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Locus theologicus in marine ethno-conservation: theological phenomenology of Tiyaitiki practice in papuan coastal communities

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ABSTRACT

Studies of Tiyaitiki, a customary practice among Papuan coastal communities of temporarily closing marine areas, have largely treated it as an ethno-conservation mechanism, leaving its religious dimension theologically unexamined. This gap matters because the continuity of the practice depends on the beliefs that motivate obedience to it. This article asks how Tiyaitiki gives rise to a contextual marine theology for the coastal community of Depapre District, Papua. Using a phenomenological-hermeneutic design operationalized through thematic analysis, we collected data in Yepase Village (May and August 2026) from twenty purposively selected participants from the customary council, the village government, young people and villagers, and the church, through an open-ended questionnaire, semi-structured interviews, and a focus group discussion, triangulated with documents. Five themes emerged: the sacred boundary, the sea as mother and fellow creature, obedience as devotion, intergenerational transmission, and self-restraint for the common good. Comparison with customary marine tenure scholarship suggests that these sacred sanctions are what make the closure hold, although this study did not measure ecological outcomes. Theologically, we argue that Tiyaitiki is a locus theologicus, a place of lived experience from which knowledge about God, creation, and human responsibility can legitimately be drawn, and that it yields a contextual marine theology with ontological, cosmo-sacred, and ethical dimensions: the sea as fellow creation, as a space of divine presence, and as a ground for Christian stewardship. The single-village scope invites comparative study across other Papuan coastal communities.

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Introduction

In Yepase Village, Depapre District, Papua, the customary practice of *Tiyaitiki*, the temporary closure of parts of the sea so that fish stocks and coral reefs can recover, sustained the balance of coastal ecosystems long before community-based conservation entered development policy discourse. The region nonetheless faces a paradox. Yepase holds one of the oldest and most tested ethno-conservation practices on the northern coast of Papua and lies at the heart of the Coral Triangle, the region with the highest marine biodiversity in the world. Even so, it remains vulnerable to external exploitation, weak supervision, and the failure to integrate local knowledge into formal policy (Paulangan et al., 2021). Nationally, more than 95% of Indonesian coral reefs are considered under threat, mainly from overfishing and destructive practices such as blast fishing (Razak et al., 2022). Commercial exploitation of Papua's marine resources continues to

intensify, while knowledge systems that could counter it, such as *Tiyaitiki*, are left without an epistemological framework adequate to sustain them across generations (Sujarta et al., 2021).

The problem we address is more specific. In the studies of *Tiyaitiki* we were able to identify, the practice is interpreted primarily through an ethno-conservationist lens, as a customary mechanism, a zoning system, or an ecologically effective form of local wisdom (Paulangan et al., 2021, 2025; Sujarta et al., 2021), while the religious dimension that explains why the people of Yepase obey it has received little theological examination. The only extended local account, written by a community author, records this belief system but does not interpret it theologically (Yarisetou, 2009). Villagers speak of the power that guards its boundaries as *nauna mire* or *klaume*, and they believe that violations can provoke the intervention of a *sondo*, a customary religious specialist thought to possess supernatural power (Yarisetou, 2009). Communal obedience to *Tiyaitiki* is therefore not driven wholly by ecological calculation but by belief in the sacred. When academic studies reduce *Tiyaitiki* to an instrument of resource management, they set aside the very conviction that motivates obedience. As long as this religious experience lacks an adequate theological articulation, the continuity of the practice, under modernization pressures that weaken the transmission of customary values, will depend on explanations that do not reach the roots of that obedience.

To test whether this pattern holds beyond the few studies devoted to *Tiyaitiki* itself, we searched Google Scholar, Scopus, and Garuda for studies of customary marine tenure in Papua, Melanesia, and eastern Indonesia (see Method) and mapped representative scholarship into four clusters (Table 1). The first and largest cluster is ecological and fisheries research. Since Johannes's (1978) classic account of traditional marine conservation in Oceania, researchers have documented the renaissance of community-based marine resource management in the region (Johannes, 2002), how clan tenure and periodic taboos regulate access to reefs (Foale et al., 2011), how customary closures can be integrated into marine conservation (Cinner & Aswani, 2007) and function as precautionary and adaptive management (Aswani et al., 2007), how periodically harvested closures perform as fisheries tools (Cohen & Foale, 2013), how *sasi* has persisted as an institution in Central Maluku (Harkes & Novaczek, 2002), and how *sasi* supports marine conservation in Raja Ampat, Papua (McLeod et al., 2009). For Depapre Bay itself, Paulangan et al. (2021) integrate *Tiyaitiki* areas into marine protected area zoning and describe the practice as a temporal "open-closed" model grounded in clan ownership of the sea, and a recent systematic review finds that the periodic closures of *Sasi Laut* are aligned with fisheries productivity, conservation, and community livelihoods (Ananta & Cabral, 2026). The second cluster is institutional and legal: research on the commons explains how locally devised rules can sustain shared resources (Ostrom, 1990), studies of *awig-awig* in Lombok and of Polynesian *rahui* show customary rules operating alongside state law (Bambridge, 2016; Satria & Adhuri, 2010), and legal scholarship warns that symbolic state recognition can weaken the substantive authority of customary systems such as *sasi* (Dewi et al., 2026). The third cluster treats belief as a social mechanism. Studies of social taboos and traditional ecological knowledge show that religious sanctions can function as "invisible" management institutions (Berkes, 2018; Berkes et al., 2000; Colding & Folke, 2001), and research on sacred landscapes shows that rituals and taboos can sustain conservation over long periods (Shiferaw et al., 2023). In this cluster, however, belief is explained by its function; it is not interpreted on its own terms. Only the fourth and smallest cluster is theological. Indonesian theologians have begun to read indigenous ecological practices theologically, as in studies of *Pasang ri Kajang* in South Sulawesi, of the ecological knowledge of the Akit people, and of Batak Toba culture as a *locus theologicus* (Ridhoh & Alfian, 2025; Risamasu, 2025; Tinambunan, 2023), and blue theology has begun to place the sea at the center of theological reflection (Ferris, 2014; Lakawa, 2023; Maggang, 2019, 2022). Yet none of the theological studies we found addresses a marine customary practice in Papua, and none of the marine tenure studies interprets the religious beliefs it reports as theology. Eco-theology has tended to begin from Scripture, doctrine, and terrestrial environments, while marine tenure research has tended to treat religion as an instrument of compliance. *Tiyaitiki* falls into the space between these two bodies of work. This is the gap our study addresses.

