

Competing Knowledges and Sovereignities in the French Pacific Oceanscapes

Pierre-Yves Le Meur ¹  and Valelia Muni Toke ² 

¹ Savoirs Environnements Sociétés (SENS), French Research Institute for Sustainable Development (IRD), New Caledonia

² Structure et Dynamique des Langues (SeDyL), French Research Institute for Sustainable Development (IRD), France

Correspondence: Pierre-Yves Le Meur (pierre-yves.lemeur@ird.fr)

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Abstract

In France, the notion of “deep-sea/deep-seabed” (“*grands fonds marins*”) has emerged fairly recently in public policy discourse, and in particular in the wake of the 2009 Grenelle de la Mer, which marked the French government’s desire for an integrated maritime policy. The Grenelle de la Mer is a public process of reflection and negotiation between the French government, elected representatives, economic and professional stakeholders in maritime affairs, and civil society, organized by the French Ministry for Sustainable Development and the Sea. *Grenelle* refers to the collective negotiation, initiated by the government in May 1968, with representatives of trade unions and industrial organizations, and held at the Ministry of Labor Headquarters in Grenelle Street in Paris. A national strategy regarding the deep-sea was developed in 2015 and updated in 2020 through a working group led by the General Secretariat for the Sea (under the authority of the prime minister), in which the authors of this article participated. This working group was made up of representatives from the relevant ministries, research institutes, and industry via the French Maritime Cluster. The French overseas territories were absent, even though the areas in question were mainly located in the French Pacific, which accounts for around two-thirds of the French exclusive economic zone (68%, 6.9 out of 10.2 million km²). In addition, New Caledonia and French Polynesia have jurisdiction over their exclusive economic zones while Wallis-and-Futuna has no formal sovereignty in this area. France’s maritime policy, and in particular its deep-sea strategy, is indicative of the relationship between the French state and its overseas territories, particularly in Oceania, marked by disregard, tension, and instrumentalization. This dynamic also extends to the knowledge issue and the lack of recognition of Indigenous voices in these matters. This article will analyze this situation of epistemic injustice while underscoring the differences and commonalities in the three territories’ trajectories regarding the interplay between sovereignty, environment, indigeneity, and development.

Keywords

Deep-sea governance; deep-sea mining; epistemic justice; French Pacific territories; ocean governance; politics of knowledge

1. Introduction

Governance, understood in an exploratory and non-normative sense, encompasses the more or less coherent, more or less interconnected, more or less stabilized forms of regulation that emerge from interactions between actors and institutions in the private, public, and associative spheres, in relation to a particular social domain (Blundo & Le Meur, 2009). This social domain can vary significantly in scope and clarity depending on the context, as illustrated by discussions of “deep-sea governance,” for example. Governance implies power relations that are riddled with knowledge issues. These are about pluralism, recognition, and categorization, in other words, visibility and invisibility, or rather mechanisms and strategies rendering things, ideas, and also knowledge and epistemologies, visible or invisible.

The social domain at stake here, the *grands fonds marins* (deep-sea/deep-seabed), has (re)emerged fairly recently in the French public policy discourse, and in particular in the wake of the 2009 Grenelle de la Mer, which demonstrated the French government’s commitment to developing an integrated maritime policy. A national strategy regarding the deep-sea was formulated in 2015 and updated in 2020 through a working group led by the General Secretariat for the Sea (under the direct authority of the prime minister), in which the authors of this article participated as scientific representatives. A final report, that was not made public for no official reason (probably its politically-sensitive nature), was written by Jean-Louis Levet and transmitted to the French General Secretariat for the Sea in July 2020: *Stratégie nationale d’exploration et d’exploitation des ressources minérales dans les grands fonds marins*. The working group was made up of representatives from the relevant ministries, research institutes, and industry via the French Maritime Cluster, a formalized industry lobbying network. The French Overseas territories were notoriously absent, even though the areas in question were mainly located in the French Pacific, which accounts for around two-thirds of the French exclusive economic zone (EEZ; 68%, 6.9 out of 10.2 million km²). In addition, New Caledonia and French Polynesia have jurisdiction over their EEZs covering 1.4 million and 4.8 million km² respectively, thanks to their institutional autonomy resulting from the 1998 Noumea Accord and 1999 Organic Law for New Caledonia and the 2004 Organic Law for French Polynesia. This is not the case for Wallis-and-Futuna, which has no formal sovereignty in this area.

France’s maritime policy, and in particular its deep-sea strategy, is indicative of the relationship between the French state and its overseas territories, particularly in Oceania, marked by disregard, tension, and instrumentalization. This also extends to the knowledge issue and the lack of recognition of indigenous voices in these matters. The campaigns carried out by the French government in 2010–2012 in Futuna waters in the wake of the 2009 Grenelle de la Mer were private-public partnerships involving national research and corporations (Areva, Technip, and Eramet), which reflected a political economy of science that marginalized Pacific representation and knowledge of the oceanscapes (Ingersoll, 2016). More broadly, the very notion of deep-sea/deep-seabed implies separations (land vs. sea, deep-sea vs. coastal sea, and sea vs. seabed) that contradict the Oceanian, holistic vision of a continuum including land, sea, air and the sky, and peopled by human and nonhuman actors (Childs, 2022).

These mechanisms display a pattern similar to what we observe in the Pacific at large in terms of North–South relations. There are discrepancies and contradictions between an Indo-Pacific strategy, promoted in particular by the US, the so-called “Free and Open Indo-Pacific” (Department of State, 2019), with the “Silk Roads” as a Chinese alternative, and taken up by its allies (including France), and a desire for regional autonomy expressed by the Blue Pacific discourse, which has taken the form of a geopolitical strategy, formalized by the Pacific Islands Forum in 2017 (Kabutaulaka, 2021; Louey, 2024). This discourse is rooted in the Pacific Way of the 1970s–1980s. The expression was probably first used publicly by the Fijian prime minister, Ratu Sir Kamisese Mara, in front of the UN General Assembly in October 1970 (Lawson, 2010; see Fry & Tarte, 2015, Chapter 6, for a contextual analysis of the notion of “Pacific way”). The Blue Pacific discourse is also rooted in the paradigm shift proposed by Epeli Hau’ofa in the 1990s (Hau’ofa, 1994, 2000)—Pacific countries as Large Ocean States rather than Small Island Developing States (SIDS). This paradigm shift is explicitly both a political and knowledge issue, raising questions of environmental and epistemic (in)justice (Fricker, 2007, 2013) that lie at the center of the regional dialogue platform we organized on behalf of IRD at the Pacific Community (SPC), Noumea, in March 2024 with political, customary, administrative, civil society, research, and regional organization representatives from around 15 Pacific countries and territories. A second platform took place in Tahiti, at the University of French Polynesia, in December 2024, both events being part of a collective scientific assessment on deep-sea knowledge and governance issues (see further down on this section).

