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Do Alternative Dispute Resolution (ADR) and Track Two Processes Support Transboundary Marine Conservation? Lessons From Six Case Studies of Maritime Disputes

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By definition, marine protected areas (MPAs) and other effective area-based conservation measures (OECMs) address spatial aspects of the ecological processes and marine features. Such a requirement is especially challenging in areas where there is no clearly defined jurisdiction. However, in these areas, assigning sovereignty and rights can be achieved through bilateral or multilateral agreements, or with the use of alternative dispute resolution (ADR) tools such as mediation and arbitration. In some cases, states may engage in transboundary marine conservation initiatives to provide an entry point to enable wider collaboration. These processes can also evolve into a form of 'environmental peacebuilding' while ideally maintaining ecosystem functioning and resilience as a core goal. Conversely, MPAs and OECMs can also be used to assert maritime sovereignty rights over disputed waters, under the pretext of conserving marine habitats. This paper identifies emerging issues of conflict resolution and their interaction with transboundary marine conservation. While ADR focuses on negotiations and facilitated processes between state representatives ("track one diplomacy"), we also discuss other forms and levels of marine environmental peacebuilding and dispute resolution, particularly those between civil society organizations ("track two diplomacy"). The six case studies presented highlight areas of recent maritime conflict or border disputes in the Mediterranean Sea, the Red Sea, the West Indian Ocean, the Korean West Sea and the South China Sea. In all cases, high ecological value, vulnerable ecosystems, and the need to conserve ecosystem services provide a shared interest for cooperation despite on-going diplomatic difficulties. The strategies used in these cases are analyzed to determine what lessons might be learned from cross-border collaborative marine initiatives in situations of territorial dispute. The use of ADR tools and their ability to support joint marine initiatives are examined, as well as how such

initiatives contribute to formal border negotiations. Other forms of inter-state dialogue and cooperation between local or civil organizations, circumventing formal treaties and negotiations between state leaders ('track two') are also investigated. Finally, other influencing factors, including third-party involvement, stakeholder interests, power dynamics, economic context, and socio-cultural aspects, are considered.

Keywords: marine conservation, maritime dispute, alternative dispute resolution, mediation, arbitration, science diplomacy, track two diplomacy, marine protected areas

INTRODUCTION

Marine protected areas (MPAs), and other effective area-based conservation measures (OECMs) take various forms in regions of border disputes. The proposal and implementation of these area-based measures can, in turn, influence geopolitical relations between adjacent states. Efforts include bilateral and multilateral initiatives between countries, peri-border 'buffer' zones or demilitarized zones (DMZs), as well as unilateral implementation of conservation areas to apply control over a region (Mackelworth et al., 2019). As on land, these transboundary initiatives can be used for improving inter-state relations (i.e., 'environmental peace-building'), as either a primary or secondary goal, alongside ecosystem protection or rehabilitation (Mackelworth, 2016; Portman and Teff-Seker, 2017). In some cases, however, countries have used the pretext of marine conservation for 'ocean grabbing,' i.e., to establish maritime sovereignty rights or access, under the pretext of protecting marine habitats (Bennett et al., 2015; Mackelworth et al., 2019).

This article examines how MPAs and OECMs are implemented in, and affected by, efforts to resolve maritime border disputes. Specifically, it focuses on alternative dispute resolution (ADR) tools, in conjunction with transboundary conservation efforts.[1] The article also addresses "track two diplomacy" initiatives, in which civil society initiatives take place across borders. The article reviews case studies from Europe, the Middle East, South-East Asia and Africa, where MPAs and OECMs were either planned or implemented, describing their interaction with specific ADR tools (see **Figure 1**). These are all cases where the protection of ecologically significant areas interacts with important ecosystem services such as fisheries, tourism, and mineral extraction. These provide a shared interest for collaboration despite possible diplomatic difficulties, offering joint goals and potential synergies for all sides. In some cases, joint management has not been fully achieved for different reasons. Nevertheless, lessons learned from analyzing partial success, as well as failure (Giakoumi et al., 2018) may provide insights into these and other cases, where conserving marine biodiversity across borders, as well as in the area beyond national jurisdiction (ABNJ), is becoming a priority.

[1]We use the established term "ADR" for tools such as mediation and arbitration not because they are uncommon, but because this is the established name in the literature for non-violent bi-lateral or multi-lateral conflict resolution processes that are alternative to litigation in court.

Alternative Dispute Resolution

Alternative dispute resolution (ADR) uses non-coercive, non-legislative methods to settle conflicts, whether on an individual, corporate or international level (Price, 2018). The term ADR includes several non-violent techniques used instead of litigation to determine the outcome of an on-going conflict (see **Table 1**). ADR processes are intended to be less formal, shorter and simpler, and therefore more accessible and affordable than official proceedings in courts, civil or international. In civil cases, they are increasingly encouraged by courts and governments around the world, as they also have the potential to decrease the workload of an already overburdened court system (Bercovitch and Jackson, 2001; Price, 2018). In international cases, where negotiations, mediation and arbitration are often preferred to international courts, ADR frameworks and tools have grown and improved continuously since the 1950s (Lundgren and Svensson, 2020). In terms of international maritime law, the United Nations Convention of the Law of the Sea (UNCLOS), specifically, encourages parties to resolve maritime disputes through ADR (UNCLOS, Part XV "Settlement of Disputes"), stating that disputing parties should first attempt to resolve conflicts by "peaceful means of their own choice" (art. 281). If this is not enough, the convention also provides four mechanisms for binding legal procedures: ITLOS (International Tribunal of the Law of the Sea), ICJ (International Court of Justice), and two forms of Arbitration (art. 287).

In addition to cost-effectiveness and greater expediency, for international cases ADR offers much needed flexibility, as often parties to a dispute may have different laws, legal systems and norms. ADR allows parties to choose a mutually agreed venue and facilitator(s), and have a custom-made process that would suit both or all sides in a manner that international courts (e.g., ICJ or ITLOS, in maritime cases) do not offer (Hadwiger, 2017). In maritime cases, where issues of borders and legal rights are often ambiguous and different than land-based equivalents (Mackelworth et al., 2019), this "customization" option can be particularly important.

