLOS decided in 2001 to use another starting point to determine this deadline: instead of the entry into force of UNCLOS, the date of adoption by the CLCS of its Scientific and Technical Guidelines became the starting point of the 10-year period. See Decision Regarding the Date of Commencement of the Ten-Year Period for Making Submissions to the Commission on the Limits of the Continental Shelf Set Out in Article 4 of Annex II to the United Nations Convention on the Law of the Sea, Meeting of State Parties, UN Doc. SPLOS/72 (2001). With respect to all states for which UNCLOS had entered into force before 1 May 1999, including thus both Malaysia and Vietnam, 12 May 2009 became the new deadline.
14. This map is reproduced in Appendix I at the end of this article.
15. See also NGUYEN Hong Thao, “Vietnam and Maritime Delimitation” in Ramses AMER and ZOU Keyun, eds., Conflict Management and Dispute Settlement in East Asia (Farnham, Burlington: Ashgate, 2011), 171 at 184, who notes that this is the first occasion on which the PRC has expressed its official position concerning the 9-dotted-line.
17. Paracel Islands.
18. Spratly Islands.
20. Pratas Islands.
2. **Sovereign rights and jurisdiction** over the relevant waters including their seabed and subsoil.

3. **Consistency** of the PRC’s official position on maritime and territorial claims in the South China Sea.

4. **Knowledge** of third-party states as regards the PRC’s maritime and territorial claims in the South China Sea.

5. The U-line **delineates** the Chinese claims of sovereignty, sovereign rights, and jurisdiction.\(^1\)

It nevertheless seems fair to state that the above-quoted official Chinese explanation, as far as the precise meaning of the attached map is concerned, remains ambiguous at best. Specifically, the exact legal nature of the maritime areas encompassed by the 9-dotted-line remains hazy, and this despite the Chinese “clarification”, as clearly indicated by the quite divergent reactions it has triggered at specialized conferences organized since then.\(^2\)

To our knowledge, only one state, the Philippines, has so far made an attempt at interpretation.\(^3\) China swiftly replied with a new note verbale, which once more does little by way of providing clarity. In this new letter, dated 14 April 2011, China states that its “sovereignty and related rights and jurisdiction in the South China Sea” are supported by “abundant historical and legal evidence”.\(^4\) What is apparent in the new diplomatic document is the lack of any reference to the map. Can we infer from this omission an abandonment of the 9-dotted-line? Certainly, such a **volte-face** cannot be presumed lightly. Moreover, PRC’s recent instances of interference with, inter alia, Vietnamese and Philippine vessels, despite its current policy of assuaging concerns regarding the freedom of navigation in the South China Sea,\(^5\) seemingly imply that its extensive claims as visualized on the map remain intact.

---

\(^{21}\) Hu, *supra* note 6 at 204–6.

\(^{22}\) See Erik FRANCKX, “American and Chinese Views on Navigational Rights of Warships” (2011) 10 Chinese Journal of International Law 187 at 196, with further reference found in note 48, indicating that some Western scholars tended to consider it an endorsement of the historic title claim, while others thought otherwise based on what the clarification did not contain, i.e. any specific reference to historic waters.


II. CLAIMS

The PRC's letter of 7 May 2009, while possibly novel in its maritime aspects, repeats similar assertions put forward in the past as regards insular features. Furthermore, several mainly Chinese and Taiwanese scholars have proffered their own interpretations of the 9-dotted-line. Amidst the confusion, one can only be certain of the fact that the Chinese assertions regarding the South China Sea do not exceed this demarcation. These views and their legal merit will now be discussed.

A. Historic Claims

1. State practice

Although assertions of this ilk do not seem to feature in official PRC policy, Chinese Taipei has traditionally advocated this position on the U-line quite strongly, as evidenced in a host of declarations. For instance, in 1991 at one of the South China Sea Workshops, a representative of the Taipei Economic and Trade Office in Jakarta (Indonesia) declared:

The South China Sea is a body of water under the jurisdiction of the Republic of China. The Republic of China has rights and privileges in the South China Sea. Any activities in the South China Sea must acquire the approval of the Government of the Republic of China.

The 1993 Policy Guidelines for the South China Sea (endorsed by the Executive Yuan) note that:

On the basis of history, geography, international law, and the facts, the Spratly Islands, the Paracel Islands, Macclesfield Bank, and the Pratas Islands have always been a part of the inherent territory of the Republic of China. The sovereignty of the Republic of China


over them is beyond doubt. The South China Sea area within the **historic water limit** is the maritime area under the jurisdiction of the Republic of China, in which the Republic of China possesses all rights and interests.29

In 1994, a Minister of the Executive Yuan, Chang King-yu, stated that “the waters enclosed by the ‘U’-shaped line in the South China Sea are our **historic waters** and the ROC is entitled to all the rights therein” (emphasis added).30

The Chinese Taipei policy is further deduced from protests lodged against the conduct of littoral states in the region. In response to the Malaysian occupation of two maritime features in the Spratly Islands and the Philippines’ decision to incorporate Scarborough Shoal on its map, Chinese Taipei stated:

>The South China Sea is a body of water of the Republic of China. The Republic of China has all rights and privileges in the South China Sea. Any activities (including the discussion on joint cooperation or on Code of Conduct, etc.) in the South China Sea region must acquire the approval of the Government of the Republic of China. (emphasis added)31

Certain pundits have cobbled together legal arguments for this tenuous claim.32 For instance, Zhao Guocai observes:

China owns the historic right of islands, reefs, shoals, banks, and waters within the 9-dotted line. The South China Sea is regarded as the historic waters of China, which was universally acknowledged at that time. So far it has lasted for half a century.33

2. Legal analysis

An examination of scholarly writings regarding historic claims relative to maritime areas gives rise to a great deal of terminological confusion. Germene concepts such as historic rights/historic title, historic waters, and historic bays are not easily distinguished and elucidated.34 In order to avoid a lengthy and somewhat superfluous inquiry on the distinction between historic rights and historic title, suffice it to say that “historic rights” are the genus under which one can place the species “historic waters”. In turn,

30. Dzurek, supra note 3 at 13.
33. ZHAO Guocai, “Analysis of the Sovereign Dispute over the Spratlys under the Present Law of Sea” (1999) 9 Asian Review at 22 (in Chinese), translated in Li and Li, supra note 4 at 293. It should, however, be stated that despite their government’s official position, not all Taiwanese legal experts have supported the historic claims approach. See ZOU Keyuan, “China and Maritime Boundary Delimitation: Past, Present and Future” in Amer and Zou, eds., supra note 15, at 160.
“historic bays” are a species of “historic waters”.35 In the context of the 9-dotted-line, Chinese Taipei’s behaviour seems to imply the recognition of historic waters as regards a substantial part of the South China Sea.