The entanglement of governance, knowledge, and justice issues is addressed here through the lens of the deep-seabed, a key, complex, and contested issue on a global scale, as well as in the context of the Island Pacific and the Indo-Pacific promoted by the French state in search of a hypothetical “third way” between the US and China (Perrin & Temal, 2023). Section 2 lays the theoretical ground of our approach to knowledge and governance especially through the perspective of epistemic justice. Section 3 presents the recent changes in the French deep-sea policy. Section 4 analyzes the differences and commonalities in the trajectories of the three French Pacific territories regarding the governance and knowledge of the deep-sea.

The data and interpretations presented in this article stem from our participation in successive scientific assessments in French Polynesia (2014–2016), Wallis-and-Futuna (2018), and New Caledonia, along with the two latter territories (2023–2026); long-term, still ongoing ethnographic research; and observations (partly participants) and interviews with various stakeholders, which we carried out within and around these projects over the last 10 years. The current scientific assessment focusing on the three French Pacific territories operates on the basis of a scientific panel composed of 13 researchers (6 women and 7 men) from French research institutes and universities (2 economists, 2 biologists, 1 oceanographer, 2 geoscientists, 1 philosopher, 2 lawyers, and 3 anthropologists), two of them from the Pacific, and a steering committee including political and customary representatives from the three Pacific territories, representatives from French ministries, scientists, and NGO members.

2. Indigenous Knowledge, Epistemic Justice, and Ocean Governance

The paradigm shift from SIDS to Large Ocean States is a clear assertion of a sovereignty claim. Here we follow Joyce (2013) who locates sovereignty within a triangular relationship with community and law paving the way for plural and competing sovereignties and plural visions of community-making assemblages and ontologies, including a relational ontology linking humans and nonhumans, gods, and ancestors in Oceanian lifeworlds (Le Meur & Mawyer, 2022; Tomas, 2013). The shift from SIDS to Large Ocean States thus also

implies a shift in the representations of the oceanscapes and the recognition of Pacific visions, which are both a matter of epistemology and ontology (Ingersoll, 2016). It is precisely at the intersection between epistemology and ontology that the scope of Indigenous knowledge is situated. The sophisticated knowledge Pacific islanders have developed over the years about oceanic currents, winds, climate, bird movements, astronomy, and island geography is now well-known (D'Arcy, 2006; Lewis, 1972). This knowledge results from partially cumulative observations and experiences. It also implies indirect forms of knowledge, such as when it comes to seamounts. What is known is fishing grounds (tuna, skipjack, and demersal species; see Misselis & Ponsonnet, 2015, for French Polynesia) or places where humpback whales or other species gather on a seasonal basis rather than seamounts per se. However, seamounts are also named and oceanic toponyms often reflect terrestrial ones as seen in the Austral Islands in French Polynesia (Dégremont & Bambridge, 2015) or the Coral Sea surrounding New Caledonia (work in progress carried out by the Customary Senate and the Agency for the Advancement of Kanak Culture, also showing ruptures and losses in this knowledge due to the colonial repression of natives' mobilities and especially navigation). Indigenous knowledge matches scientific results on these issues (for instance, Morato et al., 2010, estimate that between 1997 and 2007, almost 40% of French Polynesia's yellowfin tuna catches were made on seamounts) or at least, both can be compared on a common ground from an epistemic viewpoint that favors empirical observation. However, this does not mean they are based on the same epistemologies. For instance, oceanic knowledge developed by Pacific navigators involves a dynamic topography, composed of moving and sometimes living "seamarks," that contrasts with the Western notion of fixed cartography (Goodenough & Thomas, 1989).

Nevertheless, when it comes to representing the seabed as harboring the souls of the dead, as we will see in the case of Kanaky-New Caledonia, the limits of knowledge as a concept are called into question. This is not a matter of knowing whether dead souls live around seamounts or not. It is about belief, cosmology, and ontology. It actually belongs to the domain of sovereignty, as previously defined based on a relational ontology (and can serve as a basis for heritage policies). In other words, the vast domain of Indigenous knowledge and representations may be a key component of ocean governance apparatuses and conflicting sovereign claims (Le Meur & Mawyer, 2022). This involves political negotiation and power asymmetries, as we will see with the French Pacific cases.

Inclusiveness is central to this issue—it requires acknowledging power imbalances, involving all stakeholders, and valuing the diversity of their knowledge and perspectives, making it a question of epistemic justice. Epistemic justice, or rather injustice, is about the unequal distribution and recognition of cognitive abilities, leading to the marginalization and silencing of certain knowledge and its holders. Miranda Fricker's (2007) seminal book, *Epistemic Injustice: Power and the Ethic of Knowing*, makes a distinction between testimonial and hermeneutical injustice. Epistemic injustice occurs in the case of a "wrong done to someone specifically in their capacity as a knower" (Fricker, p. 1). Fricker speaks of testimonial injustice when:

Prejudice causes a hearer to give a deflated level of credibility to a speaker's word; hermeneutical injustice occurs at a prior stage, when a gap in collective interpretive resources puts someone at an unfair disadvantage when it comes to making sense of their social experiences. (Fricker, 2007, p. 1)