Two of the most common ADR tools are mediation and arbitration. Bercovitch and Jackson (2001) define *mediation* as an extension of negotiations, where parties choose a party that is not directly involved in the dispute to resolve their differences without invoking legal authorities. While this turns a bi-lateral relationship into a tri-lateral one, potentially adding complexity, it also provides new possibilities for all sides involved (Bercovitch and Jackson, 2001). In *arbitration*, the two sides choose an arbitrator to act as a judge, hear the arguments, and make a

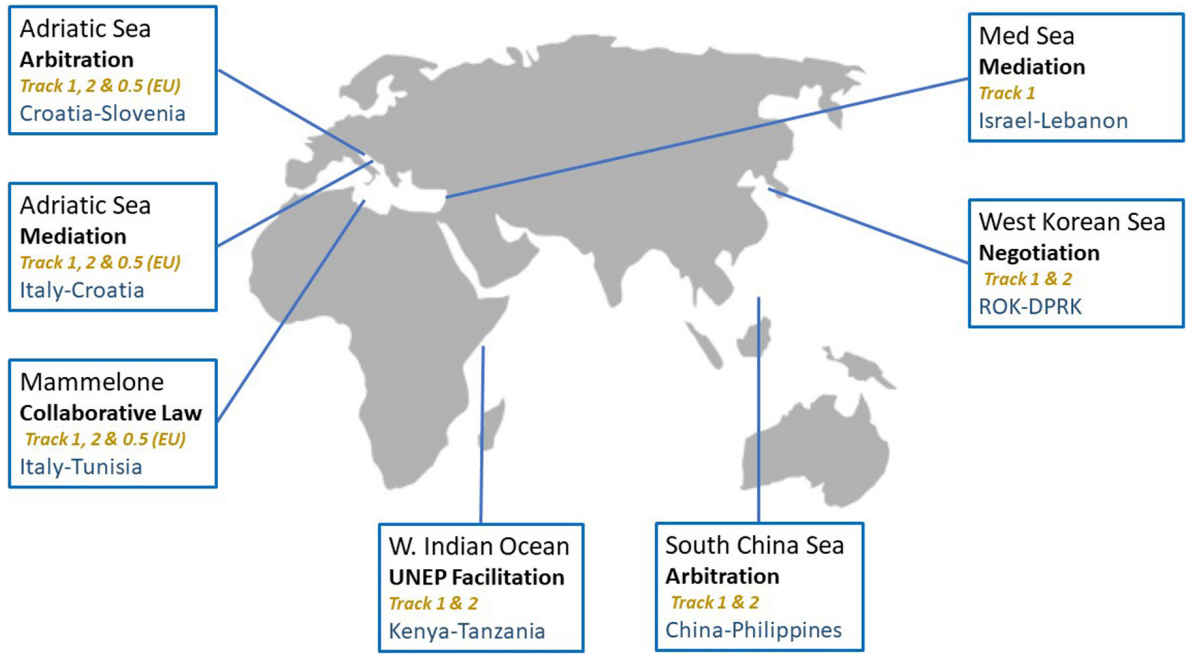

FIGURE 1 | Map of marine-related ADR case-studies.

binding decision based on the facts presented. Unlike litigation, this process takes place outside the courtroom and can be binding or non-binding (Pappas, 2015; Hadwiger, 2017).

Another common dispute resolution tool is collaborative law, a voluntary process in which each party has its own representative (often lawyers), in an attempt to collaborate and reach a mutually beneficial agreement outside the court (Lande and Herman, 2004). ADR can be considered similar to the "Soft law" concept which refers to quasi-legal instruments with little or no legally binding framework. Soft law is often associated with international or transnational participants, including most UN resolutions and voluntary action plans, such as Agenda 21 (Kirkman and Mackelworth, 2016).

The current paper primarily examines case studies that involve the more common, and easily identified, ADR tools of mediation and arbitration, but also as other types of conflict management or resolution, and various forms of diplomacy. It discusses how ADR tools and track two initiatives are implemented in marine international disputes, and especially how these processes and initiatives influence, and are influenced by, marine conservation efforts.

Advantages and Disadvantages of ADR

Mediation and arbitration are intended to allow more flexibility and be more suitable to the specific interests and abilities of the parties, which often go unrecognized due to the rigidity of conventional law and court procedures. Thus, they have the potential for identifying common interests and synergies, and reaching better results for all sides involved (Sipe, 1998; Paffenholz, 2004). In addressing environmental mediation, in particular, Sipe (1998) argues that proponents of mediation have suggested that these settlements hold greater intrinsic worth in terms of fulfilling party needs and goals; that environmental mediation boasts higher satisfaction rates than court cases; that they have higher implementation and compliance rates; and that they allow a broader discussion of the issues at hand. This, in turn, improves the understanding of disputes, especially those that pertain to natural resources, in which there are often multiple parties, issues and interests (Sipe, 1998).

In international cases where the usual, government-sanctioned, legal enforcement does not apply, ADR is useful in achieving or enhancing accountability, while allowing a certain

TABLE 1 | Descriptions of common alternative dispute resolution (ADR) tools.

Method	Description
Mediation	A third party aids communications between disputing parties, helping them reach a mutually agreed decision
Arbitration	A mutually chosen third party reviews the case and decides the outcome
Med-Arb	The mediator becomes arbitrator if an agreement is not reached via mediation
Collaborative Law	Negotiations in which both sides have their own representatives
Restorative Justice	A discussion between victims and perpetrators, often facilitated*
Community consensus	Decision-making based on the full agreement of all members
Soft law	Non-binding instruments for voluntary regulation*

**Not necessarily with the purpose of reaching an agreement.*

amount of confidentiality (Hadwiger, 2017). Moreover, these mechanisms are considered particularly suitable for cases of neighboring states, where maintaining a good relationship is particularly important (Paffenholz, 2004). ADR is also relatively flexible, and can involve multiple stakeholders, as well as allow procedural flexibility, useful in cross-border cases. This allows the parties to decide on "private" rules that would suit all participating parties (Hadwiger, 2017). This is a potential solution for issues of compatibility (Ostrom et al., 2002), where countries may wish to create strategic links to cooperate, but often face challenges in terms of incompatible regulations, institutional norms and interests, but could develop common mechanism and conflict resolution schemes. Finally, having the option to *opt-out* of an ADR process at any time, makes it a rather low-risk option (Hadwiger, 2017). Nevertheless, it does have its limitations. Even if chosen, the process may not result in an agreement, and since it is voluntary, cases may end with no official "verdict," or, in some cases, choose not to apply certain agreed-upon terms and not be stopped or sanctioned in any way (Schoenbrod, 1983; Sipe, 1998; Hadwiger, 2017).

Multi-Track Diplomacy

In conflicts between states, it is common to see multiple levels of diplomacy and conflict resolution. *Track One diplomacy* involves formal meetings between officials, i.e., government and state representatives, or military leaders. It focuses primarily on reaching agreements such as ceasefires, peace treaties and trade deals. *Track Two diplomacy* is more informal and refers to unofficial peace-building efforts of civil society representatives, often non-governmental organizations (NGOs). These are aimed at bridging gaps that stem from competing interests, as well as influencing public opinion, fostering goodwill between sides, and providing humanitarian aid to local populations (Montville, 1991; Warburton, 2017). The option of *Track Three diplomacy,* or "people to people diplomacy," is used to describe other efforts of relationship-building and cross-community understanding that engage the general public rather than NGOs. This occurs when individuals and private groups facilitate communications and interaction between diverse groups (e.g., between different ethnic groups) (Warburton, 2017; Farnum, 2018).