No universally accepted definition of historic waters exists, but in broad terms it denotes rights that accrue to a coastal state with respect to a maritime area or areas that the state would not normally enjoy. The extent of the rights concomitant to the historic waters can vary considerably. The legal conditions for acquiring historic waters were considered in a 1962 study carried out by the UN Secretariat’s Office of Legal Affairs (OLA) at the request of the International Law Commission.36 In the view of the OLA:

There seems to be fairly general agreement that at least three factors have to be taken into consideration in determining whether a State has acquired a historic title to a maritime area. These factors are: (1) the exercise of authority over the area by the State claiming the historic right; (2) the continuity of this exercise of authority; (3) the attitude of foreign States.37

Chinese Taipei does not meet these criteria, and neither does the PRC for that matter. Conditions (1) and (2) require the claimant state to exercise authority via acts displaying sovereignty with a sufficient level of frequency and effectiveness. In relation to the area claimed, displays of authority can be described as infrequent at best. The freedom of fishing and navigation of other states remains unencumbered.38 Consequently, no historic claim can be made. The theoretical requirements needed to fulfil condition (3) are uncertain. Essentially, the discussion pivots on whether other states need to acquiesce to the exercise of Chinese sovereignty over the South China Sea or whether the absence of any reaction from them is enough.39 But no matter which view one subscribes to, both seem to agree that protest from foreign states can prevent the peaceful and continuous exercise of sovereignty, and this is precisely what has occurred with respect to the South China Sea (see section IV-B).

Some have retorted that claims must be considered in the light of the rules of international law that existed when the U-line map was drawn, i.e. 1946 (the so-called doctrine of intertemporal law).40 This is quite peculiar, as this approach only weakens an
already unconvincing contention. At that time, the legally recognized breadth of the territorial sea totalled a mere three nautical miles, making historic claims all the more exorbitant.43 Given the fact that historic waters normally relate to either bays or a range of territorial waters,44 it is therefore not surprising to note that a recent treatise on historic waters does not find it necessary to make any reference to the historic claim of the 9-dotted-line.45 Moreover, even if for the sake of argumentation one were to envisage the hypothesis that China were able to make such an unprecedented extensive historic claim (quod non), it should be remembered that historic claims do not create an erga omnes regime, but rather depend, as stressed by one author recently, on express or implied recognition on a state-to-state basis.46

On a final note, the prolific usage of the nomenclature “South China Sea” does not confer historic Chinese sovereignty.47 Under international law, the mere naming of an area does not establish sovereignty over it.48 The name has been vigorously protested by interested states, including Vietnam.49 Foreign cartography uses the name South China Sea simply in accordance with the maritime nomenclature published in the International Hydrographic Organization’s Limits of Oceans and Seas (1953), which has “no political significance whatsoever”.48 Thus, this choice of terminology does not imply recognition of Chinese sovereignty on the part of Western states. Also, the

42. Clive Ralph SYMMONS, Historic Waters in the Law of the Sea: A Modern Re-appraisal (Leiden: Nijhoff, 2008) at 17-37. Making a similar reasoning on the basis of the work of the International Law Commission with respect to the 1958 conventional framework as well as on the basis of UNCLOS, see Franckx, supra note 22 at 197, and especially note 50.
43. The only time China is mentioned relates to the historic claim of the former USSR to Peter the Great Bay (Symmons, supra note 42 at 144).

[T]here is neither a definition of the concept nor an elaboration of the juridical régime of “historic waters” or “historic bays”. There are, however, references to “historic bays” or “historic titles” or historic reasons in a way amounting to a reservation to the rules set forth therein. It seems clear that the matter continues to be governed by general international law which does not provide for a single régime for “historic waters” or “historic bays”, but only for a particular régime for each of the concrete, recognized cases of “historic waters” or “historic bays”.

45. This argument has been made in WU Fengbin, “Historical Evidence of China’s Ownership of the Sovereignty over the Spratly Islands” in China Institute for Marine Development Strategy, ed., Selected Papers of the Conference on the South China Sea Islands (Beijing: Ocean Press, 1992) at 111 (in Chinese), referenced in Zou, supra note 33 at 161, note 98.
46. In general, see Franckx, Benatier, Joe, and Van den Bossche, supra note 2. With respect more specifically to the South China Sea, see NGUYEN Hong Thao, Le Vietnam et ses différends maritimes dans la Mer de Biển Đông (Mer de Chine méridionale) (Paris: Pedone, 2004) at 258.
47. As already mentioned supra note 2, Vietnam refers to this maritime area as “Biển Đông” (“East Sea”). See National Border Committee under the Ministry of Foreign Affairs of Vietnam, online: National Border Committee <biengioianhtho.gov.vn/bbg-vie/home.aspx>.
Chinese have historically employed different names for this maritime area such as “Giao Chi Sea” (Song and Ming dynasties) and “South Sea” (Qing dynasty (1905), Republic of China (1913), and People’s Republic of China (1952 and 1975)).

3. New developments

Recent developments might render this discussion moot. Indeed, it could very well be that Chinese Taipei is steadily abandoning its long-standing thesis. Statements in recent years hint at a change in stance, aligning Chinese Taipei’s policy on this matter with that of the PRC. References to historic rights/waters are absent whilst the focus seems to be on territorial sovereignty over the islands and their territorial waters. The most recent example is a May 2009 statement protesting the Vietnamese and Malaysian-Vietnamese submissions to the CLCS:

The Government of the Republic of China reiterates that the Diaoyutai Islands, Nansha Islands (Spratly Islands), Shisha Islands (Paracel Islands), Chungsha Islands

49. Nguyen, supra note 46 at 257.

50. Republic of China (Taiwan), “Statement of the Ministry of Foreign Affairs concerning the Declaration on the Conduct of Parties in the South China Sea signed by the Association of Southeast Asian Nations (ASEAN) and the People’s Republic of China (PRC) in Cambodia on November 4, 2002” (5 November 2002), online: Ministry of Foreign Affairs <http://www.mofa.gov.tw/webapp/ct.asp?xItem=2357&cNode=1902&mp=6>:

The government of the Republic of China reiterates its territorial sovereignty over Dongsha (the Pratas Islands), Xisha (the Paracel Islands), Zhongsha (the Macclesfield Bank) and Nansha (the Spratly Islands) in the South China Sea, over which it has all lawful rights according to international law;

Republic of China (Taiwan), “The Position of the Ministry of Foreign Affairs on Taiwan’s Sovereignty over Islands in the South China Sea” (20 November 2007), online: Ministry of Foreign Affairs <http://www.mofa.gov.tw/webapp/ct.asp?xItem=2778&cNode=1903&mp=6>:

The Spratly Islands, the Paracel Islands, Macclesfield Bank and the Pratas Islands have always been an intrinsic part of Taiwan’s territories, whether looked at from the perspective of history, geography, international law or plain fact. According to the principles of international law, the government of Taiwan’s sovereignty over these islands is unquestionable and it enjoys all rights accordingly;