Epistemic injustice may thus take different forms that do not necessarily result from conscious strategies, such as making the deep-sea visible through sophisticated techno-scientific mediations that mechanically

render invisible (or less visible) other ways of knowing and representing the abyss. The contemporary dominance of the scientific viewpoint can in this sense lead to forms of epistemic injustice, making other ways of knowing the ocean less relevant, especially regarding governance and decision-making. This is a structural form of hermeneutical injustice “performatively produced” (Medina, 2017, p. 45–46), yet operating beyond the awareness of the actors involved. This is particularly true for Indigenous knowledge of the deep-sea, especially when it pertains to beliefs and myths, which are more likely to be perceived as lacking credibility (as Fricker, 2007, puts it) in the so-called evidence-based policy processes. Indigenous knowledge of the deep-sea is heterogeneous in nature: it comes from indirect experiences of deep-sea phenomena that produce effects on the surface (what happens around deep-sea mounts for instance), from a direct experience of the ocean as a place for sailing and fishing (a holistic view that does not align well with the scientific and legal divisions of the ocean), and it manifests itself through practices as well as discourses (with particular patterns of social and intergenerational transmission) that constitute Indigenous oceanscapes. Any attempt to disengage this holistic vision from its fundamentally social and political Indigenous value may lead to epistemic injustice in that it could erase Indigenous views, which are seen as outdated folklore, in favor of science, seen as both universal and inherently good. This is a hermeneutical form of epistemic injustice, occurring “when someone is wronged in his or her capacity as a subject or source of understanding” (Tsosie, 2017, p. 360). Such a stark division (science as the only good on the one hand, Indigenous knowledge as a useless but decorative object on the other hand) is an active colonial legacy that undoubtedly affects contemporary governance issues regarding the ocean and sovereignty claims surrounding it. Understanding the inevitable entanglements of knowledge and politics and whatever type of knowledge is involved, allows the discussion to be reframed by shifting away from the intrinsic value of knowledge (with scientific knowledge perceived by many, including some members of the Indigenous communities, as the most well-equipped to provide data in contemporary debates) to its social and political relevance (Indigenous sovereignty being the underlying issue at stake).

3. France’s Deep-Sea Strategy: Changing Tide and the Overseas Blind Spot

The work to update the French deep-sea strategy for 2019–2020 was focused on the primary objective of exploring and exploiting deep-seabed mineral resources. In particular, the aim was to support the development of a national mining operator in this sector and an industrial pilot project. A collective scientific assessment was planned to take stock of knowledge and stakes in this field, along the lines of the one carried out in 2014–2016 in French Polynesia. This collective scientific assessment officially started in June 2023 and the results will be published in the first semester of 2026. It is financed by the Maritime Intervention Fund of the French Secretary of State for the Sea and carried out by French Research Institute for Sustainable Development (IRD). The authors of this article co-chair its multi-disciplinary panel of experts, now called upon to work not simply on the issue of mineral resources (which the French government’s previous position might have reduced the work to), but more broadly on the issues of knowledge and governance of the deep-sea, in the French Pacific EEZ, and the Clarion-Clipperton Zone (administrated by the International Seabed Authority) in the northern Pacific (<https://www.ird.fr/lancement-de-lexpertise-grands-fonds-marins>). All of this was in line with the national deep-sea strategy. The inclusion of basic scientific research (which was to materialize as part of a state-funded, multidisciplinary nine year inter-disciplinary research program on the deep-sea from the seabed to the water column) only gradually emerged from the discussions.

The French president's change of direction toward a strict ban on deep-sea mining, on June 30, 2022, at the UN Ocean Conference in Lisbon, was to be a game-changer. The change was unexpected and not concerted within the government. In fact, at the World Conservation Congress of the International Union for Conservation of Nature in Marseille in September 2021, France "did not want to approve the resolution calling for an end to deep-sea mining. Improving scientific knowledge about the deep-seabed requires expeditions to be carried out there," argued the head of state at the time (Valo, 2022, para. 8).

For the time being, it is difficult to interpret this turnaround with any certainty. However, we can put forward several hypotheses, which may overlap and which time will ultimately confirm or disprove—a question tied to the politics of time (Childs, 2020; Kirsch, 2014; Le Meur et al., 2018). The first hypothesis is that the promises of deep-sea mining appear too uncertain or remote in economic and technological terms and that it is less risky, and politically more profitable, to promote ocean conservation—aligning with the scientific community concerned about environmental issues. The second hypothesis refers to the French government's desire to make its voice heard diplomatically on a global scale, in this case, by proposing a broad international alliance in favor of a ban or moratorium on the exploitation of deep-sea mineral resources. The third, more cynical hypothesis is to wait until extraction technologies have reached a sufficiently mature stage, and, in the meantime, position itself as a champion of ocean protection. In all cases, this turnaround has brought the French position into line with that of the three Pacific territories, which could fuel a fourth hypothesis, namely the refusal to "force the issue" in the face of these territories' hostility to seabed mining, in order to avoid undermining an already delicate (post)colonial balance. Recent examples include the difficulties encountered in the public debate on the consequences of nuclear testing in French Polynesia and the challenges facing the French government's attempts to unfreeze the electoral body in New Caledonia. A fifth, and final hypothesis, would be the influence of campaigns and lobbying led by organizations and people such as French climate activist Camille Etienne, as suggested by Anne-Lise Boyer (2024).

One thing is certain though: the only knowledge referred to here is scientific knowledge. By acknowledging a "knowledge gap" about the deep-sea (and presenting it as the main argument for opposing deep-sea mining projects), the French state intends to support its public scientific research, while Indigenous knowledge about the ocean is being rendered invisible, treated as useless in a debate narrowly framed around the state (that makes decisions regarding the exploitation of resources in its national space) and science (that might help the decision-making process by collecting and analyzing data). However, the Pacific Ocean is inhabited by populations who have built valid knowledge about the sea, as well as perceptions of this space that are intrinsically connected to ideas of autochthonous sovereignty. This seems to be inaudible in a tense postcolonial (or at least post-imperial, see Howe, 2000, p. 97) context. We will not engage in the debate between postcolonial and decolonial studies, which is beyond the scope of this article and deserves thorough historicization, careful reading, and nuanced appreciation (Coronil, 2019, Part III; Escobar, 2018; see also Boidin, 2009, for a good overview for a French-speaking audience). We instead focus on the enduring coloniality of power that pervades the relationships between the French government and Pacific overseas territories. The distinction between colonial relations and colonization, proposed by Benoît De L'Estoile, proves useful here. He defines colonial relations as:

A set of related forms that have structured the interactions of Europe with a large part of the rest of the world between the 15th and 20th centuries...including conquest, rebellion and repression,

religious mission, scientific exploration, education and medical care, trading and economic exploitation, travel, art, population transfers, etc. Colonial relations, often stamped by domination and violence, are however more aptly characterised by a multifarious process of appropriation than by the sheer negation of the colonized....By contrast, colonization describes the political control of a territory by a foreign power with a view to incorporation and exploitation (but not necessarily including settlement); in that sense, colonization is but one possible mode of colonial relations. (De L'Estoile, 2008, pp. 268–269)

We must add that settler colonization, as in New Caledonia (contrasting with French Polynesia and Wallis-and-Futuna), has historically involved a latent genocidal dimension (Veracini, 2024; Wolfe, 2006).