When it comes to conservation, the movement from international to global governance has seen the roles of international actors change (Kütting, 2016). In cases of power imbalances between states, those with less power seek support from other organizations, among them supranational institutions and large international NGOs (Campbell and Pet-Soede, 2016). This intermediate, *Track 1.5 diplomacy,* moves discussions over conservation to a transboundary level.

The term *Science diplomacy* is becoming popular when discussing cross-border environmental cooperation. This term relates to the science-foreign policy nexus, and can lead to three types of action: science in diplomacy (science informing foreign policy objectives); diplomacy for science (diplomatic activities that facilitate international scientific cooperation); and science for diplomacy (using science to improve international relations) (López de San Román and Schunz, 2018). These could be effective agents of conflict management that could improve global understanding, lay grounds for mutual respect and contribute to capacity-building (Flink and Schreiterer, 2010, p. 665). Based on these definitions, science diplomacy could potentially take place in any (and every) track.

In some terrestrial territorial disputes between states, local communities have been split over the drawing of arbitrary borders at national level. This often leads to a permeable boundary through which locals move and communicate informally. The promotion of regions and regionality has been encouraged by supranational organizations such as the EU to reduce conflict around borders. Such an example is the Committee of the Regions (CoR), an influential body in the EU which promotes 'that the principles of subsidiarity and proportionality are upheld so the decisions are taken and applied as close to the citizens as possible and at the most appropriate level' (Committee of the Regions (CoR), 2009).

Most ADR efforts concentrate on Track One diplomacy, which has more resources and an increased ability to stop on-going violence or develop binding treaties between states. However, Track Two diplomacy can build upon Track one diplomacy in order to further enhance further relationships between the parties involved (Çuhadar, 2009; Farnum, 2018). This means that Track Two should be used to reach a more sustainable, long-lasting, real peace, especially at times when Track One diplomacy only provides a narrow solution to a narrow problem. Track Two tends to treat the underlying problems that caused the conflict to erupt in the first place (Çuhadar and Dayton, 2012). Track Three might emerge when other channels are perceived by certain parties as absent, lacking or inaccessible. It includes the cooperation between individuals and marginalized groups from each side, including those that have less political power or are not identified with the dominant discourse. While they have less political power and economic power, they can nonetheless present alternatives to government positions and potentially impact government attitudes or behavior (Kraft, 2002).

CASE STUDIES

The South China Sea: Arbitration

Tensions concerning overlapping claims to islands and coral reefs in the South China Sea (SCS) have built up gradually over the last 100 years. Both the People's Republic of China (PRC) on the mainland and the Republic of China (ROC) on Taiwan claim most of the South China Sea down to the territorial sea border of Indonesia in the Natuna Archipelago. These claims arise primarily from a map sketched by ROC geographer Bai Meichu in 1936, prior to the end of the Chinese civil war (Hayton, 2014). The series of maps and lists of features which followed culminated in the PRC submission to the Secretary General of the United Nations in 2009 with a refinement of that sketch, consisting of dashed lines. Although the numbers of dashes has changed over the years, it is commonly referred to as the '9-dashed line,' which assigns to the PRC (and ROC from the standpoint of that government) more than 80% of the South China Sea (Nguyen, 2017).

China's 1974 landings in the Parcel Islands resulted in the removal of Vietnamese bases there, and subsequent bilateral tensions increased recently following the building of infrastructure and tourist facilities by China. Compounding this are conflicts over oil drilling rights near the Paracels and the Spratly Islands to the south. During World War II, the Spratly Islands were under the control of Japan. In 1946, the ROC built a military base on the largest of the Spratly Islands (approximately 1.1 km^2) in 1946. The Philippines began to set up military outposts on eastern and central parts of the Spratly area in 1978. In 1988, China clashed with Vietnam over several key reefs and islands in the Spratly Islands, resulting in the loss of more than 60 Vietnamese lives. In 2001, the Philippines set up their first civilian village on Pag-Asa Island. The village still exists, considered a response to the issue of disputed sovereignty (PCA, 2016).

The Philippines, which had been unsuccessful at making progress with peace-keeping negotiations with China, started a compelled arbitration under a tribunal of members of the Permanent Court of Arbitration in 2013. In 2016, the tribunal published their award for the case. Among the many findings, mostly in favor of the Philippines, was the decision that none of the islands in the Spratly area could possibly qualify as "fully entitled islands" (entitled to EEZ and Continental Shelf) and are thus legally "rocks" according to UNCLOS. The Scarborough Reef ruling indicated that, in the absence of an EEZ, all countries which have traditionally fished there using artisanal methods must be permitted to continue to do so, albeit with reasonable fishery management controls. Other findings included condemnation of the rampant destruction of coral reef areas by China, both in terms of their artificial island development (which lacked UNCLOS-required published environmental impact statements) and in terms of the unsustainable practice of digging-up of giant clam shells for the carving trade. The total area of the Spratly Islands, Scarborough Shoal and the Paracel Islands damaged by China exceeded 159 million square meters. The damage made in burying reefs and rocks to make artificial islands (more than 14 million m^2 by China) is irreversible. Other forms of damage (e.g., clam digging) have varying recovery potential (McManus, 2017).

The basis for the compelled arbitration was a provision in the UNCLOS stating that multiple failed attempts by a party to meet for negotiation could be followed by one party calling for such action. The Philippines brought forth the call for arbitration, which was then carried out by three members of the Permanent Court of Arbitration in The Hague, Netherlands. The Philippines brought in a large team of consultants from the United States, Australia, and Germany. No representatives from China ever attended. The arbitration award clarified the legal status of the islands and their associated waters. However, the refusal of China to acknowledge the legitimacy of the arbitration kept it from settling tensions over the disputed area (McManus, 2017).

In 2011, the Association of Southeast Asian Nations (ASEAN) and China adopted a Declaration of Conduct to guide interactions in the SCS, including marine research and environmental protection among other provisions. These have been followed by discussions about developing a more comprehensive and binding Code of Conduct (CoC), beginning in 2016. In support of this effort, the Center for Strategic and International Studies in Washington, D.C., formed the Expert Working Group on the South China Sea in 2017. This group included environmental, hydrocarbon, maritime and policy specialists from the United States, Taiwan, the Philippines, Malaysia, Vietnam, Indonesia, Singapore, Australia, Canada, and the United Kingdom. In 2 years of meetings, it produced a series of recommendations for inclusion in the CoC. Prominent among these is a strong recommendation for the formation of a Fishery and Environmental Management Area in the South China Sea (Asia Maritime Transparency Initiative (AMTI), 2018).