Table 1. Representative scholarship on customary marine practices and the treatment of religion

Cluster	Representative studies	How religion is treated
Ecological and fisheries	Johannes (1978, 2002); Harkes & Novaczek (2002); Aswani et al. (2007); Cinner & Aswani (2007); McLeod et al. (2009); Foale et al. (2011); Cohen & Foale (2013); Paulangan et al. (2021, 2025); Sujarta et al.	Mentioned as the context of customary rules; not analyzed

Cluster	Representative studies	How religion is treated
Institutional and legal	(2021); Razak et al. (2022); Ananta & Cabral (2026) Ostrom (1990); Satria & Adhuri (2010); Cinner et al. (2012); Bambridge (2016); Dewi et al. (2026)	As a source of customary authority and legitimacy
Belief as social mechanism	Berkes et al. (2000); Colding & Folke (2001); Yarisetou (2009); Berkes (2018); Shiferaw et al. (2023)	As a sanction that secures compliance; explained by its function
Theological	Maggang (2019, 2022, 2024); Lakawa (2023); Tinambunan (2023); Ridhoh & Alfian (2025); Risamasu (2025)	As a source of theology, but not yet for a Papuan marine practice

Source. Compiled by the authors from the literature cited in this article.

We argue that *Tiyaitiki* is not merely an object that theology examines from the outside but a *locus theologicus*, a place or standpoint from which theological knowledge about God, creation, and human responsibility may legitimately be drawn (Cano, 1563/2006). Epistemologically, this requires a shift in where theological truth may be sought: not only in the texts and doctrines transmitted by formal religious institutions but also in the concrete lived experience of a community. The rites of closing and reopening the sea, the prohibitions that accompany them, and the sacred relationship between the people of Yepase and the sea they protect thus become primary data for theological reflection. *Locus theologicus* is therefore not a label for a source of illustrations for an already finished theology; it is a claim that experience itself is a legitimate starting point for theological knowledge. To develop this argument, we draw on three theological resources: the tradition of *locus theologicus* from Cano (1563/2006) to Clodovis Boff (1987) and Schreiter (1985), which justifies treating lived practice as a source of theology; blue theology (Ferris, 2014; Maggang, 2019), which supplies the marine focus; and the doctrine of creation developed by Moltmann (1993) and Adiprasetya (2017), which provides categories for interpreting the sea as fellow creation and as a space of divine presence. For the social rather than the theological side of the analysis, we use Berger and Luckmann's (1966) sociology of knowledge. Our guiding question is how *Tiyaitiki* gives rise to a contextual marine theology for the coastal community of Depapre District, Papua, and our aim is to show how it functions as a *locus theologicus* for that theology.

To answer this question, we combine a phenomenological description of how participants experience *Tiyaitiki* with a hermeneutic reading that places their accounts in dialogue with theological sources. We do not treat communal obedience as a quantity to be measured but as a lived meaning to be described: what participants say they fear, honor, and hope for when they respect a closed area. This meaning is approached through triangulated sources (a questionnaire, semi-structured interviews, a focus group discussion, and documents), and indigenous concepts such as *nauna mire*, *klaume*, and *sondo* are first clarified in participants' own words before any theological interpretation is offered (see Method). The study is significant because it offers a model of marine theology rooted in Papuan local wisdom at a time when a deepening marine ecological crisis, and modernization that erodes the transmission of customary values, make the religious basis of *Tiyaitiki* a condition for the continuity of the practice itself.

The novelty of this study lies in reading *Tiyaitiki* not only as a conservation instrument but as a source of theological reflection. Where earlier studies focus on ecological aspects, resource management, and conservation policy, we explore the structure of lived meaning in the practice, encompassing its ecological, social, and cosmological dimensions, and interpret it in light of the theology of creation. We do not intend to reduce formal theology, which tends to be normative, to the symbolic and cosmological religious experience of indigenous communities, or the reverse; rather, we open a space of dialogue in which each can interpret the other, so that *Tiyaitiki* can be read at once as a cultural practice and as an authentic experience of faith.

Method

Research design

We used a qualitative phenomenological-hermeneutic design (Neubauer et al., 2019; van Manen, 2016), operationalized through thematic analysis (Braun & Clarke, 2006). The design is phenomenological in its

aim, which is to describe how participants themselves experience and interpret *Tiyaitiki*, and hermeneutic in reading those descriptions in dialogue with theological sources. The study did not test hypotheses or measure attitudes; it sought the structure of meaning that participants attach to closing, guarding, and reopening the sea. We state its scope deliberately. We did not carry out a full phenomenological reduction with imaginative variation, and we therefore do not claim to have extracted invariant essences; procedurally, the analysis is a thematic analysis adapted to a phenomenological aim. What we retain from phenomenology is the commitment to begin from participants' own descriptions and to bracket, as far as possible, our theological categories during coding; these categories enter only at the interpretive stage reported in the Discussion.

Setting and participants

Fieldwork took place in Yepase Village, Depapre District, Jayapura Regency, in two stages: initial data collection beginning on 27 May 2026 and a follow-up visit in August 2026. Twenty participants were selected through purposive sampling (Palinkas et al., 2015) from four groups that stand in different positions toward *Tiyaitiki*: the customary council, which authorizes, enacts, and guards closures; the village government, which gives the practice formal recognition through the Village Regulation of 2022; young people and ordinary villagers, who inherit its values and comply with closures; and the church, which represents the formal religious institution that shapes the community's faith and has itself initiated closures. Participants were adult residents of Yepase chosen for their knowledge of, or involvement in, *Tiyaitiki*. Table 2 summarizes the groups, their position toward the practice, and the data collected from each. The study received a research permit from the Center for Research and Community Service (P3M) of STAKPN Sentani; all participants gave informed consent, and names are withheld.

Table 2. Participant composition and data collection

Group	Position toward *Tiyaitiki*	Data collection (interview informant code)
Customary council (incl. *ondoafi*, tribal chief, clan representatives)	Authorizes, enacts, and guards closures	Questionnaire; interviews with the *ondoafi* (I-OA) and the tribal chief (I-TC); FGD
Village government	Formal recognition (Village Regulation 2022)	Questionnaire; interview with the village head (I-VH); FGD
Young people and villagers	Inherit values; comply with closures	Questionnaire; interview with a youth representative (I-YR); FGD
Church	Formal religious institution; has initiated closures	Questionnaire; interview with a church representative (I-CR); FGD
Total	**20 participants**	**Fieldwork: 27 May 2026; follow-up August 2026**

Note. FGD = focus group discussion. All twenty participants are coded P01–P20; interview informants are additionally identified by role code (I-OA, I-TC, I-VH, I-YR, I-CR).

The authors are lecturers at a state Christian theological college in Jayapura Regency. Familiarity with the church context eased access and trust but also carried the risk of reading custom too readily through church categories. We addressed this by asking customary leaders to explain emic terms in their own words before introducing theological vocabulary and by presenting our preliminary readings to participants for correction in the focus group discussion.