Republic of China (Taiwan), “The Government of the Republic of China (Taiwan) Reiterates its Sovereignty over the Spratly Islands and has Proposed a Spratly Initiative that Focuses on Environmental Protection Instead of Sovereignty Disputes” (15 August 2008), online: Ministry of Foreign Affairs <http://www.mofa.gov.tw/webapp/ct.asp?xItem=31920&cNode=1903&mp=6>:

The Spratly Islands, including the Swallow Reef (Layang-Layang atoll), are located in Taiwan’s territorial waters. From either a historical, geographical or international legal perspective, the Spratly Islands, Paracel Islands, Macclesfield Islands, Pratas Islands and nearby waters are part of Taiwan’s territory and territorial waters;


In terms of either history, geography, reality or international law, the Spratly Islands, Paracel Islands, Macclesfield Islands, Pratas Islands, as well as the surrounding waters, are the existent territories of the Republic of China. The fact that sovereignty of these areas belongs to our government is undeniable, Taiwan enjoys and deserves all rights accordingly. Any sovereignty claims over, or occupation of, these islands and their surrounding waters will not be recognized by the government of the Republic of China.
(Macclesfield Islands), and Tungsha Islands (Pratas Islands) as well as their surrounding waters are the inherent territories and waters of the Republic of China based on the indisputable sovereignty titles justified by historic, geographic and international legal grounds. Under international law, the Republic of China enjoys all the rights and interests over the foregoing islands, as well as the surrounding waters and sea-bed and subsoil thereof.53

B. Insular Claims

1. Interpretation 1: All insular features within the U-line are PRC/Chinese Taipei territory

An early proponent of this territorial interpretation, the Indonesian diplomat Hasjim Djalal, whilst acknowledging the “enigmatic” nature of the Chinese line, based his findings on a careful analysis of the PRC’s statements, particularly those formulated during a 1979 meeting of the International Civil Aviation Organization (ICAO).52

Smith notes that the mid-ocean features falling within these “lines of allocation” are those for which the Chinese claim sovereignty. He emphasizes that the dashes do not suggest any maritime boundary claims and would have no impact on the resolution of maritime boundary disputes.53

Dzurek too believes that the U-line does not demarcate the borders of Chinese maritime jurisdiction, with this belief posited on a cartographic argument, namely, the fact that the dashes separating Malaysia and the Natuna Islands deviate from the agreed Indonesian-Malaysian continental-shelf delimitation line.54

As indicated above, contemporary Chinese Taipei state practice seems to evidence a shift toward this position. The delicate question of to whom the islands in the South China Sea belong, which entails rigorous analysis of a complex factual matrix and the application of manifold legal concepts (such as discovery, critical date, and effectivités), would take us too far from our present theme.55 Bearing that in mind, it is appropriate to stress here that the Chinese map per se cannot constitute a valid territorial title to the islands.

52. Hasjim DJALAL, “Conflicting Territorial and Jurisdictional Claims in South China Sea” (1979) 7(1) The Indonesian Quarterly 36 at 41-2.
53. Robert W. SMITH, “Maritime Delimitation in the South China Sea: Potentiality and Challenges” (2010) 41 Ocean Development and International Law 214 at 224. See also GAO Zhiguo, “The South China Sea: From Conflict to Cooperation?” (1994) 23 Ocean Development and International Law 345 at 346: “careful study of Chinese documents reveals that China never has claimed the entire water column of the South China Sea, but only the islands and their surrounding waters within the line.” See also the statement of Wang Xiguang, who assisted the Geography Department of the Ministry of Internal Affairs in compiling maps in the 1940s and used the same technique, but arrived at a different outcome: “the dotted national boundary line was drawn as the median line between China and the adjacent states”, in XU Sen’an, “The Connotation of the 9-Dotted Line on the Chinese Map of the South China Sea” in ZHONG Tianxiang, ed., Paper Selections of the Seminar on “The South China Sea in the 21st Century: Problems and Perspective” (Hainan Research Center of the South China Sea, 2000) at 80 (in Chinese), translated in Li and Li, supra note 4 at 290.
54. Dzurek, supra note 3 at 11.
55. For a book-length treatment of these issues, see Monique CHEMILLIER-GENDREAU, Sovereignty over the Paracel and Spratly Islands (The Hague: Kluwer Law International, 2000).
In *Burkina Faso/Mali*, the International Court of Justice (ICJ) provided its "definitive" explanation of the evidentiary value of cartographic evidence:

[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.57

This *obiter dictum* has been approvingly cited in a host of contentious cases.58 Some have read this passage as a "categorical" refutation of the concept of cartographic title.59 In any event, the small window the Court seems to leave open ("maps ... annexed to an official text of which they form an integral part") refers to instruments such as treaties and is thus not applicable *in casu*.

2. Interpretation 2: The U-line is the boundary line of the exclusive economic zone (EEZ) generated from South China Sea islands

A number of Chinese scholars seem to support this theory, although their reasoning is somewhat dissimilar and often linked to the historic rights/waters thesis. Zhao Lihai notes:

[T]he nine-dotted line indicates clearly Chinese territory and sovereignty of the four islands in the South China Sea and confirm China’s maritime boundary of the South China Sea Islands that have been included in Chinese domain at least since the 15th century. All the islands and their adjacent waters within the boundary line should be under the jurisdiction and control of China.62

---

60. For a treatment of this limited possibility, see Maurice KAMTO, "Le matériel cartographique dans les contentieux frontaliers et territoriaux internationaux" in Emile YAKPO and Tahar BOUMEDRA, eds., *Liber Amicorum Judge Mohammed Bedjaoui* (The Hague: Kluwer, 1999) at 371-98.
61. Riddell and Plant, *supra* note 56 at 266.
Jiao Yongke alleges:

The water areas within China’s Southern Sea boundary line constitute water areas over which China has a historic proprietary title, they constitute China’s specific exclusive economic zone, or historic exclusive economic zone, hence it ought to have the same status as the EEZ under UNCLOS [United Nations Convention on the Law of the Sea] provisions.63

Finally, Zou Keyuan believes that the PRC has asserted a historic claim but that this claim is “equivalent to the legal status of EEZ or continental shelf”.64

This second explanation of the intermittent dashes is entirely contingent upon the first. It follows from the principle “the land dominates the sea” that this approach is necessarily premised on Chinese sovereignty over the maritime features in the South China Sea.65 Proponents of this thesis see the U-line as a maritime boundary connecting the limits of the EEZ or continental shelf that originate from the islands. A variety of questions arise. A first thorny problem relates to the delimitation of such sea areas. After all, a coastal state cannot simply impose its delimitation upon others states in a unilateral fashion. The validity of such an action will depend upon compliance with international legal norms.66

Furthermore, are the maritime features even able to generate maritime zones (irrespective of who the rightful owner is)? All will depend on whether the insular features qualify as islands in the juridical sense. The 1982 Convention67 contains a provision to this end, Article 121, which states the following:

1. An island is a naturally formed area of land, surrounded by water, which is above water at high tide.

2. Except as provided for in paragraph 3, the territorial sea, the contiguous zone, the exclusive economic zone and the continental shelf of an island are determined in accordance with the provisions of this Convention applicable to other land territory.

3. Rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf.68


64. Zou, supra note 33 at 160.


68. Ibid.
Land surfaces in the South China Sea will therefore generate the additional EEZ (and continental shelf) only if they meet the stringent requirements set out above. It so happens that the insular quality of a range of maritime features in the South China Sea have been called into question. Oude Elferink cautiously finds that “at least some of the islands in the South China Sea have an EEZ and continental shelf. Other insular formations can almost certainly be considered to fall under the sway of Article 121(3) [rocks].” If it turns out that these land surfaces are not islands, (at least part of) the EEZ or continental-shelf interpretation of the U-line is without legal merit.

In this respect, it is worthwhile briefly mentioning the steps recently undertaken by the PRC on the international level in favour of the Common Heritage of Mankind by trying to protect the Area against the unjustified encroachment of certain states. In essence, these interventions were aimed against Japan’s submission to the CLCS based on Okinotorishima in the Pacific Ocean. But this action immediately backfired with respect to the South China Sea, where Indonesia questioned the Chinese 9-dotted-line exactly on the basis of the representations made by this country before the 2009 meeting of State Parties as well as the International Seabed Authority, namely, that rocks which cannot sustain human habitation or economic life of their own do not generate an EEZ or a continental shelf.

---

69. For a novel approach considerably limiting the applicability of the Article 121(3) exception to maritime delimitation, see Bernard H. OXMAN, “On Rocks and Maritime Delimitation” in Mahnouh H. ARSANJANL, Jacob Katz COGAN, Robert D. SLOANE, and Siegfried WIESSNER, eds., *Looking to the Future: Essays on International Law in Honor of W. Michael Reisman* (Leiden/Boston: Martinus Nijhoff, 2011), 893. Following the author’s reasoning, contentions relating to the precise meaning of human habitation and economic life would be less important, because in the delimitation phase smaller islands often play a minor role.


71. It concerns actions undertaken by China for the inclusion of additional agenda items at the 2009 Meeting of the States Parties to UNCLOS and the 15th Session of the International Seabed Authority (ISA) later that year. See Erik FRANCKX, “The International Seabed Authority and the Common Heritage of Mankind: The Need for States to Establish theOuter Limits of Their Continental Shelf” (2010) 25 International Journal of Marine and Coastal Law 543 at 563–4. Such attempts were repeated at the time of the 2011 Meeting of States Parties to UNCLOS but not at the 17th meeting of ISA held about one month later.


73. Indonesia, “Letter to the Secretary-General of the United Nations—480/POL-703/VII/10” (8 July 2010), online: UN <http://www.un.org/depts/los/clcs_new/submissions_files/mysvnm33_09/ldn_2010r06_mys_vnn_e.pdf>. The link between these Chinese interventions and the South China Sea are expressed in this note verbales as follows:

In this connection, the statements of these distinguished representatives of the People's Republic of China are also relevant to the situation in the South China Sea and thus it is only correct to state that those remote or very small features in the South China Sea do not deserve exclusive
No matter how interesting these developments may be, this imperative, but rather fact-laden and technical, inquiry into the exact legal status according to Article 12(3) of the 1982 Convention of the different South China Sea features exceeds by far the scope of our study.

III. FACTORS WEAKENING THE MAP’S PROBATIVE FORCE

According to a well-documented rule, the international adjudicator enjoys particularly wide discretion in determining the weight of evidentiary material. Bearing in mind this principled freedom, we have examined judicial precedents concerning maps in order to infer factors that are typically used by a judge or arbitrator to assess the probative force of cartographic evidence. It should be stressed that in doing so, we rely on both maritime and territorial precedents without distinction. While it is true that the principles governing acquisition of maritime spaces and maritime delimitation differ considerably from those underpinning territorial acquisition and delimitation, this economic zone or continental shelf of their own. Allowing the use of uninhabited rocks, reefs and atolls isolated from the mainland and in the middle of the high sea as a basepoint to generate maritime space concerns the fundamental principles of the [1982] Convention and encroaches the legitimate interest of the global community. Therefore, as attested by those statements, the so-called ‘nine-dotted-lines map’ ... clearly lacks international legal basis and is tantamount to upset the ... 1982 [Convention].


76. Although there is no doctrine of stare decisis in international law, international courts and tribunals will often cite case-law. This is particularly true for the ICJ, which is highly self-referential and will only deviate from its past jurisprudence when substantial reasons are present. See Alan BOYLE and Christine CHINKIN, The Making of International Law (Oxford: Oxford University Press, 2007) at 293–9; Gilbert GUILLAUME, “The Use of Precedent by International Judges and Arbitrators” (2011) 2 Journal of International Dispute Settlement 5 at 12.

77. Frontier Dispute, supra note 57 at 582, para. 55, stating: “actual weight to be attributed to maps as evidence depends on a large number of considerations”; Qatar v. Bahrain, supra note 58, Dissenting Opinion of Judge Torres Bernárdez at 274, para. 37, stating: “[t]he weight of maps as evidence depends on a range of considerations.”

78. See Case concerning the Delimitation of Maritime Boundary between Guinea-Bissau and Senegal (Guinea-Bissau/Senegal), Decision of 31 July 1989, Dissenting Opinion of Mr. Mohammed Bedjaoui, [2006] XX Reports of International Arbitral Awards 119 at 166–9, paras. 32–7 (arguing against an automatic transposition of territorial principles to maritime delimitation given “patent” and “irreducible” differences in terms of geography, their relation to populations and States’ rights vis-à-vis these spaces); Lea BRILMAYER and Natalie KLEIN, “Land and Sea: Two Common Sovereignty Regimes in Search of a Common Denominator” (2001) 53 New York University Journal of International Law and Politics 703 at 703–4 (noting...
A. Cautious Approach to Cartographic Evidence

As a preliminary observation, it should be pointed out that the general tendency is such that international courts and tribunals refrain from rendering rulings based merely on cartographic findings. Although accurate maps reflecting the intentions of the parties can indeed constitute "a solid and constant basis for discussion" the absence of which "is an inconvenience much to be regretted", they will often play a secondary role of corroborating other evidence that points in the same direction. Returning to the *Burkina Faso/Republic of Mali* decision:

[M]aps 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 ...