In July, 2020, US Secretary of State Mike Pompeo announced that the US would now consider most of the maritime claims of the PRC and many of its actions to be illegal, in support of the previous Tribunal Award. This announcement was followed in August 202 by the placing of 24 PRC companies on the Entities list, which restricts certain trading, because they had played a significant role in the building of the PRC artificial island bases in the Spratly Islands (Poling and Cooper, 2020).

ADR in the Adriatic: Arbitration and Third Party Involvement (Track 1.5)

Two case studies in the Adriatic show the importance of a mutual ecological dilemma, clear boundaries and the roles of the supra-national organizations in facilitating agreement. However, each of these two cases chose a different ADR tool and resulted in different outcomes.

The northern Adriatic, in particular, has been heavily exploited for fishery and is an important region for shipping, trade and industry, tourism, and oil and gas (Peterlin et al., 2013; Kocian, 2014). Within this region is the coastal disputed territory of the Piran-Savudrija Bay. Since Croatia and Slovenia achieved independence from Yugoslavia in 1991 the maritime border in Piran Bay has been under dispute (for the detailed history see Mackelworth et al., 2013, 2016).

In 2009, with the assistance of the European Commission, the two countries signed an Arbitration Agreement concerning the delimitation of the maritime and terrestrial boundary between the two States. This was conducted under the auspices of the Permanent Court of Arbitration in The Hague. The arbitration process started in 2013. However, Croatia withdrew from the process and claimed it was tainted and untrustworthy, after discovering that in 2014–2015 there were illicit attempts on the Slovenian side to influence the arbitration ruling. Following these events, Slovenia changed its arbitrator and claimed that there was no impediment preventing the Tribunal from fulfilling its duty. The arbitration tribunal continued its work without the Croatian arbitrator and in June 2017 rendered a final ruling on the border. However, the Croatian Government stated it had no intention to implement it. In December 2017 Slovenia declared adherence to the ruling, and to force Croatia to comply with the ruling, Slovenia initiated proceedings under Article 259 of the Treaty on the Functioning of the European Union (TFEU) in March 2018. When the European Commission did not deliver its reply within 3 months, Slovenia filed an action against Croatia in

July 2018 for the infringement of an obligation under Article 259 TFEU. In January 2020 the EU Court of Justice declared that it lacked jurisdiction to rule on this action brought by Slovenia, as it the issue would fall under the jurisdiction of the International Tribunal of the Law of the Sea. Slovenia has recently added pressure by delaying and threatening to veto Croatian entry into the EU Schengen area and threatening to block Croatian accession to the Organization for Economic Cooperation and Development (OECD) (Lider, 2017).

In the second Adriatic case, the central Adriatic the region of Jabuka Pit covers about 10% of the territorial and offshore waters of Italy and Croatia and the international boundaries are not contested. The importance of this region as spawning area for many of the commercial fish species in the Adriatic was a major feature in the development of cooperation between the two states (for the detailed history of the areas see Mackelworth et al., 2019).

The region has been over-fished for several decades and biomass figures have been in decline (Vrgoč et al., 2014). It thus became clear that some form of management was required to alleviate fishing pressures in the region. A series of short term agreements were made between Italy and Croatia to mitigate and restore functions; however, long term agreements appeared to be unlikely, as the area covered was not located in territorial waters. A solution has been found in the form of establishing an internationally recognized Fisheries Restricted Areas (FRA), under the General Fisheries Commission for the Mediterranean (GFCM) in 2017. Proposals for protection were promoted by broad coalition of NGOs and research institutes who lobbied the Scientific Advisory Committee of the GFCM to declare an FRA (FAO, 2017; MEDREACT, 2017). In the case of EU members, fisheries policy is an exclusive competence of the European Union, rather than the states. Thus, the European Commission needed to be the active party, and indeed supported the establishment and the GFCM established the FRA in 2017 (GFCM, 2017, Recommendation GFCM/41/2017/3).[2]

The Case of Israel-Lebanon: Mediation

The recent discovery of potential offshore oil and gas reserves close to the Israel–Lebanon maritime border, and Lebanese objections to the demarcation of the maritime border as declared by the Israeli government, has resulted in a maritime border dispute between the two states over an area of 860 km^2. The UN peacekeeping force in Lebanon (UNIFIL) has been present along the Israel–Lebanon land border since the 1970s, and has played the part of an unofficial mediator between the two sides from time to time during those years. However, the issue of maritime border delineation or agreements does not fall under its mandate. Thus, in order to prevent the situation from deteriorating into violent conflict, there was a need to resolve the matter in other ways. Efforts to begin a mediation process, including suggested mediators such as the UN, France, and Cyprus, did not succeed, and previous US mediation attempts in 2012 and 2016, have also failed to resolve the dispute, with neither side accepting mediator proposals. However, in 2019, both sides agreed to a new round of mediation between them, this time with assistant secretary for Near East affairs, David Schenker, heading the process (see Haboush, 2019). While Israel could benefit from additional gas resources, for Lebanon the gains would be more dramatic, opening its economy and providing an important source of energy independence and income for this unstable country. In economic terms, this development is highly desirable for the Lebanese, but also for US companies that would be included in the extraction (Rudee, 2019).

In parallel, unilateral attempts have been made to promote MPAs in close proximity to the border. Several years ago, Israel (2016) approved a new MPA in the north of Israel, the Rosh Hanikra MPA, which reaches right up to the Lebanese border as it is suggested by the Lebanese. It is the first officially state-approved large-scale MPA. If extended as planned, it will cover almost 100 km^2, reaching 15 km offshore, protecting a valuable and vulnerable marine ecosystem. The MPA's proximity to the border and the adjacent naval training area have actually benefited conservation enforcement efforts, as this proximity deters and prevents fishers from entering the area. Lebanon has also begun a process of declaring two MPAs. One of which, Nakoura, is less than 10 km north of Rosh Hanikra. The latter was chosen to be considered first for declared MPA status by the Lebanese Ministry of the Environment and UNEP, owing to its high ecological value and threats related to pollution and over-fishing (see Mackelworth et al., 2019).

The Case of Kenya and Tanzania: Unofficial Mediation and a Proposed Joint Marine Conservation Area

The Kenya-Tanzania maritime border harbors highly significant marine and coastal biodiversity and is one of the East African eco-regions with high potential for exercising regional and transboundary cooperation (Griffiths, 2005; Levin et al., 2018; Tuda et al., 2019). Due to its rich biodiversity and contribution to the socio-economics of coastal communities, this area has been recognized as an area of ecological and social significance by some international organizations and regimes such as the World Wide Fund for Nature (WWF) and the Convention for Biological Diversity (CBD) (Eastern African Marine Ecoregion (EAME), 2004). This area supports a great diversity of plant and animal life, including some of the Indian Ocean's most diverse coral reefs, mangrove forests, seagrass beds, globally significant marine and coastal habitats. The area's population is multiplying, and nearly 60% of rural communities rely on marine and coastal resources for their livelihoods. Overfishing, illegal and destructive fishing and logging practices, and unsustainable resource use patterns are major threats depleting natural resources. Other threats include pollution, increased sedimentations as a result of poor agricultural practices, and disturbance or clearance of mangroves. Climate change and associated impacts are intensifying the vulnerability of communities and ecosystems in the area, prompting the need for appropriate management measures (ASCLME/SWIOFP, 2012).