Data collection

Data were collected in three complementary stages (Figure 1). First, all participants completed a questionnaire consisting solely of open-ended questions, which they answered freely in their own words. The questions were organized around four dimensions: (a) knowledge of *Tiyaitiki* rules, symbols, and sanctions; (b) reasons for respecting a closed area; (c) the perceived relationship between custom and Christian faith; and (d) how the practice is learned and passed on. Because the questionnaire contained no rating scales and served to gather participants' own formulations and to identify issues to probe in interviews, reliability coefficients such as Cronbach's alpha do not apply; its open answers were analyzed as qualitative text together with the interview and FGD data.

Second, semi-structured interviews were held with the five informants identified in Table 2: the village head, the *ondoafi* (customary leader), the tribal chief, and youth and church representatives. The interview guide was built around five core questions: (1) How is an area chosen, closed, and reopened, and who decides? (2) What happens, in your understanding, when someone violates a closed area, and why? (3) What do *nauna mire*, *klaume*, and *sondo* mean to you? (4) How do you relate *Tiyaitiki* to your faith in God and to

the church? (5) How did you learn about *Tiyaitiki*, and how is it taught to young people today? Interviews were recorded with the informants' consent and transcribed.

Third, one focus group discussion (FGD) brought representatives of the four participant groups together. Preliminary themes from the questionnaire and interviews were presented for confirmation, correction, and elaboration, so that the FGD also served as a collective member check. These data were complemented by documents and audiovisual records (Bowen, 2009; Figueroa, 2008), namely the Yepase Village Regulation of 2022 on the Management of Land, Coastal, and Marine Natural Resources and the written account of *Tiyaitiki* by Yarisetou (2009).

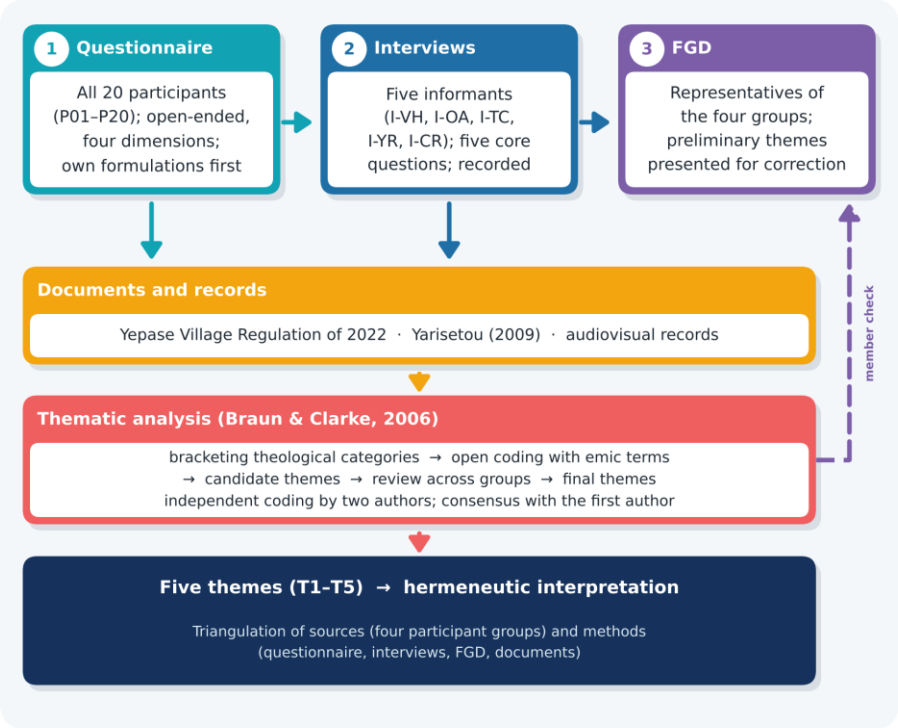


Figure 1. Sequence of data collection, analysis, and triangulation

Sequence and independence of data sources

The sequence was designed to limit contamination between sources. The questionnaire came first so that every participant recorded his or her own formulations before any interview or group discussion; its answers were then read to identify issues to probe in the interviews. The FGD came last by design. Its purpose was member checking rather than independent data generation, so the influence of earlier findings on the discussion was intended, and we treat FGD data as confirmation and refinement rather than as an independent source.

Data analysis and trustworthiness

Transcripts, questionnaire responses, FGD notes, and documents were analyzed through thematic analysis adapted to a phenomenological-hermeneutic aim (Braun & Clarke, 2006). The procedure had six steps: (1) repeated reading of the data while bracketing theological categories, so as to stay close to participants' language; (2) open coding of meaning units, retaining emic terms such as *finday*, *nauna mire*, *klaume*, and *sondo*; (3) grouping codes into candidate themes; (4) reviewing the themes against the whole data set and across the participant groups; (5) defining and naming the final themes; and (6) interpreting the themes hermeneutically in dialogue with theological sources. The second and third authors coded the data independently and resolved differences through discussion with the first author; in an interpretive design, such consensus coding is preferred over a reliability statistic (Braun & Clarke, 2006). The resulting coding structure is reported in Table 3.

A sample of twenty falls within the range at which thematic saturation is commonly reached in relatively homogeneous qualitative samples (Guest et al., 2006; Hennink & Kaiser, 2022). Saturation was assessed during the follow-up visit, when additional conversations with participants were used to check whether

further data altered or added to the themes identified in the first stage. Credibility was strengthened by triangulating sources (participant groups) and methods (questionnaire, interview, FGD, and documents), by using the FGD as a member check, and by verifying emic terms with customary leaders and against Yarisetou (2009) (Carter et al., 2014; Lincoln & Guba, 1985).

Selection of literature

Literature was selected purposively rather than systematically, in two sets. The first comprises primary theological texts chosen for their place in the genealogy of the concepts we use, regardless of date; this is why sixteenth-century works (Calvin, 1559/1960; Cano, 1563/2006) stand beside recent studies. The second comprises empirical and theological studies of customary marine management and indigenous eco-theology, mostly published between 2000 and 2026 and identified through searches in Google Scholar, Scopus, and Garuda (Garba Rujukan Digital) using combinations of the keywords "Tiyaitiki", "sasi", "customary marine tenure", "blue theology", "eco-theology", and "locus theologicus".

The Results report the closure cycle and the five themes that emerged from participants' accounts. The Discussion then compares these findings with customary marine systems elsewhere, explains how the practice is socially sustained, reads it through blue theology, and argues that *Tiyaitiki* is a *locus theologicus* with ontological, cosmo-sacred, and ethical dimensions.