---

that key significance is accorded to de facto possession in deciding on the allocation of land territory, whereas maritime disputes are settled pursuant to "equitable" rules; Marcelo G. KOHEN, "*L'uti possidetis iuris et les espaces maritimes*" in Jean-Pierre COT, ed., *Liber amicorum Jean-Pierre Cot: le procès international* (Bruxelles: Bruylant, 2009), 155 at 157–9 (arguing in favour of the applicability of *uti possidetis iuris* to maritime zones yet still stressing that territorial and maritime spaces are subject to distinct legal regimes).

79. See examples of cases involving in part a maritime dispute *supra* note 58 citing a passage from *Frontier Dispute* (*Burkina Faso/Republic of Mali*) (which is a territorial case).

80. *Island of Palmas Case* (Netherlands v. U.S.A.), Award of 4 April 1928, [2006] II Reports of International Arbitral Awards 829 at 852–3 stating: "only with the greatest caution can account be taken of maps in deciding a question of sovereignty", reaffirmed in *Nicaragua v. Honduras*, *supra* note 58 at 58, para. 214; *Territorial Sovereignty and Scope of the Dispute (Eritrea/Yemen)*, Decision of 9 October 1998, [2006] XXII Reports of International Arbitral Awards 209 at 296, para. 388, stating: "[t]he evidence is, as in all cases of maps, to be handled with great delicacy". For an opposing view calling into question the reluctant approach of international adjudicators vis-à-vis cartographic evidence, see Romulo R. UBAY Jr, "Evidence in International Adjudication: Map Evidence in Territorial Sovereignty Dispute Cases" (2011) 1 Aegean Review of the Law of the Sea and Maritime Law 287.

81. *Arbitration Between Great Britain and Portugal as Regards Questions Relative to the Delimitation of their Spheres of Influence in East Africa (Manica plateau) (United Kingdom/Portugal)*, Decision of 30 January 1897, [2007] XXVIII Reports of International Arbitral Awards 283 at 298.

82. *Indo-Pakistan Western Boundary (Rann of Kutch) between India and Pakistan (India v. Pakistan)*, Award of 19 February 1968, Proposal of Mr. Nasrollah Entezam, [2006] XVII Reports of International Arbitral Awards 1 at 505, stating: "[m]aps are only secondary evidence. Only such maps are primary evidence as are prepared by the surveyor on the spot by observation. Even they are primary evidence only of what a surveyor can himself observe"; *Qatar v. Bahrain*, *supra* note 58, Dissenting Opinion of Judge Torres Bernández at 274, para. 37, stating: "[i]n general, the value as evidence attached to them by international courts and tribunals is corroborative or confirmatory of conclusions arrived at by other means unconnected with the maps, because the maps as such are not a legal title"; *Island of Palmas*, *supra* note 80 at 853–4, stating: "[a]nyhow, a map affords only an indication—and that a very indirect one—and, except when annexed to a legal instrument, has not the value of such an instrument, involving recognition or abandonment of rights"; *ibid.*, at 853:

If the Arbitrator is satisfied as to the existence of legally relevant facts which contradict the statements of cartographers whose sources of information are not known, he can attach no weight to the maps, however numerous and generally appreciated they may be.
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.84

This wary stance has been detected and documented in authoritative scholarly opinion,85 and in certain instances has been met with considerable approval.86

### B. Incompatible Maps

Setting the facts straight is strenuous when presented with mutually contradictory assertions.87 Quite similarly, when cartographic materials contradict one another, they lose credibility.88 As stated by the ICJ in the Kasikili/Sedudu case: “in the light of the uncertainty and inconsistency of the cartographic material submitted to it, the Court considers itself unable to draw conclusions from the map evidence produced in this case.”88

---

83. *Frontier Dispute*, supra note 57 at 583, para. 56. See also *The Government of Sudan/The Sudan People’s Liberation Movement/Army (Abeyi Arbitration)*, Final Award of 22 July 2009, online: PCA <http://www.pca-cpa.org> at 256, para. 741:

> The Tribunal is similarly very reluctant to equate the eastern and western limits of the area occupied by the Ngok Dinka transferred in 1905 with the 1933 pencil depiction of Ngok Dinka’s dry season grazing area on a sketch map, especially when more comprehensive and specific evidence is available.


87. The level of concordance among maps need not always be absolute, but it does have to be general. Abou-el-Wafa, supra note 37 at 432–4.

88. *Kasikili/Sedudu Island*, supra note 38 at 1300, para. 87; see also *Dubai/Sharjah Border Arbitration (Dubai v. Sharjah)*, Award of 19 October 1981, [1993] 91 International Law Reports 543 at 630, para. 168:

> In the view of the Court it is necessary to set aside both of the maps prepared by Mr Walker, in so far as the location of Hadlib Azana is concerned, since, although prepared by the same person, they are mutually contradictory on the general line of boundary in this area. It is futile to speculate further on the possible reasons for such a contradiction.

*Eritrea/Yemen Arbitration*, supra note 80 at 296, para. 388:

> The evidence for this period is beset with contradictions and uncertainties. Each Party has demonstrated inconsistency in its official maps. The general trend is, however, that Yemeni map evidence is superior in scope and volume to that of Eritrea. However, such weight as can be attached to map evidence in favour of one Party is balanced by the fact that each Party has published maps that appear to run counter to its assertions in these proceedings.
Maps showing the 9-dotted-line paint a picture of the South China Sea different from cartographic evidence and other materials of the regional littoral states. It would be hard to gain an accurate understanding of maritime and political boundaries based solely on a juxtaposition of these maps. Additionally, portrayals of the U-line are not consistent. As mentioned above, the U-line in PRC cartography prior to 1953 normally consists of eleven dashes,\(^8\) whereas later versions of the dotted line consist only of nine segments. A recent electronic map placed online by the Chinese State Bureau of Surveying and Mapping on 21 October 2010 again adds one more segment to the North between Taiwan and the Ryukyu group, of which Yonaguni Island is the most western island, all belonging to Japan.\(^9\) No reasons have been given for the mysterious removal of two dashes in the past or the new tenth segment added recently.\(^10\)

C. Incoherent/Ambiguous Cartographic Symbols

Ambiguous cartography has surfaced in arbitral proceedings in the past. In the \textit{Eritrea/Yemen Arbitration}, Eritrea had submitted maps depicting a dotted line in support of their claims. The Tribunal made short shrift of the party's evidentiary approach:

In some instances the Tribunal cannot agree with the characterization of the maps sought by the Party introducing it. Moreover, the Tribunal is unwilling, without specific direction from the map itself, to attribute meaning to dotted lines rather than to colouration or to labelling. The conclusions on this basis urged by Eritrea in relation to a number of its maps are not accepted.\(^11\)

Naturally, the analogy of this case to the U-line, the lack of a map legend, and cryptic wording contained in the PRC's letter to the UN Secretary-General is readily made. The perplexity is all the greater because the depiction of the 9-dotted-line deviates from international cartographic standards developed by the International

---

\(^8\) But see \textit{Separate World’s Geography} (Chinese Ya Guang Geographic Publisher, 1951) at 18 (Map of Republic of Indonesia), where only about half of the lines are represented \([1951 Chinese Map]\).