Despite on-going environmental issues in the Kenya–Tanzania maritime border, and in response to these issues,

[2]The monitoring and management measures introduced in FRA will come under review after the 31st December 2020.

attention has focused on the concept of transboundary marine conservation as a way of reducing user conflict and as a means of sustainable management of the marine environment (MPRU/KWS, 2015). The two leading agencies promoting the transboundary marine conservation area (TBCA) initiative are the Kenya Wildlife Service (KWS) and the Tanzania Marine Parks and Reserves Unit (MPRU). Recent commitments were made by Kenya and Tanzania under the aegis of the UNEP, through the Nairobi Convention Secretariat[3] which is a convention that provides a legal framework as well as coordination and facilitation to support the prosperity and conservation in the West Indian Ocean coastal and marine areas, and has recently promoted the adoption of a marine transboundary conservation area (TBCA) for the effective and sustainable management of shared marine spaces (UNEP, 2015). Kenya and Tanzania also registered to establish the TBCA as a commitment at the 2017 United Nations Ocean Conference (Tuda et al., 2019).

Managing the proposed TBCA together would allow Tanzania and Kenya to mitigate the increasing threats and continue enjoying the ecological services and economic benefits this area provides. However, because of the different approaches applied by Kenya and Tanzania in marine resource management (Tuda et al., 2019), cooperation may bring about its own challenges. In recognition of the need to spur between country collaboration in marine conservation, the eighth Conference of Parties of the Nairobi Convention adopted a decision requesting support for the TBCA between Kenya and Tanzania. This initiative was supported by the Biodiversity program implemented by the Indian Ocean Commission (IOC) and the EU, in collaboration with the Wildlife Conservation Society. The main proposed form of support was to assess the institutional and legal instruments required to establish the TBCA as well as to build stakeholder engagement It has been recommended that the TBCA should be governed through shared management or joint management (UNEP, 2015), i.e., a partnership in which government agencies, local communities and resource users, NGOs and other stakeholders share the authority and responsibility for the management (Borrini-Feyerabend et al., 2000/2007; Tuda et al., 2019).

The Case of ROK and DPRK: A Proposed Joint MPA

The transboundary area in the Western Sea of the Korean Peninsula has long been disputed in terms of maritime demarcation between the two Koreas (Nam and Kang, 2003; Van Dyke et al., 2003; Roehrig, 2008). The first objection of the DPRK regarding the Northern Limit Line (NLL) was made in 1973. The DPRK has not accepted NLL proclaimed by ROK as a maritime boundary since then, and politico-military tension escalated in the area close to the line; with military collisions, including gun and cannon fighting, occurred around the NLL in the early 2000s. Recognizing that settling the boundary issue was pivotal in terms of peace-building in the peninsula, the leaders of the two Koreas held Inter-Korean summit talk and signed joint declarations in 2007 and 2018. These summit talks avoided discussions over difficult subjects such as nuclear armament, but nevertheless provided a momentum to bring peace to the area. Some actions in the declarations have already been implemented, including a joint survey of the Han River estuary, and closure of DPRK artillery position doors (Sokolsky, 2019).

The NLL did not show up on any official agreement documents between two Koreas for decades, until the Panmunjom declaration in April, 2018, a legacy of the 2007 Declaration. This implied that the DRPK would acquiesce to the NLL as a provisional boundary in inter-Korean cooperation and peace-building process (Nam et al., 2019), and that the area around the line (the transboundary area) might be under transition phase between "alienated borderlands" phase to "coexistent borderlands" phase (Martinez, 1994). Reflecting the changed political circumstance, the 2018 Panmunjom declaration has more hopeful commitments for peace, prosperity and re-unification of two Koreas; establishment of Maritime Peace Zone, joint fishing grounds, joint economic special district; joint patrol to prevent the third party's illegal fishing; joint utilization of Han River estuary; halting of military hostile conduct; navigation route development for the DPRK, etc.

It should be noted that a stronger conservation element for the transboundary area was incorporated into the 2018 agreement. In 2007, sand dredging was the most interesting agreement on Han River, but very controversial in ROK society. The exploitation-oriented aspect was diminished in the Panmunjom Declaration, reflecting societal demands for more sustainable development. After the two leaders' agreement on environment restoration and protection at the 2018 Summit Talks, conservation of marine ecosystems and fishery resources has been emerging as after the Declaration (Nam et al., 2007, 2019). Interestingly, joint MPAs or conservation areas have become a hot issue in the ROK, mainly raised by environmental action organizations and scientists. The transboundary area could not be accessed and economically utilized due to inter-Korean military confrontation, and consequently, the two governments have unilaterally designated over 70 PAs in total along the NLL within their jurisdictions (Nam et al., 2019).

The Case of Tunisia-Italy: Collaborative Law and Track 0.5, 1, and 2 Diplomacy

The area referred to as "the Mammellone" is a bank located in the Strait of Sicily, 12 nautical miles South-West off the Italian island of Lampedusa and Eastward of the Tunisian island of Kerkennah (Scovazzi, 1999). Tunisia claimed an exclusive right to fish over the whole Mammellone in 1973, following previous provisions by the Bey of Tunisia in 1951 (Salamone, 2004; Caffio, 2016), and established Law 63–49 in 1963, which extended Tunisian sovereignty over the entire Gulf of Tunis, where the Mammellone is located. Finally, the 1973 Law 73–49 specifies that area as part of a reserved zone within which only vessels flying the Tunisian flag may be authorized to fish (ICJ Recueil, 1982, para. 90). By contrast, Italy considers the Mammellone as a portion of the high seas, which in principle allows its national fishing fleet to operate there. The conflict, which was later called the "fish-war," dates back to 1911, when the then French protectorate claimed

[3]https://www.unenvironment.org/nairobiconvention/

Italian fishing boats were fishing for sponges illegally in the area (Salamone, 2004; Caffio, 2016).