Results and Discussions

This section reports what participants said. Unless a published source is cited, the statements are drawn from our field data (questionnaire, interviews, and FGD); published sources are cited only where they corroborate or contrast with participants' accounts. Analysis yielded five themes (Table 3), and Figure 2 summarizes the closure cycle as participants described it.

Table 3. Themes, codes, and data sources

Theme	Main codes (emic terms in italics)	Data sources	Related dimension
T1. The sacred boundary	*Ondo*'s prayer and ancestral sign; *finday* markers; guardians *nauna mire* and *klaume*; *sondo*; fear of disaster for violators	Interviews, FGD; Yarisetou (2009)	Cosmo-sacred
T2. The sea as mother and fellow creature	Sea as a "mother" who gives life; sea as God's gift; rest so that the sea can recover	Interviews, questionnaire	Ontological
T3. Obedience as devotion	Respecting custom as obeying God; church-initiated closure; caring for the sea as a believer's duty	Interviews, questionnaire, FGD	Cosmo-sacred; ethical
T4. Intergenerational transmission	Ancestral stories; parental advice; the *finday* as a teaching sign; Village Regulation 2022; concern about erosion of values	Questionnaire, FGD, documents	Social construction
T5. Self-restraint for the common good	Bans on dynamite, *tuba* root poison, indiscriminate felling, and dumping waste; communal harvest and allocation	Interviews, questionnaire, FGD	Ethical

Note. FGD = focus group discussion; documents = Yepase Village Regulation of 2022 and Yarisetou (2009).

T1. The sacred boundary

Participants described *Tiyaitiki* as the closure of a particular area of sea and coral reef, decided by and belonging to the clan that holds customary rights over it, which is later reopened through a customary ceremony so that the community can harvest what has accumulated (interviews; questionnaire), as also recorded in written accounts (Paulangan et al., 2021; Yarisetou, 2009). The choice of a site is not arbitrary but is preceded by prayer offered by the *ondo*, a customary religious specialist, who asks for guidance before the area is formally closed; in the local idiom, guidance comes through the voice or appearance of ancestors who meet the *ondo*, or through a shell sign from the sea (interviews; FGD). Boundaries are marked with the *finday* (young sago palm fronds), and entering or harvesting during the closure is regarded as a serious violation punishable by customary sanctions (cf. Paulangan et al., 2025; Sujarta et al., 2021). Participants stated that a violation brings disaster on whoever commits it, and several referred to the guardian powers called *nauna mire* or *klaume*, whose power can be summoned through a *sondo* (interviews; FGD; cf. Yarisetou, 2009). The boundaries are thus experienced as sacred rather than merely administrative.

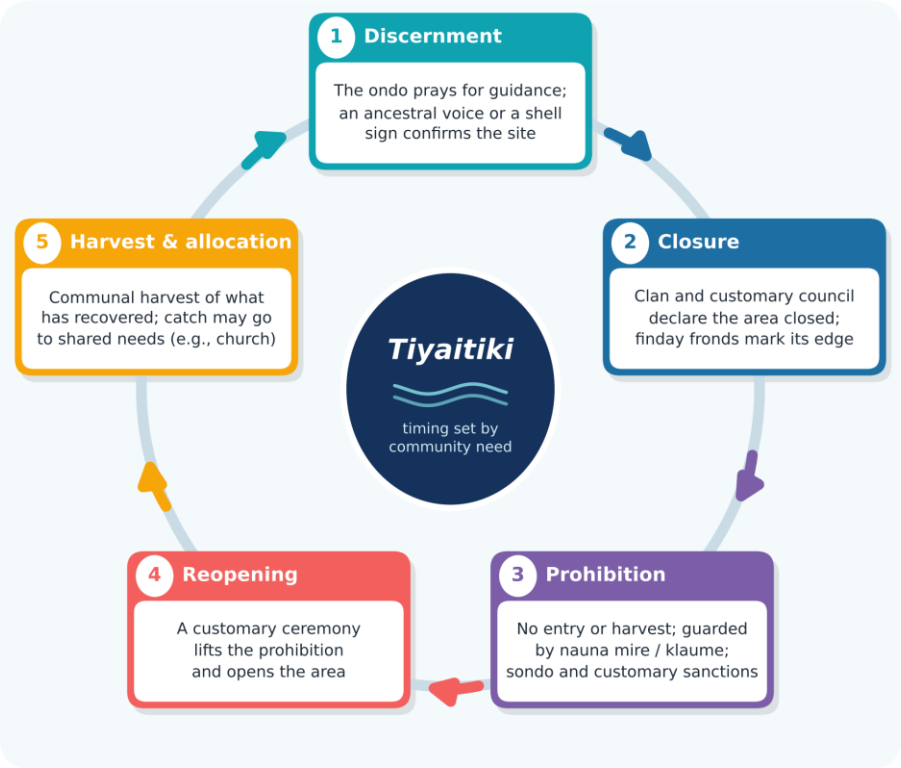


Figure 2. The *Tiyaitiki* cycle in Yepase Village as described by participants

T2. The sea as mother and fellow creature
Participants described the sea not only as a fishing ground but as a source of life with its own dignity. One participant (P07) called the sea a "mother" who gives life, and others spoke of it as God's gift that must be allowed to rest so that it can recover (interviews; questionnaire).

T3. Obedience as devotion
Participants understood respecting custom as obeying God and caring for the sea as a believer's duty, so that damaging it violates God's will as well as custom (interviews; questionnaire). The timing of *Tiyaitiki* is not bound to a fixed seasonal calendar but is determined situationally, according to the community's needs, and one recent enactment was initiated by the local church to raise funds for a church building: the customary council banned fishing in a certain area for a set period, and the catch obtained after reopening was allocated to the construction (interviews; FGD). The FGD confirmed this theme and added that respecting a closed area is understood at once as honoring the ancestors and as obeying God.

T4. Intergenerational transmission
Participants described how young people learn *Tiyaitiki* through ancestral stories, parental advice, the *finday* as a teaching sign, and everyday practice (questionnaire; FGD; documents), and several worried that modernization is weakening this transmission (FGD). The Yepase Village Regulation of 2022 gives the customary rules a written institutional form (document analysis).

T5. Self-restraint for the common good
Participants linked *Tiyaitiki* to wider prohibitions on dynamite fishing, poisoning with *tuba* root, indiscriminate tree felling, and dumping waste into the sea, and they stressed that the harvest after reopening is communal and allocated for shared purposes (interviews; questionnaire; FGD).