\(^9\) See Chinese State Bureau of Surveying and Mapping, \textit{Map World}, online: \textit{Map World} \(<\text{http://www.chinazonmap.cn}>\). This map is partially reproduced in Appendix II at the end of this article.

\(^10\) It would therefore seem technically more correct to speak of a dotted line with a varied number of segments, as for instance the \(11/9/10\)-dotted-line. However, since the \(9\)-dotted-line is the only one so far relied upon by China on the international level to clarify its position in a state-to-state dispute, the present contribution will normally use the notion “\(9\)-dotted-line”, unless the varying number of dotted lines seems to have legal implications.

\(^11\) \textit{Eritrea/Yemen Arbitration}, \textit{supra} note 80 at 295, para. 382.
Hydrographic Organization precisely for the purpose of clarity. In China, it should be remembered, is a member of this international organization.

D. Unclear Intent

As rightly pointed out by Judge Oda in his separate opinion in Kasikili/Sedudu, “a claim to territory can only be made with the clear indication of a government’s intention, which may be reflected in maps. A map on its own, with no other supporting evidence, cannot justify a political claim” (emphasis added). In casu, the criterion of discernible intent on the part of the PRC government is not adequately fulfilled. The variety of interpretations of the U-line offered by legal scholars as well as the PRC’s ambiguous note verbale de dato 7 May 2009 bear witness to this conclusion. Besides confusing sentence structures, terms employed in the note verbale, namely “relevant waters” and “adjacent waters”, are particularly puzzling as they do not appear anywhere in UNCLOS. The ostensibly deliberate vagueness is exacerbated, for the PRC has yet to pass legislation giving the U-line any effect in its domestic legal order.

Even if one could unearth the PRC’s intention behind the map, the legal implications thereof should not be overestimated. Turning back to Judge Oda’s aforementioned writings:

A map produced by a relevant government body may sometimes indicate the government’s position concerning the territoriality or sovereignty of a particular area or island. However, that fact alone is not determinative of the legal status of the area or island in question. The boundary line on such maps may be interpreted as representing the maximum claim of the country concerned, but does not necessarily justify that claim.

E. Lack of Neutrality

When a map is drawn up by an impartial expert, its probative value tends to increase. A contrario, cartographic materials produced at the behest of one of the parties in a
dispute will be viewed with more suspicion, and thus reliance on such a document should be the exception not the rule.\textsuperscript{99} The arbitrators in the \textit{Beagle Channel Arbitration} commented along these lines:

While maps coming from sources other than those of the Parties are not on that account to be regarded as necessarily more correct or more objective, they have, \textit{prima facie}, an independent status which can give them great value unless they are mere reproductions of—or based on originals derived from—maps produced by one of the Parties, or else are being published in the country concerned by, or on behalf, or at the request of a Party, or are obviously politically motivated. But where their independent status is not open to doubt on one or other of these grounds, they are significant relative to a given territorial settlement where they reveal the existence of a general understanding in a certain sense, as to what that settlement is, or, where they conflict, the lack of any such general understanding.\textsuperscript{100}

The lack of neutrality is patently evident with respect to the 9-dotted-line. As discussed in section II-A, the history of the U-line can be traced back to an internal commission established by the ROC government to update the Chinese map and reassert its position. Such a unilaterally appointed and staffed governmental body can hardly be deemed impartial vis-à-vis other interested states in the South China Sea region. It should not be forgotten that conscientious map-makers can be used for deceitful purposes:

[A] map-maker ... may be employed to reveal what a particular State such as his own asserts to be the full measure of its territorial domain, regardless of the propriety of the assertion and without intimation that the portrayal depicts the scope of a claim rather than the position of an accepted boundary. Through subsequent copying and reproduction by unsuspecting cartographers not only are these erroneous accounts perpetuated but the very fact of repetition tends to endow them with legal sanction by producing a large number of maps unanimous in their testimony.\textsuperscript{101}

\textbf{F. Technical Imprecision}

In his treatment of the evidentiary value of maps, De Visscher included the following criteria: “\textit{les garanties d’exactitude géographique intrinsèques de la carte … sa}
précision au regard des points contestés”. According to Brownlie, “a map has probative value proportionate to its technical qualities”.

Case-law also points to the requirement of technical precision in maps. In the Island of Palmas case, sole arbitrator Max Huber wrote that: “[t]he first condition required of maps that are to serve as evidence on points of law is their geographical accuracy.”

The ICJ opined that:

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 the 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.

In the light of these views, the advent of modern technology could increase judges’ recourse to map evidence. An excellent case in point is the ICJ’s 2004 advisory opinion on the Israeli Wall in which it relied (in part) on an electronic map posted on the Israeli Ministry of Defence website to pinpoint the current and future route of the wall in Palestinian territories. Conversely, it does not seem that the Chinese map can meet stringent technical standards. Although the Chinese interrupted line generally follows the 200-metre isobath, it has so far never been precisely demarcated,

103. Ian BROWNlie, African Boundaries: A Legal and Diplomatic Encyclopaedia (London: Royal Institute of International Affairs, 1979) at 5.
104. Cukwurah, supra note 84 at 217-20.
105. Island of Palmas, supra note 80 at 853. Cited in Dubai/Sharjah Border Arbitration, supra note 88 at 630, para. 168. See also Delimitation Between Eritrea and Ethiopia, supra note 88 at 1075, para. 3.19, stating: “[t]he Commission is also aware that maps, however informative they may appear to be, are not necessarily accurate or objective representations of the realities on the ground.”
106. Frontier Dispute, supra note 57 at 582-3, para. 55. See also Beagle Channel, supra note 100 at 174, para. 154, stating: “[t]he Court is obliged to conclude therefore that the Pelliza map is of too uncertain a character to have the requisite probative value”; Request for Interpretation of the Judgment of 15 June 1962 in the Case concerning the Temple of Preah Vihear (Cambodia v. Thailand), Order of 18 July 2011, Dissenting Opinion of Judge ad hoc Cot, [2011] I.C.J. Rep. 1 at 4, para. 22-2 (declaring the Court’s decision to define a provisional demilitarized zone “imprudent” in light of cartographic material he deems limited and insufficiently reliable from a technical standpoint).
thus lacking accurate geographical co-ordinates. In addition, there seems to be some slight inconsistency among PRC maritime cartographic materials: the endpoints of the different segments that make up the line vary (variations have been found ranging from 1 to 5 nm). But even the location of the segments themselves is sometimes clearly at variance with those found on the Annex I map. Moreover, because it concerns lines at sea, satellite imagery will not be very helpful either.