In line with a marked peaceful tradition (Kliot, 1989), Italy and Tunisia held several meetings in which they eventually reached an agreement and defined the maritime median line between the states, in a collaborative law process (G. Cataldi, personal communication). In these discussions, Italy restrained itself from extending rights beyond the territorial sea off the Italian southernmost islands. In addition, Italy made no official claim over any contiguous zone, nor Economic Exclusive Zone (EEZ), beyond its territorial sea. Bilateral inter-governmental agreements were signed in 1963, 1971, and 1976 between Italy and Tunisia. In 1979, the last bilateral agreement on fisheries was signed, but not renewed, mainly due to the implementation of the passage of competencies regarding fisheries from the Italian government to the European Economic Community (EEC), later EC and then EU. This is because the authority to sign bilateral agreements between EEC members and third parties was the (then) EEC's (Treaty establishing the European Economic Community or Treaty of Rome, Arts. 134 and 136), with EEC member states delegating fisheries management onto EEC in 1972 (Europarl, 2020). Another issue contributing to the lack of renewal was a disagreement on the terms of extension of preferential access for Italian fishing vessels, as opposed to other EU vessels, to Tunisian areas (Gutiérrez Castillo, 2008).

The Italian process was as follows: Italy established a "fish-stocks rebuilding area in the high sea" in its national legislation (Ministerial Decree of 25 September 1979), invoking article 3 of the Convention on Fishing and Conservation of the Living Resources of the High Seas (CFCLRHS, 1958)[4]. Later on, Tunisia declared the Mammellone area a Fishing Exclusive Zone (Law 26 June 2005, No. 50), in apparent agreement with article 6.2 of the CFCLRHS. Italy unilaterally declared the same zone an Ecological Protection Zone (EPZ) beyond the territorial sea soon afterward (Law 8 February 2006, No. 61), interpreting the provisions contained in UNCLOS (1982) part XI (amended 1994). However, the EPZs defined by the Italian law 2006/61 and deposited to the United Nations Division for Ocean Affairs and the Law of the Sea, (DOALOS) did not enter into force. During this period, the fishermen community in Mazara del Vallo engaged in strikes to force the national government to overcome what was perceived as a period of stagnation in the negotiation of the right to fish in the Mammellone area (Italian parliament proceedings of 1 October 1982:52290-52292). By the end of 2017, a total number of three Italian fishers were dead and other 27 injured while fishing in the Mammellone as a result of Tunisian use of force. A number of Italian vessels were sequestrated by Tunisian warships, then confiscated or released after payment of heavy monetary fines (EU parliamentary question E-006697-17 of 26 October 2017). Italian warships patrolled the area in order to discourage the sequestration of Italian fishing vessels since 1957 (Salamone, 2004; Caffio, 2016) and to ensure compliance with the Italian fishing ban in the "fisheries protection area" established in the Mammellone in 1979 (Ministerial Decree, 25 September 1979).

In recent years, the Sicilian trawl fleet was progressively reduced to nearly a half of units, following mandatory reduction in fishing effort (Italian Republic Official Bulletin, general, No. 73, Appendix A, of 27 March 2012) triggered by the alarming status of the main exploited stocks (trawl fishery management plan for GSA 16) and the negative trends of the main economic indicators (Pipitone and Colloca, 2018).

Italy and Tunisia signed an agreement of collaboration between both navies by 10 November 1998 to enhance the patrolling of the Mammellone area. However, implementation of such agreement remains lacking. In an attempt to enhance compliance and ameliorate conflict, both countries experimented with joint ventures from 2005, which turned out to be of little success. In 2006, an aggregation of Sicilian stakeholders, including research institutions, fishing enterprises and food transformation companies, founded a Fishing District, with the support of the autonomous government of Sicily. A branch of the District is based in Mazara del Vallo, which also holds the Italian trawl-fishing fleet that traditionally operated in the Mammellone area. Among other objectives, the fishing district is intended to promote fishing heritage, obtain a quality label for local fish products, and foster innovation and technology transfer. The fishery district also organized a round of meetings to pave the way toward the shared management of the fish stocks in the Mammellone area, as well as other areas in the Mediterranean, with the ultimate aim of attaining a sustainable "blue" development in the region (Sicilia 2.0 News, 2018; Sicilia Ogginotizie, 2019; Distretto Della Pesca e Crescita Blu, 2020).

FINDINGS

The six cases described above differ widely in geographic location, climate, ecosystem type and vulnerability, historical claims, and in their political, strategic, socio-economics and potential. However, they all describe situations in which maritime border disputes interact with marine conservation. They also all display attempts at non-violent conflict management and resolution, often involving a third party (briefly summarized in **Table 2**). Conflict management, as opposed to conflict resolution, can be found where unilateral steps were taken. These include unilateral declarations of sovereignty by a state over the disputed area, as in the cases of Croatia and Slovenia and Italy and Tunisia. In addition, this could be the unilateral establishment of MPAs in or near the disputed zone, as in the cases of the two Koreas, the South China Sea, and Israel and Lebanon. Other formal Track one agreements pertaining to joint fishing practices and/or environmental cooperation also exist in some of these cases, such as in the case of Italy and Tunisia, Italy and Croatia, and between the DPRK and the ROK. Other initiatives might involve several parties or states from the region. Agreements or on-going processes between ASEAN states and between them and China; and EU regulations or decrees relating to the contested area between Slovenia and Croatia; or to the Mammelone case (with Italy as an EU member state) show such involvement.

[4]In fact, the EU has exclusive competence on fishery issues related to international agreements on conservation of living resources (Treaty of the Functioning of the European Union, Art. 3, 1, d); and shared competence with member states in international agreements on fisheries not related to conservation of living resources (Art. 4, 2, d).

TABLE 2 | ADR tools and track/level of diplomacy in six case studies.

Case	Geographic Area	ADR Tool Used	Diplomacy Track	Form of Conflict Management/ Resolution
China-ASEAN	South China Sea	Arbitration (by ITLOS)	1, 2	Unilateral, Bilateral, and Multilateral
Adriatic	Piran Bay	Arbitration (by EU)	1, 2 (+0.5)*	Unilateral, Bilateral, and Multilateral
Adriatic	Jabuka Pit	Facilitation (EU and GFCM)	0.5	Bilateral and Multilateral
Israel–Lebanon	Mediterranean Sea	Mediation (by US)	1	Unilateral and Bilateral
Kenya–Tanzania	Western Indian Ocean	Facilitation (by UNEP, through the Nairobi Convention)	1, 2	Unilateral and Bilateral
ROK-DPRK	West Korean Sea	Negotiation	1, 2	Unilateral and Bilateral
Tunisia-Italy	Mammelone	Collaborative Law	1, 2 (+ 0.5)*	Unilateral and Bilateral

**0.5 – Super-national entities (e.g., EU).*

Two forms of formal Track one ADR tools were used in three of these cases: Mediation and Arbitration. The tool of *arbitration* was applied in the SCS case and in that of Piran (Croatia–Slovenia), has not yielded its intended results. Although the point of arbitration is often to settle a dispute "once and for all" by an impartial and agreed upon arbitrator, it seems that this was missing, in the eyes of at least one of the parties. In the case of the SCS, China claimed that the UNCLOS Tribunal did not have the jurisdiction to judge the matter, and refused to even be part of the proceedings or accept its final decision, despite the fact that compelled arbitration is included in the UNCLOS text (Schofield, 2016). Although arbitration is one of the tools intended to be applied by UNCLOS signatory states, and its ruling therefore binding. In the case of Piran, Croatia refused to recognize the arbitration process, on the basis that it was biased. Subsequently, the arbitrators found that they did not have the jurisdiction to compel Croatia to apply its decision. In both cases, the side that withdrew from the arbitration process claimed that it is willing to resolve the matter, but through direct bilateral (or multilateral) negotiation and agreement, rather than by arbitration.