***Tiyaitiki* among customary marine systems: conservation or ritualized extraction?**
Placed alongside customary marine closures across Indonesia and the Pacific, *Tiyaitiki* is familiar in mechanism but distinctive in grounding (Table 4). Like Melanesian *tabu* areas and periodically harvested closures (Cinner & Aswani, 2007; Cohen & Foale, 2013), Polynesian *rahui* (Bambridge, 2016), *awig-awig* in Lombok and Bali (Satria & Adhuri, 2010), and *sasi* in Maluku (Harkes & Novaczek, 2002), it combines temporary closure, local authority, and communal harvest. Studies of these systems have emphasized

ecological effects, co-management, and institutional resilience (Aswani et al., 2007; Cinner et al., 2012; Johannes, 2002), and they have often analyzed taboos as "invisible" institutions whose religious content functions mainly as an enforcer (Colding & Folke, 2001).

The closest parallel is *sasi* in Raja Ampat and Maluku, where Christianity reinforced the practice and church-administered *sasi gereja* now draws compliance from religious faith as well as ancestral authority (McLeod et al., 2009). The church-initiated enactment of *Tiyaitiki* (Theme T3) places Depapre within this wider pattern of ecclesial appropriation of customary closure and suggests that the boundary between the customary and the ecclesial is more fluid than earlier ethno-conservationist studies assumed. Yet the pattern is not without risk: just as symbolic state recognition can weaken the substantive authority of *sasi* (Dewi et al., 2026), the formalization of *Tiyaitiki* in a village regulation or its use for church projects may shift the basis of obedience. Our contribution lies in what we do with the religious content that these studies record: rather than treat it only as an enforcement mechanism, we take it as theological testimony in its own right, since in Yepase it is also the language in which participants explain why the sea deserves restraint.

Table 4. *Tiyaitiki* compared with selected customary marine management systems

System and region	Mechanism	Authority	Religious grounding	Sources
Tiyaitiki, Depapre (Papua)	Temporary closure of clan sea areas marked by *finday*; ceremonial reopening and communal harvest	Clan and customary council; *ondo*; church may initiate	Guardians *nauna mire* and *klaume*; *sondo*; obedience as devotion to God	This study; Paulangan et al. (2021); Yarisetou (2009)
Sasi laut, Maluku and Raja Ampat	Periodic closure of areas or species; opening ceremony	Customary institutions (e.g., *kewang*); church in *sasi gereja*	Ancestral sanctions; Christian prayer and church oversight	Harkes & Novaczek (2002); McLeod et al. (2009); Ananta & Cabral (2026)
Awig-awig, Lombok and Bali	Locally agreed rules for gear, zones, and seasons	Village and customary councils	Customary law; religious sanction varies	Satria & Adhuri (2010)
Tabu areas and periodically harvested closures, Melanesia	Temporary closures, often linked to customary events; periodic harvest	Clan leaders and chiefs	Ancestral and spiritual sanctions	Aswani et al. (2007); Cinner & Aswani (2007); Cohen & Foale (2013)
Rahui, Polynesia	Temporary prohibition on access or harvest	Chiefs and communities, increasingly with the state	Sacred restriction (*tapu*)	Bambridge (2016)

Source. Compiled by the authors from this study and the literature cited.

Comparison also raises a harder question: whether the label "ethno-conservation" is warranted, since a periodic closure followed by a harvest could also be a ritualized extraction cycle. Comparative scholarship suggests that the answer depends on mechanisms rather than labels. Johannes (1978) showed that Oceanic communities developed reef closures, tenure, and taboos long before Western fisheries management, but also documented how easily these systems decline. Foale et al. (2011) caution that many Pacific taboos originated in social and ritual purposes, such as stockpiling food for feasts, rather than in conservation intent, so that their conservation effect is a by-product of variable size. Cohen and Foale (2013) add that periodically harvested closures can rebuild stocks, but that the gains can be erased if reopening is followed by intensive harvesting. The church-initiated closure in Yepase, whose explicit purpose was a harvest for a building fund, fits this pattern. Read through this literature, *Tiyaitiki* is better described as a periodically harvested closure with conservation potential than as conservation by design.

The institutional literature helps locate that potential. *Tiyaitiki* displays several of the design principles that Ostrom (1990) associated with durable commons: clearly defined boundaries marked by the *finday*, a clan with recognized rights to decide, rules adapted to local conditions, and sanctions for violators. Like *sasi* in Raja Ampat, where customary closures have been incorporated into marine conservation (McLeod et al., 2009), *Tiyaitiki* may gain strength from its link to formal regulation through the Yepase Village Regulation of 2022, as comparative research on the comanagement of coral reef social-ecological systems suggests (Cinner et al., 2012), although Dewi et al. (2026) warn that such recognition can also hollow out customary authority.

The spiritual sanctions that participants reported (Theme T1) are the key mechanism. Colding and Folke (2001) describe social taboos as "invisible" systems that regulate resource use without formal enforcement, and Berkes et al. (2000) show that traditional ecological knowledge often works through belief and ritual. In Yepase, the belief that a violation provokes *nauna mire*, *klaume*, or a *sondo* turns every community member into an observer and makes compliance a matter of conscience rather than surveillance. We therefore theorize the relation between spiritual sanctions and resource outcomes in two links. First, sacred sanctions lower the cost of monitoring and raise the perceived cost of violation, which allows a closure to hold. Second, the length of the closure and the intensity of the subsequent harvest determine whether the result is net recovery or merely deferred extraction. Our data speak to the first link, not the second. Because this study did not measure fish stocks or reef condition, we do not claim that *Tiyaitiki* produces measurable ecological recovery; that claim requires biological monitoring. What our data do show is that obedience to the closure rests on religious belief, and it is this belief that the following sections interpret.

***Tiyaitiki* as socially constructed ecological knowledge**

Our findings further show that *Tiyaitiki* is understood not merely as a customary rule but as a system of ecological knowledge built and passed down across generations by the people of Yepase Village (Theme T4). We adopt the sociology of knowledge of Berger and Luckmann (1966) because it explains how a norm can bind objectively without deriving from a written text or authority, a question directly relevant to *Tiyaitiki* as an oral tradition. Berger and Luckmann argue that social reality is formed through a dialectical process of externalization, objectivation, and internalization: repeated human action (externalization) settles into institutions experienced as a reality outside the individual (objectivation), and is then transmitted again as the subjective consciousness of the next generation (internalization). These moments explain why *Tiyaitiki* can bind the Yepase community with a moral force equal to written law even though it has never been codified as doctrine. Figure 3 maps them onto the practice.