The question of the deep-seabed is indeed indicative of France's relationship with its Pacific territories. There are several reasons for this, stemming from both global geopolitics and France's colonial heritage. At the heart of the debate is the "discovery" that France could become a maritime power thanks to the size and distribution of its EEZ, second only to that of the US. This prospect, made possible by the 1982 UN Law on the Sea, which created the EEZs, and the presence of archipelagos in all three oceans that are still French, was expressed in a somewhat contradictory way, between the promotion of marine protected areas (to meet the Aichi Target resulting from the Convention on Biological Diversity), the orientation toward deep-sea mining (until 2022), and geopolitical discourse on the Indo-Pacific. Above all, it has often disregarded the autonomy of French territories, particularly in the Pacific. Both New Caledonia and French Polynesia have statutes giving them jurisdiction over their EEZs (via the 1999 and 2004 organic laws respectively), while military jurisdiction and maritime surveillance issues remain the responsibility of the state. This is not the case for Wallis-and-Futuna, however, whose non-sovereignty is enshrined in the 1961 statute.

4. The Deep-Sea as Viewed From the French Pacific Territories

If we are to understand France's deep-sea and Indo-Pacific strategy and its limits regarding the integration of Indigenous knowledge and Indigenous sovereignty claims, we need to uncover the blind spots in the Pacific overseas territories.

4.1. *New Caledonia: Terrestrial Resource Nationalism but Deep-Sea Mining Refusal*

The deep-seas of New Caledonia have been the subject of scientific and economic exploration campaigns for half a century. The scientific campaigns led by the Office of Scientific and Technical Research Overseas (ORSTOM that became IRD in 1998) began in the 1970s–1980s. They were followed by the ZONECO program (1991–2014) involving research institutes, the French state, New Caledonia, and the three Provinces (Staszak et al., 2022, p. 42). The ZONECO initiative focused on the mineral and living resources of the New Caledonian EEZ, and was designed to continue building the mineral inventory initiated by ORSTOM, but was ultimately limited to identifying potential zones of mineral resource presence (Staszak et al., 2022, p. 42). Oil companies also began looking for hydrocarbons in the 1980s but to no avail.

New Caledonia's political and legal framework was established by Organic Law No. 99–209 of March 19, 1999. It gives the territory jurisdiction over exploration and exploitation in its EEZ. Under Article 22 of the 1999 Organic Law (République Française, 1999), New Caledonia is responsible for the following matters:

“10°. Regulation and exercise of rights to explore, exploit, manage and conserve the natural, biological and non-biological resources of the exclusive economic zone....11°. Regulations relating to hydrocarbons, nickel, chromium, cobalt and rare earth elements” [translation by the authors]. However, New Caledonia’s Mining Code (2009) does not address seabed mining activities in the EEZ.

The creation of the Parc Naturel de la Mer de Corail (PNMC, in English Natural Park of the Coral Sea) in 2014, which covers the whole of New Caledonia’s EEZ, changed all that. It was preceded by a strategic analysis of New Caledonia’s maritime space (Gardes et al., 2014), which mentions the deep mineral issues at stake, clearly underlining the very limited scientific knowledge on the subject. Staszak et al. (2022, p. 44) make a similar observation regarding deep-sea mineral resources. The establishment of the management committee in 2015, and the scientific committee in 2018, the validation of the first management plan in 2018 following a consultation process, and the country’s law of June 1, 2022, on the protection of New Caledonia’s marine areas, firmly established the PNMC within the local institutional framework. Significantly, the decrees governing its operation have all been unanimously adopted by the New Caledonia government, which operates on a collegiate basis and brings together the various pro-independence and anti-independence political perspectives.

The issue of deep-sea mineral resources (and also hydrocarbons) has taken a back seat since the creation of the PNMC, and the “civil society” college of the management committee—comprised of environmental associations and NGOs—has supported this state of affairs. At the 5th France-Oceania Summit on July 19, 2021, Louis Mapou, president of the government of New Caledonia, insisted on “the need to preserve the great marine balances, both for the exploitation of fisheries and for the exploitation of underwater resources, for which a moratorium seems to be necessary,” while the French president remained silent on the subject (see <https://la1ere.francetvinfo.fr/polynesie/tahiti/polynesie-francaise/5eme-sommet-france-pacifique-vers-un-renforcement-de-la-cooperation-avec-les-etats-d-oceanie-1061959.html>). It is worth noting that for pro-independence parties, terrestrial nickel mining and processing serve as the key economic driver for political sovereignty (Le Meur & Levacher, 2022; Neaoutyine, 2006). A bill to introduce a 10-year moratorium on the exploration and exploitation of deep-sea mineral resources in the EEZ was unanimously adopted by the government of New Caledonia on June 7, 2023, and is due to be ratified by Congress in 2025. The preliminary draft law was the subject of opinions from the various colleges of the PNMC management council and from scientists (see Gouvernement de la Nouvelle-Calédonie, 2023a). This text also draws on the brief report written by Sarah Samadi, Pierre-Yves Le Meur, and Julien Collot: *Expertise extérieure pour le Comité Scientifique du Parc Naturel de la Mer de Corail au sujet du Projet de Loi de Pays portant moratoire sur l’exploration et l’exploitation des ressources minérales de la ZEE de la NC*, which notably helped refine the notion of exploration, distinguishing between scientific exploration (to be encouraged while addressing its potential impacts) and exploration for economic purposes or prospecting, to be banned.

At the same time, the Customary Senate, which participates in the PNMC management board, is developing the Kanak Cultural Vision of the Ocean, which aims to change the paradigm of the relationship between humans and the environment, and to place at the heart of the debate a holistic point of view that integrates the deep-sea into a wider oceanic space, and beyond that, into a land-sea continuum and a social organization integrating living humans and ancestors, biotic, and abiotic elements—as shown in the presentation by Jean-Yves Poëdi, customary senator, at the regional dialogue platform on deep-sea knowledge and governance organized by IRD at SPC, Noumea, March 19–21, 2024, to delegates from

around the 15 Pacific states and territories (Institut de Recherche pour le Développement, 2024). In this Kanak cultural vision, the ocean is seen as harboring the souls of the dead, in specific places that form a sacred path. This argument is put forward by critics of integrating Indigenous knowledge into public policy as proof that Indigenous knowledge is useless folklore. However, in this case, the question is not to know whether the souls of the dead are or are not under the sea. Such a claim stands as legitimate when it comes to governance discussions: sacred places constitute heritage, cultural assets that are acknowledged at all levels of governance, from local to supranational.