Mediation was decided by Israel and Lebanon to be the best tool to solve its dispute over the maritime border. This was an achievement in itself, stopping several years of bilateral threats, with each country claiming that any resource development in the area would be considered *Casus Belli*. However, the process is ongoing and there has been no result as yet. It is interesting to note that they chose the US as mediator despite it being highly involved in the region and having a vested interest in the case. US companies are the potential developers of natural gas in the contested area, which may undermine its role as an unbiased mediator. However, it could be that the US was chosen as the mediator because of its partial involvement in the area.

Informal mediation or *facilitation* can be seen in the case of Kenya and Tanzania, with UNEP as the facilitator. Discussions regarding the proposed marine transboundary conservation areas in the Kenya-Tanzania maritime border have been going on between the two main agencies promoting this initiative (KWS and MPRU). UNEP, through the Nairobi Convention Secretariat, has supported three meetings of 'Core Group' since 2015. To some extent, UNEP also supported conciliation and cooperation between the ROK and the DPRK in the West Korean Sea, in addition to organizations such as UNESCO, IOC-UNESCO, and NOWPAP, the latter with its regional sea program. These are all representative third parties that are involved in promoting transboundary marine protection involving both Koreas but have no political or military authority (Nam et al., 2007, 2019). In the case of Kenya and Tanzania, third party involvement also included international conservation organizations raising awareness and providing support as well as additional facilitation for transboundary conservation. Due to its rich biodiversity and contribution to the socio-economics of coastal communities, the marine area close to the border has been recognized by several international bodies, including the World Wildlife Fund for Nature (WWF) and the Convention for Biological Diversity (CBD) as an area of significance, deserving special conservation attention (Eastern African Marine Ecoregion (EAME), 2004). These, as well as other efforts, can be seen as a form of *Environmental Peacebuilding,* i.e., "cooperation on environmental issues which simultaneously conceptually aims at or *de facto* achieves the transformation of relations between hostile parties toward peaceful conflict resolution" (Ide and Scheffran, 2013; Ide, 2017). In this context, peace is a continuum or a spectrum of decreased hostility and violence, rather than a one defined state (Ide, 2017).

Other forms of third-party involvement, and support for joint management or cooperation include *science diplomacy* endeavors by universities and research institutes. This type of involvement was particularly common in the SCS case, beginning with a series of regional South-East Asian research and training projects in the 1980s and 1990s, supporting the Association Southeast Asian Nations (ASEAN). These projects led to considerable camaraderie among the ASEAN scientists, although Chinese scientists did not usually participate. However, China was actively involved in the project: "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand," organized and funded via UNEP and the Global Environment Fund from 1996 to 2009 (Pernetta and Brewers, 2013). In turn, this was preceded by a regional Transboundary Diagnostic Analysis, involving regional nations and an overall coordinator and data analyst (Talaue-McManus, 2000). Yet, a condition of this participation was that the project did not include activities in the major offshore reef systems. Analogously, scientific institutions and NGOs came together to promote the definition of fishery restricted areas in the Italy–Croatia Jabuka Pit case. Notably, while there was some informal cooperation in the Croatia-Slovenia dispute in Piran Bay, it was not enough to promote a conservation area.

In 1990 Canadian-sponsored workshops brought together the SCS Informal Working Group. While the group did not include China initially by 1991 Chinese scientists were represented, as well as Taiwanese scientists (Song, 2011). Another initiative was a series of four joint Vietnam–Philippine research cruises through the SCS (1996–2007),

including research activities at Scarborough Shoal and various reefs of the Spratly Islands (Satyawan, 2018). These studies, in conjunction with various expeditions from Taiwan and China, helped to establish these waters as one of the highest biodiversity hotspots of the world. Another long-term study of a large system of reefs at Bolinao, Philippines, on the eastern edge of the South China Sea, revealed that fishing effort was high enough to drive many species to local extinction. Following this work, the Spratly Islands were proposed as an international marine park, later referred to as a Peace Park; an idea supported by the Philippines, Taiwan and the SCS Informal Working Group (McManus, 1992, 1994; McManus et al., 2010).

Two other important scientific endeavors include the Expert Working Group on the South China Sea, and a science-based facilitation initiative by the Centre for Humanitarian Dialogue. The first intended to provide scientific support for the Code of Conduct (CoC) effort by the Center for Strategic and International Studies in Washington, D.C., creating the Expert Working Group on the South China Sea of developed states and SCS states in 2017. Its recommendations supported the formation of a SCS regional fisheries and environment organization. The second endeavor involved an external group that coordinated discussions on key SCS topics - the Swiss-based Centre for Humanitarian Dialogue. The center worked with China and various ASEAN nations to organize workshops in support of resolving issues involving maritime encounters and enforcement, as well as environmental and fisheries concerns (HD, 2020).

These endeavors can be framed as science diplomacy, also evident in the case of the DPRK-ROK, whereby experts and scientists from the ROK were occasionally able to meet DPRK at international meetings or conferences, mainly organized by international bodies of PEMSEA (Partnerships in Environmental Management for the Seas of East Asia), Ramsar Regional Center – East Asia, YSLME (UNDP/GEF Yellow Sea Large Marine Ecosystem), etc.[5] (UN, 2020). A similar situation exists in the Israel–Lebanon case, where international conferences allow scientists from these two countries, who do not have other opportunities to collaborate directly, to receive updates on ecosystem status or new initiatives taking place on the other side of the border (Engert, 2019).

Another type of bilateral or multilateral process relates to local NGOs and regional or local government cooperation, falling under the category of track two diplomacy, initiated by civil society organizations. This is perhaps displayed best in the case of Italy and Tunisia, where the fishing district is catalyzing a recent momentum in the relationships between Italy and Tunisia after decennial stagnation of collaboration on fishery issues. Such activity is probably prompted by the recent context of depletion of fishing resources in the contested Mammellone area. Indeed, Sicilian fishermen claim that Egyptian and Libyan vessels, which face lower cost of operation (in terms of fuel and personnel) are exercising heavy fishing pressure in the Mammellone as well as other areas along the African coast. This could also be a reason for the apparent, recent displacement of the main front of the "fish-war" to the Gulf of Sirte, Libya (e.g., La Stampa, 2020). The fishing district organize meetings with representatives of Italian and Tunisian authorities in order to foster Track Two collaboration in resource management and fisheries.