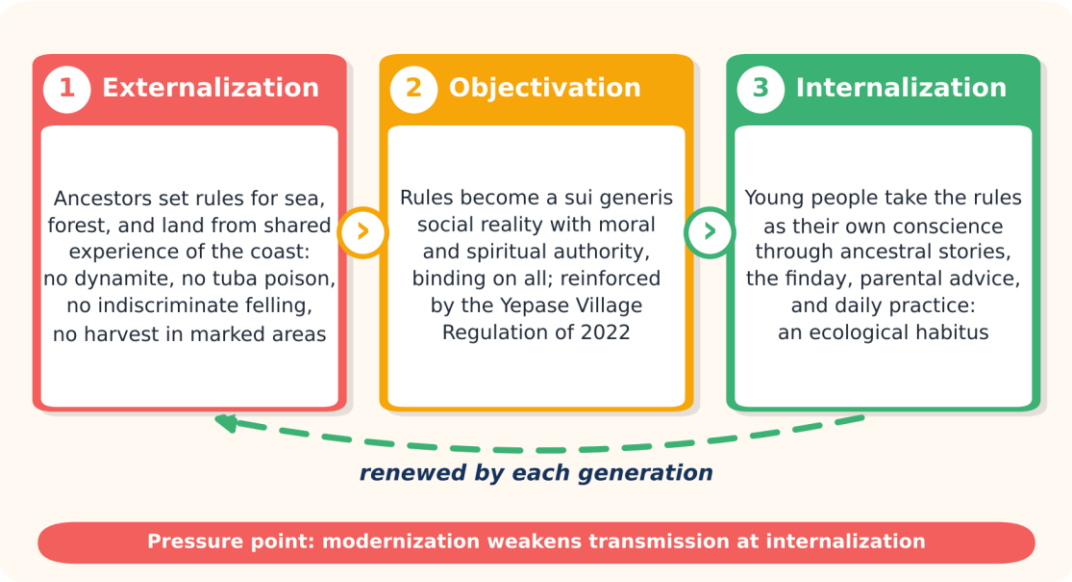


Figure 3. *Tiyaitiki* as socially constructed ecological knowledge (after Berger & Luckmann, 1966)

At the moment of externalization, the ancestors of the Yepase people established customary rules governing the use of sea, forest, and land. The prohibitions on felling trees indiscriminately, on using dynamite and *tuba* root poison, and on harvesting resources in areas marked with traditional symbols represent the community's collective experience in interpreting the dynamics of the coastal environment, translated into social norms designed to secure the sustainability of natural resources.

At the moment of objectivation, the rules of *Tiyaitiki* are accepted as legitimate social reality binding on all members of the community and so become a reality *sui generis* (Berger & Luckmann, 1966): they can no longer be reduced to the individual ideas of the ancestors who first established them but stand as a social institution with its own moral and spiritual authority, independent of the subjective intentions of anyone who obeys it today. The community regards *Tiyaitiki* as a set of sacred rules that must be obeyed to maintain

the balance of life, and the Yepase Village Regulation of 2022 gives its values an institutional form that further strengthens their social legitimacy.

Internalization occurs when the younger generation inherits the values of *Tiyaitiki* through ancestral stories, traditional symbols such as the *finday*, parental advice, and everyday social practice. Customary prohibitions are then no longer understood merely as external rules but become part of the individual's moral consciousness: caring for the sea, not littering, and not damaging the coral reef are understood as acts that are right both socially and spiritually. *Tiyaitiki* has thus become an ecological *habitus* that shapes the community's outlook on nature, one that derives not primarily from state policy or modern environmental campaigns but from a social construction that has unfolded historically through customary practice. The sustainability of the practice therefore depends on the success of this internalization; as modernization weakens the transmission of these values, the community's ecological consciousness is at risk of eroding.

Reading *Tiyaitiki* through blue theology

Blue theology is a development in contemporary ecological theology that places water, above all the sea, at the center of theological reflection. Unlike earlier ecological approaches that concentrated on land, it directs attention to the aquatic realm as a space of life, a spiritual symbol, and a *locus* of divine presence. The development has prompted curricular renewal in theological education itself (Lakawa, 2023), an indication that the sea is now regarded as a field of theological inquiry in its own right. In "Sister Water: An Introduction to Blue Theology," Ferris (2014) understands water as a sister within the community of creation. The metaphor carries deep ontological implications: humans are no longer the dominant subject over nature but part of a network of interdependent relations. Blue theology thus rejects the anthropocentric paradigm in favor of a relational one, yet it develops the broader eco-theological tradition rather than starting anew. L. Boff (1997) insists that the ecological crisis is a spiritual crisis rooted in the severing of humanity's relationship with the earth as a common home, and McFague (1993), through her concept of the world as God's body, broadens the understanding that all creation has sacred value. Blue theology can therefore be understood as a thematic specification of this wider framework, focusing on water as a medium of life and theological reflection.

Read in this light, *Tiyaitiki* functions not only as a traditional conservation instrument but also as a form of ecological devotion. From the perspective of blue theology, the sea is a living space with spiritual and theological value rather than merely an economic resource (Ferris, 2014), and believers are encouraged to recognize its place in God's creation as a site of spiritual reflection and ethical responsibility (Maggang, 2022). The prohibitions on dynamite fishing, *tuba* root poison, indiscriminate tree felling, and dumping waste into the sea (Theme T5) show an awareness that the sea must be protected, and participants link these acts to devotion to God (Theme T3).

These findings reinforce Maggang's (2019) argument for a "blue" character in Indonesian Christianity, which calls for a theology that no longer treats the sea as a marginal space but as an integral part of God's saving work. In a later maritime-theological reading of Mark 1:16–20, Maggang (2024) argues that addressing the crises faced by Indonesia's fishing communities is an essential part of actualizing the Gospel. *Tiyaitiki* shows how Papuan coastal communities have already developed a spirituality that honors the sea as a fellow member of the community of creation. Like L. Boff's (1997) common home, a *Tiyaitiki* area is treated as a shared living space whose damage harms the whole community, not only the individual who violates it, so that restoration requires collective rather than merely individual changes in practice. *Tiyaitiki* is therefore not a religiously neutral conservation mechanism but a lived expression of faith that works through Papuan local culture, in which custom and church borrow each other's authority.

Tiyaitiki* as *locus theologicus

The claim that *Tiyaitiki* is a *locus theologicus* requires genealogical clarity before it can be methodologically justified. The phrase is Latin: *locus* means "place" and *theologicus* means "theological," so it literally means a theological place, the standpoint from which theological argument can be drawn. The term entered systematic theology through the Renaissance revival of classical rhetoric, in which *locus* (from the Greek *topos*) designated the place from which an argument could be drawn, as in Aristotle's *Topics* and Cicero's *Topica*. The Dominican theologian Melchior Cano transformed this rhetorical apparatus into a theological method in *De Locis Theologicis* (1563). There he formulated ten *loci*: seven proper to theology (Scripture, apostolic tradition, the authority of the universal Church, church councils, the magisterial authority of the Church, the Church Fathers, and the scholastic theologians) and three borrowed from outside theology (natural reason, philosophers and jurists, and human history) (Cano, 1563/2006). Even in Cano's classical

system, then, the *locus theologicus* was never limited to Scripture alone; human history counted from the outset, though as a secondary source, among the legitimate sources of theological knowledge.