An additional element contributing to the inaccuracy of the Chinese map is its excessively small scale. The ICJ has lamented maps drawn to an insufficient scale. A prime illustration can be found in Land, Island and Maritime Frontier Dispute:

Honduras has produced a second map, of 1804, showing the location of the ecclesiastical parishes of the province of San Miguel in the Archdiocese of Guatemala. The scale of this map is however insufficient to make it possible to determine whether the course of the last section of the river Goascoran is that asserted by El Salvador, or that asserted by Honduras.111

Similar problems have been presented before arbitral tribunals. For instance, the Eritrea-Ethiopia Boundary Commission held: "[m]oreover, much of the map evidence is on so small a scale, or so devoid of detail, that it can only be treated as ambiguous in this respect.”112

108. Dzurek, supra note 3 at 12; Zou, supra note 5 at 51.
109. Dzurek, supra note 3 at 11.
110. See for instance 1991 Chinese Map, supra note 89. Not only are a good number of segments simply missing (ibid.) but the location of those represented on that map of scale 1:1,500,000 are clearly at variance with those to be found in Annex I: the first three segments are clearly discernable, but the first is located more in a north-western, the second in a south-western, and the third in a northern direction when compared to the Annex I map.
111. Land, Island and Maritime Frontier Dispute (El Salvador/Honduras: Nicaragua Intervening), [1992] I.C.J. Rep. 350 at 550, para. 315. See also Kasikili/Sedudu Island, supra note 58, Dissenting Opinion of Vice-President Weeramantry at 1176, para. 73:

Maps can of course vary differing degrees of weight depending on their authorship and the circumstances in which they were made. Moreover, the scale of the maps is often so small as not to show clearly the particular area which is the subject of the dispute, while other maps which are sufficiently large can indicate the area of dispute in sufficient detail.
112. Delimitation Between Eritrea and Ethiopia, supra note 88 at 1086, para. 4.67. Earlier on in that case (at 1076, para. 3.21), the Commission also stated: "[a] map … on so small a scale that its import becomes a matter for speculation rather than precise observation, is unlikely to have great legal or evidentiary value.” See also Case Concerning the Location of Boundary Markers in Taba (Egypt/Israel), Decision of 29 September 1988, [2006] XX Reports of International Arbitral Awards 1 at 48, para. 184:

The Tribunal does not consider these map-based indications to be conclusive since the scale of the map (1:100,000) is too small to demonstrate a location on the ground as exactly as required in these instances where the distances between disputed pillar locations are sometimes only of a few metres.

Dispute Concerning the Course of the Frontier Between BP 62 and Mount Fitzroy ("Laguna del Desierto") (Argentina/Chile), Resolution of 13 October 1993, [1999] II J International Law Reports 1 at 224:

In the first place, some observations are called for as regard the maps of scale 1:10,000 submitted by Chile. These maps drawn to a scale considerably greater than that of the Map of the Mixed Boundary Commission or of those attached to the Chilean Submission of 31 January 1993 claim to provide a more accurate representation of the true topography of the ground.
Finally, it is to be noted that the Chinese map does not contain any indication of the datum (i.e. a reference employed in geodesy for measurement) used, which seems to be a crucial element in evaluating the technical precision of any maritime boundary.113

IV. NON-OPPOSABILITY OF THE MAP VIS-À-VIS OTHER REGIONAL STATES

A. Applicable Standard

Even if one accepts that the 9-dotted-line is an erroneous portrayal of reality, that does not mean that it can be cast aside forthwith. This point was elucidated in the Beagle Channel case:

the importance of a map might not lie in the map itself, which theoretically might even be inaccurate, but in the attitude towards it manifested—or action in respect of it taken—by the Party concerned or its official representatives.114

The judges in Temple of Preah Vihear had a more pronounced take, sending a clear warning signal as to the potential effects of inadvertence in the face of cartographic assertiveness:

[It] is clear that circumstances were such as called for some reaction, within a reasonable period, on the part of the Siamese authorities, if they wished to disagree with the map or had any serious question to raise in regard to it. They did not do so, either then or for many years, and thereby must be held to have acquiesced. *Qui tacet consentire videtur si loqui debuisset ac putisset.*115

Another instance of the linkage between maps and acquiescence was restated more recently by the Eritrea-Ethiopia Boundary Commission: “[a] map *per se* may have little legal weight: but if the map is cartographically satisfactory in relevant respects, it may, as the material basis for, e.g., acquiescent behaviour, be of great legal significance.”116

113. Maurice KAMTO, “Sur quelques questions techniques liées à la détermination du tracé d’une frontière maritime délimitée” in Rafael CASADO RAIGON and Giuseppe CATALDI, eds., *L’évolution et l’état actuel du droit international de la mer* Mélanges de droit de la mer offerts à Daniel Vignes (Brussels: Bruylant, 2009), 481 at 493–6, who gives a detailed account of the serious difficulties later encountered by Cameroon and Nigeria because of the fact that the ICJ had relied in its judgment on a British Admiralty Chart which did not contain any indication of the datum used.


116. *Delimitation Between Eritrea and Ethiopia, supra* note 88 at 1075–6, para. 3.22. The Commission similarly observes (at 1076, para. 3.22):

But a map produced by an official government agency of a party, on a scale sufficient to enable its portrayal of the disputed boundary area to be identifiable, which is generally available for
Of course, the fact patterns underlying the above-mentioned cases are wholly different from that with which we are faced, making it debatable whether the precedents could even apply here. In casu we are dealing with a purported maritime boundary, the establishment of which is, in the words of the ICJ, “a matter of grave importance and agreement is not easily to be presumed”. Furthermore, as observed by Strupp:

[T]his strange U-shape claim was so abnormal and so exorbitantly outside reality during the decades 50 to 60 that it is not conceivable that by way of “acquiescence with regard to map claims” a (tacit) recognition by the foreign states community of those “extremely irregular” pretensions, by application of rule *qui tacet consentire videtur si loqui debuisset ac potuisset* or else, could seriously come under examination.

Strupp also observes that:

In the utterly eccentric “moon claim”-like circumstances of the SCS [South China Sea] “U-shaped line” [there] evidently exists no rational basis at all for such enormously high degree of “hyper-sensitivity” on behalf of states confronted with adverse map claims in terms of “acquiescence”.

It would, however, be prudent to adopt an intermediate approach. Having examined a large body of state practice, Blum, in his influential work on historic titles, comes to the following conclusion:

[Re]cent instances of protests lodged against “map claims” seem to indicate that States do, in fact, “keep a vigilant watch over the maps published by the civilized nations” ... On the whole, it seems to emerge that States will be imputed with knowledge of each other’s domestic legislative activities and other acts done under their authority, and that the plea of ignorance will be accepted only in the most exceptional circumstances. States desirous of reserving their rights will therefore be well advised to follow with a substantial amount of self-interested awareness the official acts of other States and to raise an objection to them—through the legitimate means recognized by international law—should they feel that their rights have been affected, or are likely to be affected, by such acts.