Moreover, the opinion of the Customary Senate on scientific exploration remains reserved—“we don’t question nature, we listen to it, we feel it,” (Jean-Yves Poëdi, 2024, communication at the Noumea platform) which aligns with a well-established Indigenous stance on maintaining a respectful relationship with the environment—even if it has shifted from a very restrictive view to now advocating for limiting scientific activity to matters that directly benefit society, such as research for medical purposes in particular. This attempt to control scientific research by orienting it towards medical research is crucial, as it helps envision the transposition of an indigenous view of the environment (which has long been integrating the knowledge of healing plants, for example) to the ocean as a potential source of still unknown healing substances. In this sense, Indigenous knowledge does not stand in opposition to scientific research.

The consensus uniting New Caledonia’s political, customary, and civil society stakeholders is broad, but some areas of fragility can be identified, in particular, the duration of the moratorium to be included in the local law (*loi du pays*) is the subject of debate. The proposed 10-year period, which avoids certain constitutional contradictions with development objectives, is considered far too short by many, while the industrial lobby, represented by the Cluster Maritime de Nouvelle-Calédonie (an offshoot of the French Maritime Cluster), sees it as an opportunity to develop more efficient technologies that are less harmful to the environment, in order to make seabed mining “acceptable” (see the standpoint of the French Maritime Cluster at the first Conference on the Indo-Pacific maritime economy in New Caledonia organized by the New Caledonia Government, NC, and French Maritime Clusters on 25–27/10/2023; Gouvernement de la Nouvelle-Calédonie, 2023b). Deep-sea issues are also deeply entrenched in relations between New Caledonia and the French government, which are currently hampered by the latter’s heavy-handedness and partiality in negotiations on the country’s institutional future. The refusal of the president of the government of New Caledonia to attend the platform on the subject, organized by the IRD at the SPC in Noumea on March 19–21, 2024, is a reminder that the French strategy was drawn up without any consultation with the French Pacific territories.

4.2. French Polynesia: Contrasted Indigenous Perspectives Regarding Deep-Sea Mining

French Polynesia is an interesting case of rather successful integration of Indigenous knowledge into local marine policy regarding coastal areas. An ancient use of *tapu* (a term that refers, throughout the so-called Polynesian triangle, which includes French Polynesia, to what is forbidden or prohibited) applies to marine resources and is called *rāhui*. By reviving this practice (Bambridge, 2016) and implementing it in various places of the archipelago, French Polynesian authorities and people have shown that environmental policies are at the same time a matter of politics and knowledge. Deciding on a *rāhui* in a specific place or for a particular type of fishing resource might be based on environmental concerns (which often implies nowadays not only Indigenous knowledge of the environment but also scientific data to support the decision) as much as on

sovereignty claims (including territorial conflicts and micro-localized relations of power). Nevertheless, as for all the French territories in the South Pacific, French Polynesia's scope of action is restricted when it comes to its relationship with the French state and its relative positioning within the regional area.

Like New Caledonia, French Polynesia has jurisdiction over its EEZ, except for the regalian aspects of defense and surveillance, which remain under the responsibility of the French state. French Polynesia has gradually addressed the maritime issue, in particular in the search for alternative income sources to offset the economic (and unfortunately health) consequences of the nuclear tests that began in 1962 and were discontinued in 1996. In the 2010s, deep-sea mineral resources emerged as an option to be explored, leading to a collective appraisal commissioned by the government of French Polynesia and coordinated by the IRD. The conclusions of this work were cautious and nuanced, highlighting at the time (Le Meur et al., 2016, 2018) the major gaps in knowledge, the absence of industrial technologies and uncertain economic profitability. The government of French Polynesia has not gone any further on the subject, with the exception of a study entrusted to Abyssa (a subsidiary of Créocéan, a private consultancy agency specializing in oceanography and coastal development) in 2019 concerning the potential of cobalt-rich crusts on seamounts.

At the same time, French Polynesia has turned a corner in terms of maritime policy. After promoting large marine protected areas launched by the international NGO PEW in the Austral Islands and the state via the MPA Agency in the Marquesas Islands, the Polynesian government shifted in 2016 (when the autonomist Tapura Huiraa-tira party came to power) from a protection-based approach (marine protected area) to one focused on the management (marine managed area) of its entire maritime space. In 2018, it created the Tainui Atea area with the aim of “reconciling economic development and environmental protection” (Dégremont, 2022, p. 63). While expert assessment of the mineral resources mentioned in Section 1 took place during this period, the rationale for resource management remained focused on fishery resources (particularly tuna).

The Government of French Polynesia's position on mineral resources has since moved in the direction of a moratorium, but this trajectory has not been linear, and political parties have been divided by divergent viewpoints on the subject, such as the pro-independence Tavini Huiraatira party until 2022 when the Government of French Polynesia was preparing a draft deliberation for a “moratorium on deep-sea mining” (see https://www.tahiti-infos.com/Exploiter-ou-protéger-les-grands-fonds-marins-le-dilemme-du-Tavini_a211638.html). The internal debates within the Tavini party, which won the territorial elections of 2023 and now governs the country, are interesting because they mobilize a variety of arguments—environmental, political, economic, and also historical: “We're not the party that fought against nuclear testing to go and trash the ocean tomorrow” (Moetai Brotherson in 2022, then MP for French Polynesia; Pambrun & Samoyeau, 2022). Additionally, the geographical proximity of the Cook Islands, which have been developing a pro-extraction policy for almost two decades, is a source of local concern, on the one hand for the possible environmental impacts, and on the other for the potential positive economic spin-offs that could put French Polynesia in difficulty in justifying its pro-moratorium stance.

4.3. Wallis-and-Futuna: A Problematic Lack of Dialogue With Customary Authorities

The situation in Wallis-and-Futuna differs greatly from that of New Caledonia and French Polynesia in that the territory is entirely under the authority of the Prefect, the “head of the territory” according to the 1961 Statute, and who is the sole holder of executive powers. The state alone exercises sovereignty over the EEZ,

while local authorities, represented on the one hand by an elected Territorial Assembly and on the other by customary chieftaincies (one kingdom in 'Uvea-Wallis, and two in Futuna: Alo and Sigave), cannot claim a role in the decision-making process. A significant conflict exists between the political and legal segmentation imposed by the state, and subsequent to France's international commitments (UN Law on the Sea) for which the territory was not consulted, and the customary vision of maritime spaces, seen as a land-space continuum. However, land tenure in both 'Uvea (Wallis) and Futuna is still under the customary authority and strictly Indigenous (apart from a few cases, often conflictual, of land transfer for the installation of public infrastructure). The local population's current lack of understanding of the governance of maritime space is therefore a recent phenomenon, triggered by the state's desire to explore and exploit deep-sea mineral resources in Futuna (Le Meur & Muni Toke, 2021, 2022).