Latin American liberation theology developed the idea further. In *Theology and Praxis*, C. Boff (1987) distinguishes between "first theology," the faith and praxis of the people, especially the poor, as concretely lived, and "second theology," the academic reflection built upon it. For Boff, the people's lived praxis is not merely an object that theology studies but the authentic *locus* in which theology is born. In this framework, the life and praxis of the Yepase community in carrying out *Tiyaitiki* is not raw material awaiting interpretation from outside but first theology itself: faith already alive and at work before it is systematically formulated. In the same direction, Schreiter (1985) insists in *Constructing Local Theologies* that culture and local context are not passive vessels receiving theology from outside but help shape its content: local theologies arise from the dynamic interaction of Gospel, church, and culture. Extending the classical *locus theologicus* toward the lived experience, culture, and socio-historical reality of a community, as Indonesian contextual theologians have also done (Tinambunan, 2023), is thus not a deviation from Cano's tradition but a fulfillment of its own logic.

To call *Tiyaitiki* a *locus theologicus* is therefore to claim more than that it is a subject worthy of theological study. It is to claim that the practice itself, its prohibitions, rituals, and the living relationship of the community with the sea it guards, is a source from which theological knowledge about God, creation, and human responsibility can legitimately be drawn. This claim converges with our findings at three points (Figure 4). First, Cano's criterion that human history is a legitimate *locus* converges with *Tiyaitiki* as an oral tradition and customary law handed down over generations (Theme T4). Second, C. Boff's distinction converges with the way participants live *Tiyaitiki*: their obedience is not mere social compliance but an expression of faith already alive before this study formulated it (Theme T3), as one participant (P07) acknowledged in calling the sea a "mother" who gives life. This study therefore functions as a second theology that systematically reconstructs what the community already lives as first theology. Third, Schreiter's thesis that local culture shapes theology converges with the way Yepase cosmology, through the figures of *nauna mire*, *klaume*, and *sondo* (Theme T1), gives concrete form to the experience of divine presence that blue theology formulates more abstractly as the cosmo-sacred. The three dimensions below elaborate this embodiment.

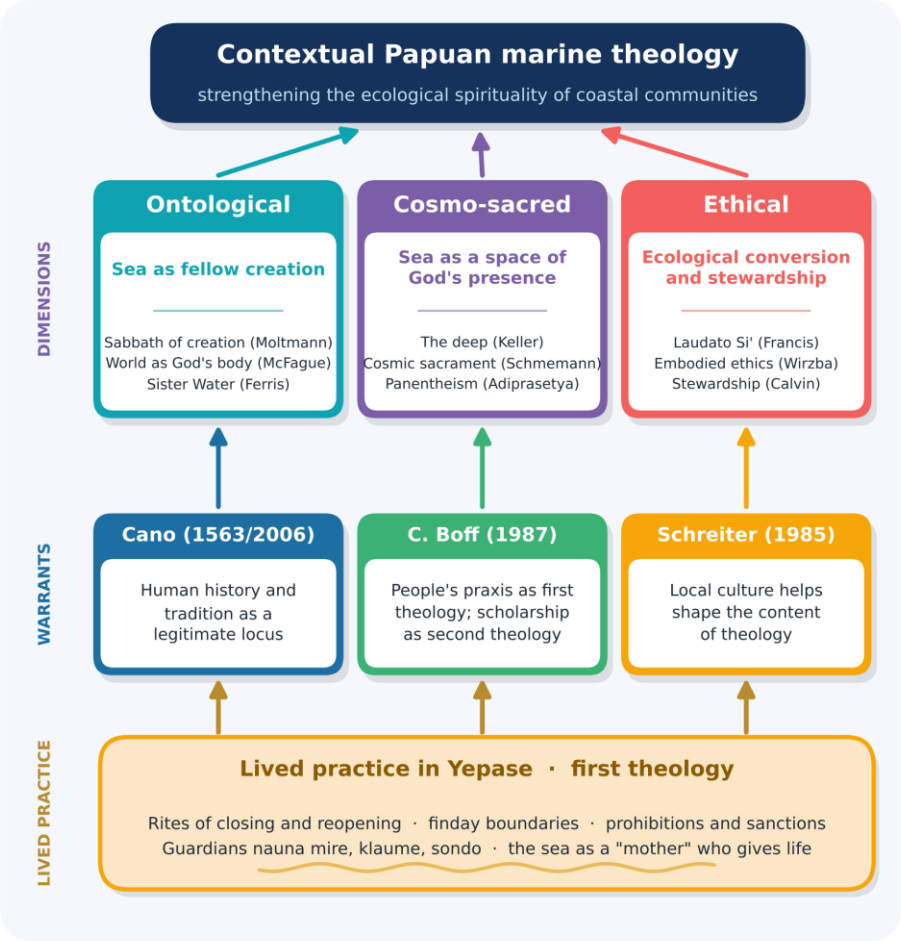


Figure 4. *Tiyaitiki* as *locus theologicus*: from lived practice to contextual marine theology

Three dimensions of a contextual marine theology

Ontological dimension: the sea as fellow creation. The people of Yepase regard the sea not merely as a space of economic production but as an integral part of life with its own value and dignity (Theme T2). *Tiyaitiki* regulates the use of marine resources through set closed seasons so that the ecosystem can recover, a practice that rests not only on long-term economic considerations but also on the conviction that the sea must be honored as a gift of God. This accords with the ontological assumption of blue theology, which regards water and the sea as part of the community of creation with intrinsic value in God's eyes (Ferris, 2014).

Here we rely in particular on Jürgen Moltmann, whose *God in Creation* (Moltmann, 1993), originating in his Gifford Lectures, sought to overhaul a Western doctrine of creation he considered too anthropocentric and dualistic. We chose Moltmann because his argument converges with *Tiyaitiki* at two points. First, creation is not a finished product of God's past but the space in which God, through the Spirit, continues to dwell and work, so that all creation forms a community of life. Second, Moltmann develops the Sabbath of creation: creation needs periodic rest from human use if its balance is to be restored, since it does not belong to humans to exploit without limit but to God. The parallel with the periodic closure of sea areas is methodologically significant: both treat rest as a condition of recovery grounded in respect for creation as a fellow subject. When a participant (P07) called the sea a "mother" who gives life, the statement carried more than a cultural metaphor, and it resonates with McFague's (1993) understanding of the world as God's body. *Tiyaitiki* thus expresses a relational ontology that places humans and the sea in a reciprocal, interdependent relationship.