Lastly, another type of diplomacy that might be termed "Track 0.5," in which the EU plays an important part, has also emerged. While the role was confused and disjointed in the case of the Croatia–Slovenia Piran Bay, it was more effective in following through on a bilateral agreement between Italy and Croatia in the Jabuka Pit. In the Jabuka Pit case, initially both the Croatian and Italian fleets had been fishing the area. When Croatia declared an Ecological and Fisheries Protection Zone in 2004, this potentially excluded others from fishing around Jabuka Pit. As a result, Italy and Slovenia exerted political pressure through EC on Croatia to suspend its application to EU countries. As Italian fleet was fishing into Croatian territorial waters, thereby suspending the EFPZ, Croatia was enabled untethered access to Italian fishing grounds. By developing the bilateral agreement, followed by FRA establishment, the relationship became more balanced.

DISCUSSION

Alternative dispute resolution tools aim to replace courts, and provide a more flexible, efficient, and expedient process for parties in conflict. In the cases described above, it can be ascertained that when both or all parties decided to willingly enter an ADR process, this action on its own was already a step toward improving relationships between states, as well as improving joint and cross-border marine conservation schemes. Additionally, marine conservation and joint monitoring are often key factors in such a process, and are also often one of the first points of agreement for both or all sides, setting important precedents for parallel or later discussions and communications. This can, to some extent, be attributed to the special nature of the marine environment, which is often peripheral and away from the public eye, giving it an ambiguous status that could be used both by those who wish to exploit it, and by those who wish to make their first steps in reconciliation in cases of protracted conflict (Portman and Teff-Seker, 2017; Mackelworth et al., 2019).

As international ADR tools are intended to not only settle narrow disputes but rather open the lines of communications and transform or strengthen relationships between states and actors, using ADR in cases of maritime disputes could be especially valuable in cases where diplomatic relations are limited, as in several of the cases below. Since courts are typically intended to rule on one issue at a time, transboundary conservation might not be suggested in such a setting, while in some of the cases above the informal and flexible nature of ADR, as well as track two and track three initiatives, have allowed parties to discuss this issue at length and promote joint marine protection initiatives.

The two cases of arbitration, which both featured one side that did not recognize the validity of the process or the ruling, indicates that ADR loses some of its advantages

[5] pemsea.org

when it is not actively chosen by both or all sides for that particular case, or if it is seen as unfair or imbalanced or if the arbitrator is not approved by all parties. This also leads to a situation where the verdicts of arbitration processes are not necessarily abided by or enforced, even though in strict terms, they are intended to be legally binding. While this could be the case on land too, the complications in both cases of arbitration reviewed above (Croatia-Slovenia, SCS) also stemmed from the ambiguous nature of the marine environment, the marine border delineation and the lack of mutually important resources. The Croatian situation shows how the mutual importance of Jabuka Pit resulted in bilateral and finally regional agreement on protection (with Italy), an element missing in the case of Piran Bay. Moreover, the legal rules and tools are different for international marine disputes following UNCLOS-based international legislation. This also includes the level of commitment demanded by marine-related ADR processes (encouraged by UNCLOS), overlapping and unclear jurisdictions of courts (especially after the establishment of ITLOS) and lack of ability of the courts to enforce the verdict. Thus, if one side is unhappy with the arbitration verdict, they can simply decide not to implement it and not suffer any meaningful consequences. While the refusal to implement an ADR verdict or agreement could have merit in certain cases, these processes are weakened by the fact that lack of implementation is not followed by meaningful consequences. It should be noted that while "classic" arbitration necessitates both sides to agree upon the specific case, facilitator, location and rules of the arbitration process, this was not the case in the cases of Piran Bay or in the case of the SCS. In the latter, arbitration was not chosen by China for this specific case. Rather, China resisted the process from the beginning. It could be argued that by ratifying UNCLOS, China agreed beforehand to participate in the various forms of conflict resolution available for UNCLOS signatory states, including arbitration. While this might be the case, it is obviously a very different scenario than one in which China would have agreed to arbitration for this specific case.

Track two bottom–up processes of environmental peace-building and science diplomacy, while often lacking the power to resolve border disputes or enforce international agreements directly, can offer much needed groundwork (scientific or other), relationship-building and infrastructure to support ADR processes. This is in part because track two initiatives can circumvent certain track one difficulties that result from the political entrenchment of governments in their views of marine border and resource allocation. However, track two initiatives often focus on smaller scale or narrowly focused projects, and lack power to enforce, fund or develop larger enterprises, let alone determine land-use zones or legislate. Thus, each track had its own strengths and weaknesses, but the findings suggest that synchronized they could support and strengthen each other. The success of track two initiatives in the marine environment is supported by the unique features of that environment explained above. Most importantly, its different status and peripheral location allow collaboration that can momentarily ignore or partially resolve territorial claims that are often deemed less controversial than land-based ones.

Finally, it is the conclusion of this paper that if done correctly, marine conservation and ADR, as well as diplomatic processes on all and every level, have the potential to support each other and build upon each other. While marine conservation remains a vital goal in and of itself, it would benefit greatly if it could also support other stakeholder interests or provide mutual grounds for preliminary agreements, particularly in disputes over marine resources or maritime sovereignty. Important economic activities such as tourism and fisheries could have important synergies with conservation, as they rely on the continued provision of ecosystem services and thus require a sustainable development approach to survive and thrive in the long run. Other economic activities that rely on marine resources, such as fossil fuel extraction, seem to have fewer synergies with conservation and even conflict with it. However, in the cases described above, it is evident that MPAs (existing or proposed) and other specially protected areas are used by those who would want to exploit marine resources, in what has been claimed to be a cynical act of "green grabbing" or "ocean grabbing." This has become a relatively common practice in areas where fossil fuels are found, and which developers and states tend to covet more, in comparison to other marine areas. Transboundary (bilateral or multilateral) conservation in these areas would prove more challenging than in others, and would require a mutually beneficial sharing of the resources to succeed.

AUTHOR CONTRIBUTIONS

YT-S established the theoretical and conceptual framework for the article, wrote most of the discussion section, and also wrote the sections on the Israel–Lebanon case study. PM contributed to the conceptual framework of the article and to its structural integrity. PM and DH wrote the sections pertaining to the Adriatic Sea case studies. TV wrote the sections on the Mammellone case and added to the understanding of the theoretical implications of the study. AT wrote the sections pertaining to the West Indian Ocean case study. JN wrote the sections on the West Korean Sea case study. JM wrote the sections pertaining to the South China Sea case study and also contributed in terms of editing. All the authors contributed to the article and approved the submitted version.

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