Following scientific-mining campaigns carried out in 2010, 2011, and 2012, as a public-private partnership involving Eramet, Areva, and Technip and run by Ifremer (French Research Institute for Exploitation of the Sea), the French government attempted to obtain the consent of the Territorial Assembly for a modification to the current mining code, to grant exploration and research permits to the industry (2014 and 2015). Since 2019, a text entitled Declaration on the Ocean has been under local discussion, with the aim of imposing a 50-year moratorium on the exploitation of deep-sea mineral resources and implementing a conservation plan for both the lagoon and the EEZ. This text has now been finalized and has been presented by the Territorial Assembly in Pape'ete at the second regional platform organized by IRD in December 2024.

Beyond political cleavages—particularly in 'Uvea, where a dissident chiefdom exists and federates a significant part of the population, alongside an official chiefdom recognized by the state—there is a local consensus against deep-sea mining that is publicly structured around the environmental argument. Nevertheless, it is closely linked to an explicit claim to sovereignty by the customary authorities, who are supported by the population in this regard. The idea that "Wallis-and-Futuna has never been colonized" has long been asserted, both in the territory and in the diaspora, and is now being challenged.

While President Macron's statement against deep-sea mining has helped to ease these political tensions, a strong demand for the inclusion of local authorities in decisions concerning the EEZ has now emerged and remains unresolved, the current political and legal framework not being in a position to accommodate it. The recent platform of regional exchanges organized in Noumea as part of the collective scientific assessment carried out by IRD on deep-sea governance and knowledge issues confirmed the clear expression of this demand for shared sovereignty, in an approach that acknowledges customary law, understood by the population and its chiefdoms as exercising undifferentiated rights over land and sea. This idea of a land-sea continuum is common throughout the South Pacific. Interestingly enough, it is not contradicted by geological data: the land does indeed plunge under the sea water only to resurface further as an island. Customary authorities in Wallis-and-Futuna defend this vision explicitly and express their concerns regarding contemporary supranational negotiations as well as negotiations including the French state and leaving them as spectators. They feel that their knowledge of the ocean, viewed as a pathway between islands (see Hau'ofa, 1994, 2000), with boundaries that should be discussed with other neighboring islanders (and not the French state, let alone the International Seabed Authority), is disregarded, along with their ancestral sovereignty over it.

5. Conclusion

In a speech delivered at the Lowy Institute in Sydney in 2018, the Hon Prime Minister Tuilaepa Sailele Malielegaoi made the following statement: “The renewed vigour with which a ‘Free and Open Indo-Pacific strategy’ is being advocated and pursued leaves us with much uncertainty. For the Pacific, there is a real risk of privileging Indo over the Pacific” (Malielegaoi, 2018).

This worrying observation by Tuilaepa Sailele Malielegaoi, then prime minister of Samoa, could be applied to the sometimes tense relations between France and its Pacific territories. It is set against a backdrop of competition, and even incompatibility, between the strategy of regional autonomy represented by the Blue Pacific and the promotion of an Indo-Pacific vision driven by partly external powers in the context of a global struggle for influence between US and China (and their respective allies). This tension is explicitly identified by the political representatives of the three French territories in the Pacific, whatever their political affiliation. In our interviews and fieldwork, we repeatedly heard remarks about the “Indo-Pacific” as a purely “French state” construct, built without consulting the territories (a fact that a recent report for the French Senate made clear, see Perrin & Temal, 2023) and thus perceived as both worrying and foreign to local governance practices, including customary ones. The feeling of being instrumentalized in a geopolitical game orchestrated from the outside is therefore expressed by actors of various statuses and political affiliations, which suggests both the necessity and appeal of a regional dialogue organized on an Oceanian scale (this is also a result of the regional dialogue platform mentioned in Section 1), within the context of a broader relational approach to security and sovereignty (Koro, 2023).

The relationship between the three territories and the French state has entered a phase of reconfiguration, following President Macron’s recent announcement that the French government would renounce the mining of deep-sea mineral resources. The alignment of the three territories and the state on this common position should not, however, obscure the conflicts over the sovereignty of maritime spaces, which are still alive and ongoing despite relative political autonomy in New Caledonia and French Polynesia (Le Meur & Mawyer, 2022). The exploitation of mineral resources is obviously a central issue in discussions on sovereignty, but it is far from exhausting the subject, which is also made up of military issues relating to surveillance and the regulation of uses of the EEZ. The regional integration of France’s three Pacific territories is a further challenge in this context. New Caledonia and French Polynesia have long-established relationships that have ensured they have the support of island states, particularly in their dealings with the UN (Fry & Tarte, 2015). This is illustrated by the agreements between New Caledonia and the Cook Islands about their respective large-scale marine protected areas in 2013 (at the governmental level) and 2016 (customary authorities; agreement extended to the Vanuatu Council of Chiefs), or the adoption by the Cook Islands in 2017 of the managed marine area model promoted by French Polynesia, as well as the 2015 declaration by the Polynesian Leaders Group claiming, via their contiguous EEZs, a marine area of 10 million km² called Te Moana o Hiva. The announcements by New Caledonia’s customary and pro-independence authorities in favor of Vanuatu in the border dispute that has pitted this country against France for several decades over the Matthew and Hunter zone are also part of this trans-Pacific “political connectivity” (Dégremont, 2022), as is the proposal by Louis Mapou, president of the New Caledonian government, in his general policy speech on November 25, 2021, to make this disputed zone a “peace park,” “which could be managed in consultation with the sister country, Vanuatu” (Mapou, 2021, p. 30). Nevertheless, the territory of Wallis-and-Futuna clearly remains on the fringes of regional dynamics. In this sense, the Blue Pacific strategy

remains a matter for independent states, in which the three non-sovereign Pacific territories must negotiate both an intra-regional position (which has a certain historical depth for New Caledonia and French Polynesia but remains to be built for Wallis-and-Futuna), and a degree of autonomy in their interactions with the French state. In this broad context, the politics of recognition needed to redress epistemic injustice, especially in its hermeneutical form, plays a key role in the various manifestations generated by the specific historical pathways of the three French Pacific territories.