Cosmo-sacred dimension: the sea as a space of God's presence. Participants understood obedience to *Tiyaitiki* as honoring the way of life inherited from the ancestors and, at the same time, as obedience to God (Themes T1 and T3); damaging the sea violates not only custom but also God's will. Through the concept of

the deep, Keller (2003) understands the sea as a symbol of the depth of divine mystery that continually gives birth to life and new possibilities. Drawing on Sámi coastal traditions, Grau and Sjöberg (2024) likewise describe extractive exploitation of the deep sea as a form of sacrilege. In the experience of the Yepase people the sea is ambivalent: it gives life through the catch, but it can bring danger when people transgress boundaries handed down by tradition, an ambivalence that accords with the biblical depiction of the sea as both a source of life and a power humans cannot fully master (Gen. 1; Ps. 104). This can be interpreted through the cosmic sacramentality of Schmemann (1973), for whom the world is by nature a medium of the human encounter with God.

This understanding is enriched by Joas Adiprasetya, an Indonesian systematic theologian whose work negotiates the Christian doctrine of God with the idioms of Asian cosmology and religiosity (Adiprasetya, 2013). We chose him for two reasons. First, as an Indonesian theologian, he offers a conceptual bridge closer to the Papuan context than Western panentheistic frameworks in general; his panentheism is constructed in critical dialogue with Moltmann's Trinitarian panentheism (Adiprasetya, 2017), so that the two belong to one genealogy of argument. Second, Adiprasetya insists that God is neither wholly separate from the world nor identical with it: God is the reality in which all creation exists and moves while remaining beyond creation, a position he develops as *theenpanism* (Adiprasetya, 2017). This framework supplies a fitting vocabulary for what participants live pre-reflectively through *nauna mire*, *klaume*, and *sondo*. Rather than treating these beliefs as animism to be discarded, or accepting them uncritically as literal theophany, it allows us to interpret the guardian figures as local articulations of God's presence, at once immanent and transcendent. Protecting the sea through *Tiyaitiki* is therefore a spiritual act that preserves a space of God's presence in the life of the community.

Ethical dimension: ecological conversion and Christian stewardship. Through closures, regulation of resource use, and community-based oversight (Theme T5), the Yepase people keep human needs and ecosystem sustainability in balance, showing that the freedom to use nature is bounded by moral responsibility for shared life. This accords with Pope Francis's call in *Laudato Si'* for ecological conversion as a faith response to environmental degradation (Francis, 2015). In Yepase, such conversion is already embedded in cultural practice: obedience to customary rules teaches self-restraint, moderation in consumption, and a willingness to forgo short-term gain for the sake of future generations, the kind of ecological ethic embodied in everyday life that Wirzba (2011) describes. Many participants understand caring for the sea as part of their responsibility as believers, which accords with Calvin's view of the world as *theatrum gloriae Dei*, the theater of God's glory, entrusted to human stewards (Calvin, 1559/1960). Read this way, *Tiyaitiki* also answers White's (1967) charge that Christian anthropocentrism lies at the root of the ecological crisis: here Christian faith reinforces restraint rather than domination.

On this basis the research question can be answered. *Tiyaitiki* gives rise to a contextual marine theology in Depapre by positioning the sea as fellow creation with intrinsic value (ontological dimension), as a space in which God is present and at work (cosmo-sacred dimension), and as a ground for stewardship and ecological conversion (ethical dimension). These dimensions make *Tiyaitiki* not merely an object of theological study but the *locus theologicus* itself, the place from which a contextual Papuan marine theology is drawn. These are interpretive claims grounded in participants' own descriptions; they neither depend on nor substitute for measurement of ecological outcomes.

Contribution and limitations

The study contributes in three ways. Theologically, it shows how an indigenous marine practice can serve as a *locus theologicus*, moving eco-theology from applying doctrine to a context toward listening to faith already at work in that context. For conservation studies, it suggests that the religious content of customary closures is not only an enforcement device but a source of meaning on which the continuity of the practice depends. Practically, because obedience rests on faith as much as on ecological calculation, efforts to sustain *Tiyaitiki* are likely to be more effective when the church and the customary council work together to transmit its meaning to young people.

The study also has limitations. It is based on one village, twenty participants, and two field visits (May and August 2026) rather than continuous observation of a full closure-and-reopening cycle, so its claims are transferable rather than statistically generalizable. It includes no ecological measurements, so the conservation effect of *Tiyaitiki* cannot be determined from our data. The authors' affiliation with a Christian theological college and the presence of church representatives in the FGD may have encouraged participants to stress the harmony between custom and faith, and elders may have shaped what younger participants said in the group setting. Translating emic terms into theological vocabulary inevitably involves interpretation;

the three dimensions are our second-order reading, not claims made by participants themselves. Future research could combine theological interpretation with biological monitoring of *Tiyaitiki* sites, compare other Depapre villages and *Sasisen*, follow a full closure cycle over time, and include the voices of those who contest or violate *Tiyaitiki*.

Conclusions

This study asked how *Tiyaitiki* gives rise to a contextual marine theology for the coastal community of Depapre District, Papua. Drawing on an open-ended questionnaire, semi-structured interviews, and a focus group discussion with twenty participants from the customary council, the village government, young people and villagers, and the church in Yepase Village (May and August 2026), triangulated with documents, we identified five themes: the sacred boundary, the sea as mother and fellow creature, obedience as devotion, intergenerational transmission, and self-restraint for the common good. Empirically, *Tiyaitiki* is a clan-owned closure whose site is chosen through the prayer of the *ondo*, whose boundaries are marked by the *finday* and protected by belief in guardian powers, whose timing is situational and can be initiated by the church, and whose values are passed to the young through stories, symbols, and practice, a transmission participants see as threatened by modernization.

On this basis, we answer the research question in a proportionate form. *Tiyaitiki* functions as a *locus theologicus*: a lived practice from which theological claims can be drawn about the sea as fellow creation (the ontological dimension), as a space of God's presence (the cosmo-sacred dimension), and as a trust that calls for restraint and stewardship (the ethical dimension). The practice is first theology, which this study reconstructs as second theology. These are our second-order interpretations of participants' descriptions, not measured outcomes. Likewise, comparison with customary marine tenure scholarship suggests that the conservation function of *Tiyaitiki* rests on sacred sanctions that make the closure hold, but whether it produces net ecological recovery cannot be determined from our data. Because the continuity of the practice depends on transmitting its meaning to younger generations, church and customary leaders have a shared stake in it. The findings are limited to one village and a small purposive sample, and comparative and longitudinal research across Papuan coastal communities is needed to test how far this marine theology extends beyond Yepase.

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