**B. Protest/Lack of Acquiescence**

Assuming that the prospect of implied acquiescence looms large, coastal states are required to express their disapproval of the Chinese U-line policy and its underlying contentions. Some Chinese scholars have alleged that the international community
has not voiced its dissent so as to prevent the solidification of Chinese pretensions in the South China Sea:

Upon the declaration of the nine-dotted line, the international community at no time expressed dissent. None of the adjacent states presented a diplomatic protest. This silence in the face of a public declaration may be said to amount to acquiescence, and it can be asserted that the dotted line has been recognized for half a century. In recent years, however, several Southeast Asian countries, which have been involved in sovereignty disputes of the South China Sea, have questioned the juridical status of the nine-dotted line.\(^{121}\)

Zhao Guocai maintains: “[s]ince the declaration of the 9-discontinued-and-dotted line, the international society at that time had not put forward any dissents. Neither had the adjacent States raised any diplomatic protests on the 9-dotted line. These amounted to acquiescence.”\(^{122}\)

This international acquiescence has been very much doubted.\(^{123}\) Taking Vietnam as a case in point, we can observe that these statements are unconvincing. Examples include:

1. An objection to China’s pretensions by stating that it would “not recognize any so-called ‘historical interests’ which are not consistent with international law and violate the sovereignty and sovereign rights of Vietnam and Vietnam’s legitimate interests in its maritime zones and continental shelf in the East Sea”.\(^{124}\)

2. A declaration in response to the PRC’s 2009 note verbale:

   The Hoang Sa (Paracels) and Truong Sa (Spratlys) archipelagoes are part of Viet Nam’s territory. Viet Nam has indisputable sovereignty over these archipelagoes. China’s claim over the islands and adjacent waters in the Eastern Sea (South China Sea) as manifested in the map attached with the Notes Verbales CLM/17/2009 and CLM/18/2009 has no legal, historical or factual basis, therefore is null and void.\(^{125}\)

3. A request to remove data from China’s online map service depicting the U-line (mentioned above) on two occasions.\(^{126}\)

---

\(^{121}\) Li and Li, supra note 4 at 290. See also “Carps Among the Spratlys” The Economist (10 March 2011), online: The Economist (http://www.economist.com/node/18332702?story_id=18332702), stating: “China points to a map in use since the Republic of China published it during the Chinese civil war in the 1940s and says that, until quite recently, nobody minded.”

\(^{122}\) Zhao, supra note 33 at 22, translated in Li and Li, supra note 4 at 292.

\(^{123}\) As argued in the paper present by Nyuyen Hong Thao at the Second International Workshop, entitled “The South China Sea: Cooperation for Regional Security and Development”, held on 10-12 November 2010 in Ho Chi Minh City, Vietnam: “South China Sea—Three Stages, Four Challenges, Two Regional Approaches and One Confidence” at 12-13. On file with the authors.


\(^{126}\) Vietnam, “Viet Nam Request the Chinese Side to Remove from SBSM Map Service All Data and Information that Violate Viet Nam’s Sovereignty” (5 November 2010), online: Ministry of Foreign
4. Recent protests against Chinese interference with Vietnamese vessels, in which the legality of the 9-dotted line was explicitly refuted.127

5. At the occasion of the last Meeting of State Parties to UNCLOS, Vietnam reiterated its objection to the 9-dotted line under item 14 of the Agenda.128

Such conduct must comply with the international legal criteria necessary to imbue acts of protest with legal effect so that the U-line cannot be used against the protesting state. Nevertheless, it seems unfeasible to apply these criteria to the early cases in which the ICJ inferred acquiescence from over sixty and 125 years of notoriety of the 9-dotted-line were established, the nature of acquiescence is such that they occur (e.g., the 2009 PRC letter to the UN Secretary-General). The passage of time, the following criterion, is contingent upon the former. Arguendo, that the notoriety of the 9-dotted-line were established, the nature of acquiescence is such that it tends to be accepted only following a prolonged period of passivity.129

Conspicuous examples are Fisheries and Right of Passage over Indian Territory cases in which the ICJ inferred acquiescence from over sixty and 125 years of
silence, respectively. The requirement of clear intent has also been fulfilled in that the Vietnamese declarations are unequivocally aimed at preventing the coming into being of new Chinese legal entitlements. Also, the criterion that protest must be consistent and uninterrupted can be said to have been complied with, as illustrated by the content of the above-mentioned notes of protest.

V. CONCLUSION

In this contribution, we have attempted to uncover some of the legal uncertainties shrouding the dashes on the Chinese map of the South China Sea. Our analysis has brought us to the conclusion that the U-line, whether interpreted as a territorial or a maritime manifestation, clearly lacks precision, and thus poses problems if kept as part and parcel of PRC as well as Chinese Taipei’s official policy. If the considerable body of case-law is anything to go by, cartography displaying the 9-dotted-line would not fare well as evidentiary material in a hypothetical court case. While it can be observed that some see a new trend emerging that militates in favour of leniency vis-à-vis maps, we would submit that such contentions are rather precipitate. It remains unchanged that maps other than those annexed to treaties are to be received with understandable prudence and will be assessed in function of their merits.

But there is a more fundamental issue at stake here. Maintaining a unilateral claim over an extended period of time without due consideration for the rights of other interested parties is tantamount to imposing a fait accompli. This plainly flies in the face of international law, which prevents the strong states from claiming their “lion’s share” to the detriment of their weaker neighbours. Adherence to the 9-dotted-line is also out of step with the current government regime, which includes workshops and (proposals for) co-operation in the field of environmental and biodiversity protection. One pragmatic solution that has gained currency over the years is

131. Martti KOSKENNIEMI, “L’affaire du passage par le Grand-Belt” (1992) 38 Annuaire français de droit international 905 at 932; Fisheries Case, supra note 66 at 138; Right of Passage over Indian Territory (Portugal v. India), [1960] I.C.J. Rep. 6 at 40. See also Land, Island and Maritime Frontier Dispute, supra note 111 at 577, para. 364.

132. Fisheries Case, supra note 66 at 138; Chamizal Case (Mexico v. United States), Award of 15 June 1911, [2006] XI Reports of International Arbitral Awards 309 at 329.


134. Abou-el-Wafa, supra note 37 at 128–9.


seeking ways of achieving the joint development of resources. This involves setting aside territorial and maritime disputes and concluding provisional arrangements "without prejudice" to the final delimitation outcome. Fortunately, the PRC, Chinese Taipei, and other regional actors have made use of these multilateral mechanisms and continue to do so in a fruitful manner. Our hope is that claimant states abandon exceedingly assertive cartographic assertions and rather focus their energies on mutually beneficial outcomes as regards the South China Sea on the basis of UNCLOS.