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Conflict of Interests

The authors declare no conflict of interests.

References

- Bambridge, T. (2016). *The Rahui: Legal pluralism in Polynesian traditional management of resources and territories*. Australian National University Press. https://doi.org/10.26530/OAPEN_607554
- Blundo, G., & Le Meur, P.-Y. (Eds.). (2009). *The governance of daily life in Africa: Ethnographic explorations of public and collective services*. Brill.
- Boidin, C. (2009). Études décoloniales et postcoloniales dans les débats français. *Cahiers des Amériques latines*, 62, 129–140.
- Boyer, A.-L. (2024). *Deep Sea Mining, Nirvana Concepts, and the Horizon of Blue Injustice*. Ocean nexus. <https://oceanexus.org/2024/05/15/deep-sea-mining-nirvana-concepts-and-the-horizon-of-blue-injustice>
- Childs, J. (2020). Extraction in four dimensions: Time, space and the emerging geo(-)politics of deep-sea mining. *Geopolitics*, 25(1), 189–213. <https://doi.org/10.1080/14650045.2018.1465041>
- Childs, J. (2022). Geographies of deep sea mining: A critical review. *The Extractive Industries and Society*, 9, Article 101044. <https://doi.org/10.1016/j.exis.2022.101044>
- Coronil, F. (2019). *The Fernando Coronil reader: The struggle for life is the matter*. Duke University Press.
- D'Arcy, P. (2006). *The people of the sea: Environment, identity and history in Oceania*. University of Hawai'i Press.
- De L'Estoile, B. (2008). The past as it lives now: an anthropology of colonial legacy. *Social Anthropology*, 16(3), 267–279.
- Dégremont, M. (2022). LSMPA sovereignties in New Caledonia and French Polynesia: Territorialities, alliances and powers in Oceania. *Oceania*, 92(1), 51–73. <https://doi.org/10.1002/ocea.5331>
- Dégremont, M., & Bambridge, T. (2015). Expéditions sur les pratiques culturelles et représentations de l'océan aux Australes. In B. Salvat, T. Bambridge, D. Tanret, & J. Petit (Eds.), *Environnement marin des îles Australes* (pp. 160–169). Institut Récifs Coralliens Pacifique; CRILOBE; The Pew Charitable Trusts Polynésie française. <https://univ-perp.hal.science/hal-01163658>
- Department of State. (2019). *A free and open indo-pacific: Advancing a shared vision*. <https://www.state.gov/wp-content/uploads/2019/11/Free-and-Open-Indo-Pacific-4Nov2019.pdf>
- Escobar, A. (2018). *Designs for the pluriverse: Radical interdependence, autonomy, and the making of worlds*. Duke University Press.
- Fricker, M. (2007). *Epistemic injustice: Power and the ethics of knowing*. Oxford University Press.
- Fricker, M. (2013). Epistemic justice as a condition of political freedom? *Synthese*, 190(7), 1317–1332.
- Fry, G., & Tarte, S. (2015). *The new Pacific diplomacy*. Australian National University Press. <https://doi.org/10.22459/NPD.12.2015>

- Gardes, L., Tessier, E., Allain, V., Alloncle, N., Baudat-Franceschi, J., Butaud, J.-F., Collot, J., Etaix-Bonnin, R., Hubert, A., Jourdan, H., Loisier, A., Menkes, C., Payri, C., Rouillard, P., Samadi, S., Vidal, E., & Yokohama, Y. (2014). *Analyse stratégique de l'Espace maritime de la Nouvelle-Calédonie—Vers une gestion intégrée*. Gouvernement de la Nouvelle-Calédonie. <https://doi.org/10.13140/RG.2.1.2888.0803>
- Goodenough, W. H., & Thomas, S. D. (1989). Traditional navigation in the Western Pacific: A search for pattern. *Expedition Magazine*, 3, 3–14.
- Gouvernement de la Nouvelle-Calédonie. (2023a). *Moratoire sur l'exploration et l'exploitation des ressources minérales de la zone économique exclusive de la Nouvelle-Calédonie*. <https://www.congres.nc/textes/projet-de-loi-du-pays-portant-moratoire-sur-l'exploration-et-l'exploitation-des-ressources-minerales-au-sein-de-lespace-maritime-de-la-nouvelle-caledonie-rapport-n-38-g>
- Gouvernement de la Nouvelle-Calédonie. (2023b). *Les premières assises de l'économie maritime indopacifique à Nouméa du 25 au 27 octobre 2023*. <https://gouv.nc/espace-presse/les-premieres-assises-de-leconomie-maritime-indopacifique-noumea-du-25-au-27-octobre>
- Hau'ofa, E. (1994). Our sea of islands. *The Contemporary Pacific*, 6(1), 147–161.
- Hau'ofa, E. (2000). The ocean in us. In A. Hooper (Ed.), *Culture and sustainable development in the Pacific* (pp. 32–42). Australian National University Press. <https://doi.org/10.22459/CSDP.04.2005>
- Howe, K. R. (2000). *Nature, culture, and history: The "knowing" of Oceania*. University of Hawai'i Press.
- Ingersoll, K. E. (2016). *Waves of knowing: A seascape epistemology*. Duke University Press.
- Institut de Recherche pour le Développement. (2024). *Expertise Grands fonds marins: Lancement d'une plateforme régionale d'échanges dans le Pacifique*. <https://www.ird.fr/expertise-grands-fonds-marins-lancement-dune-plateforme-regionale-dechanges-dans-le-pacifique>
- Joyce, R. (2013). *Competing sovereignties*. Routledge.
- Kabutaulaka, T. (2021). Mapping the blue Pacific in a changing regional order. In G. Smith & W.-S. Terence (Eds.), *The China alternative: Changing regional order in the Pacific Islands* (pp. 197–232). Australian National University Press.
- Kirsch, S. (2014). *Mining capitalism: The relationship between corporations and their critics*. University of California Press.
- Koro, M. (2023). *Relational security: Ethical dilemmas of geopolitics in the blue Pacific continent*. Asia-Pacific Leadership Network. <https://www.apln.network/projects/voices-from-pacific-island-countries/relational-security-ethical-dilemmas-of-geopolitics-in-the-blue-pacific-continent>
- Lawson, S. (2010). "The Pacific way" as postcolonial discourse: Towards a reassessment. *The Journal of Pacific History*, 45(3), 297–314.
- Le Meur, P.-Y., Arndt, N., Christmann, P., & Geronimi, V. (2018). Deep-sea mining prospects in French Polynesia: Governance and the politics of time. *Marine Policy*, 95, 380–387. <https://doi.org/10.1016/j.marpol.2016.07.020>
- Le Meur, P.-Y., Cochonat, P., David, C., Geronimi, V., & Samadi, S. (2016). *Les ressources minérales profondes en Polynésie française*. IRD Éditions. <http://books.openedition.org/irdeditions/9540>
- Le Meur, P.-Y., & Levacher, C. (2022). Mining and competing sovereignties in New Caledonia. *Oceania*, 92(1), 74–92.
- Le Meur, P.-Y., & Mawyer, A. (2022). France and Oceanian sovereignties. *Oceania*, 92(1), 9–30. <https://doi.org/10.1002/ocea.5328>
- Le Meur, P.-Y., & Muni Toke, V. (2021). Une frontière virtuelle: L'exploitation des ressources minérales profondes dans le Pacifique. *VertigO*, 33. <https://doi.org/10.4000/vertigo.29723>
- Le Meur, P.-Y., & Muni Toke, V. (2022). Le "renouveau minier" français vu des abysses ultramarins. In

- S. Chailleur, S. Le Berre, & Y. Gunzburger (Eds.), *Ressources minérales et transitions: Trajectoires politiques du sous-sol français au 21ème siècle* (pp. 223–239). Peter Lang.
- Lewis, D. (1972). *We, the navigators: The ancient art of landfinding in the Pacific*. Australian National University Press.
- Louey, P. (2024). *Competing regional visions and incompatible priorities: The blue Pacific and info-Pacific in the Age of AUKUS*. Department of Pacific Affairs, Australian National University Press.
- Malielegaoi, T.S. (2018). *Pacific perspectives on the new geostrategic landscape* [Speech transcript]. Lowy Institute. <https://www.loyyinstitute.org/publications/speech-hon-prime-minister-tuilaepa-sailele-malielegaoi-pacific-perspectives-new>
- Mapou, L. (2021). *Déclaration de politique générale*. Gouvernement de la Nouvelle-Calédonie. https://gouv.nc/sites/default/files/atoms/files/2021.11.25_dpg_louis_mapou_version_revisee.pdf
- Medina, J. (2017). Varieties of hermeneutical injustice. In I. J. Kidd, J. Medina, & G. Pohlhaus (Eds.), *The Routledge handbook of epistemic injustice* (pp. 41–52). Routledge.
- Misselis, C., & Ponsonnet, C. (2015). La pêche hauturière pélagique et démersale autour de l'archipel des Australes. In B. Salvat, T. Bambridge, D. Tanret, & J. Petit (Eds.), *Environnement marin des îles Australes* (pp. 226–237). Institut Récifs Coralliens Pacifique; CRIOBE; The Pew Charitable Trusts Polynésie française. <https://univ-perp.hal.science/hal-01163658>
- Morato, T., Hoyle, S. D., Allain, V., & Nicol, S. J. (2010). Tuna longline fishing around West and Central Pacific seamounts. *PLoS ONE*, 5(12), Article e14453. <https://doi.org/10.1371/journal.pone.0014453>
- Neaoutyine, P. (2006). *L'indépendance au présent: Identité kanak et destin commun*. Syllepse.
- Pambrun, V. U., & Samoyeau, A. (2022). Exploiter ou protéger les grands fonds marins, le dilemme du Tavini. *Tahiti Infos*. https://www.tahiti-infos.com/Exploiter-ou-protoger-les-grands-fonds-marins-le-dilemme-du-Tavini_a211638.html
- Perrin, P., & Temal, R. (2023). *La stratégie française pour l'Indopacifique: Des ambitions à la réalité*. Sénat. <https://www.senat.fr/rap/r22-285/r22-285.html>
- République Française. (1999). *Loi n°99-209 du 19 mars 1999 organique relative à la Nouvelle-Calédonie*.
- Staszak, P., Collot, J., Josso, P., Pelleter, E., Etienne, S., & Patriat, M. (2022). *Minéralisations marines profondes en Nouvelle-Calédonie: Caractérisation minéralogique et chimique des encroûtements ferromanganésifères au sein de la ZEE*. Archive Institutionnelle de l'Ifremer. <https://archimer.ifremer.fr/doc/00754/86566>
- Tomas, N. (2013). Maori concepts and practices of Rangatiratanga: "Sovereignty"? In J. Evans, A. Genovese, A. Reilly, & P. Wolfe (Eds.), *Sovereignty: Frontiers of possibility* (pp. 220–249). University of Hawai'i Press.
- Tsosie, R. (2017). Indigenous people, anthropology, and the legacy of epistemic injustice. In I. J. Kidd, J. Medina, & G. Pohlhaus (Eds.), *The Routledge handbook of epistemic injustice* (pp. 356–369). Routledge.
- Valo, M. (2022, July 1). Emmanuel Macron se prononce contre l'exploitation des grands fonds océaniques. *Le Monde*. https://www.lemonde.fr/planete/article/2022/07/01/emmanuel-macron-se-prononce-contre-l-exploitation-des-grands-fonds-oceaniques_6132819_3244.html
- Veracini, L. (2024). *Settler colonialism: A theoretical overview* (2nd ed.). Palgrave MacMillan.
- Wolfe, P. (2006). Settler colonialism and the elimination of the native. *Journal of Genocide Research*, 8(4), 387–409.

About the Authors



Pierre-Yves Le Meur is an anthropologist and senior researcher at the French Research Institute for Sustainable Development (IRD). Based in New Caledonia (2008–2015 and since 2021), he has been working on the land-mine-water nexus from a political anthropology perspective and has extended the scope of his research toward marine areas and the deep-sea in the Pacific with a focus on the science-policy-society interface and science and technology studies.



Valelia Muni Toke is an anthropologist at the French Research Institute for Sustainable Development (IRD). Her ethnographic research explores the relation between the French state and autochthonous populations in French Overseas territories, especially Wallis-and-Futuna in the South Pacific, by focusing on public service and public policy. In a comparative and STS perspective, she studies the production and transmission of both autochthonous and scientific knowledge regarding the ocean and the way they inform (or not) public policy.