The Spatiotemporal Transformations of Lutheran Airplanes

Courtney Handman, *University of Texas at Austin*

ABSTRACT

Lutheran missionaries in pre–World War II colonial New Guinea transformed their mission when they became the first group to use "aviation for souls." Transformations in modes of circulation (from muddy, dark paths through dense rainforests into fast, sun-filled flights above a mountainous landscape) depended upon the discursive organization of a set of different space-times—to use Nancy Munn's term—so as to properly sacralize a mode of transportation that had until then been used almost exclusively in service of colonial resource extraction at the New Guinea gold fields. The mission prized movement and circulation as a Christian evangelistic practice in and of itself, in which the "message" and the process of its spread could be conflated. Yet this emphasis on circulation has been obscured by the almost exclusive attention within the anthropology of religion to evangelism as a form of agonistic comparison between Christianity and local culture and within linguistic anthropology to circulation as about type-token relations among texts.

The title of this article is a play on Nancy Munn's (1977) essay "The Spatiotemporal Transformations of Gawa Canoes," in which she analyzes how a wooden dugout canoe is transformed through a process of pro-

Contact Courtney Handman at SAC 4.14, 22201 Speedway Stop C3200, Austin, TX 78712 (chandman@austin.utexas.edu).

Some of the material analyzed in this article was examined during visits to archives in Australia, Papua New Guinea, and Chicago. These trips were generously supported by a small grant from the Edward A. Clark Center for Australian Studies, as well as by a Humanities Research Award, a Summer Research Award, and a Faculty Research Award, all from the University of Texas at Austin. An early version of this article was presented at the Society for the Anthropology of Religion meetings in 2015 on a panel about religious temporalities organized by Hilary Kaell. A later version was presented at the American Anthropological Association meetings in 2015, on the panel "When Time Matters," organized by Karl Swinehart and Anna Browne Ribeiro. I thank the audience and organizers of these events, and I particularly thank Karl and Anna for developing the papers into this special section. Craig Campbell originally pointed me to the Soviet material I discuss in a final section as a potential point of comparison. James Slotta gave me very helpful feedback on a later draft. Daniel Midena generously read a late draft that helped sharpen several points. The anonymous reviewers and editors of *Signs and Society* offered particularly insightful comments and suggestions. Many thanks to all of these interlocutors. Remaining errors are my own.

Signs and Society, vol. 7, no. 1 (Winter 2019). © 2019 by Semiosis Research Center at Hankuk University of Foreign Studies. All rights reserved. 2326-4489/2019/0701-0004$10.00

https://doi.org/10.1086/701049 Published online by Cambridge University Press

duction and a series of exchanges into a *kitomu*, the most prized category of shell valuable in the kula network, the circular exchange network of shell armbands and necklaces that Malinowski ([1922] 1984) first described. Munn examines value in terms of a series of qualities, and value transformation as a process that takes place through spatiotemporal movement. Value is made in the transformation from heavy/slow materials to light/fast materials: an earthly tree in the forest becomes a seagoing canoe that can be exchanged for a kula-networked armband endlessly circulating through the islands off the southeast coast of Papua New Guinea. She argues that these value transformations structure the kinds of space and time in which this movement takes place. Hamlets, seas, and the kula network itself are formed and controlled through a Gawan's controlled exchange of tree into canoe into shell valuable.

I want to use Munn's analysis as a model for analyzing how missionaries in twentieth-century colonial New Guinea created value through movement and how value transformations structure different qualities of movement in space and time. The value transformation I am talking about in this case is the transformation of souls, from unsaved into saved, and the movement I am talking about in this case is the capacity to cut across, through, or over the dense rainforest that covers New Guinea island. For many of the missionaries in the Lutheran mission, movement was itself a practice and sign of Christianity, because for them heathens were trapped in states of fear and darkness that made movement impossible. In order to go from darkened heathendom to the free movement of salvation, Lutherans created a set of Christian technologies of circulation and transportation. When they decided in the late 1920s to use aviation in their evangelism and forgo walking along mountain paths into the New Guinea highlands, they had to make those airplanes vehicles for godly bodies able to ascend, eventually, to heaven.[1]

But Lutherans engaged in this project on a complicated colonial stage, in which their claims to technology, colonial subjects, and land were always contested by a number of other actors. Their most direct competitors were the Roman Catholic missions also operating in New Guinea. The Lutherans also had quite contentious relationships with administrators and the colonial business classes: the planters, gold miners, and assorted others hoping to make money off the New Guinea land and its people. Their competition with and proximity

1. In Munn's essay, she analyzes how a canoe is transformed into a shell valuable. In the case I examine here, I analyze how dirt paths as modes of circulation are transformed into airplanes. If I were to make my title more analogous to Munn's, the paper should be called "The Spatiotemporal Transformations of Lutheran Paths." While I hope to take Munn's piece as a theoretical inspiration and departure point, there are clearly differences in the transformations discussed in the two cases that make an exact comparison impossible.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

to these adversarial others meant that Lutherans had to constantly work to claim their project as a properly moral and Christian one, rather than a popish, avaricious, or secular one. In this article, I outline the different spatiotemporal levels (I would say planes, but that might confuse the topic too much) on which Lutheran airplanes traveled as the missionaries tried to make their use of what was then a novel technology—civil aviation—into a divine project. Christian circulation happens through specific spatiotemporal formations. The airplane was the crux of establishing this circulatory form, but it had to be sacralized in order to be used in this way.

From Canoes to Airplanes

Nancy Munn's (1977) article on Gawan space-time and value transformation was a groundbreaking analysis of semiotic ("symbolic" in her terms) anthropology, examining how value is produced through a process of production and exchange in a noncapitalist community. This involves both physical and symbolic transformations of an object, in this case the wood used to make a Gawan dugout canoe, and the concomitant capacity of the Gawan owner of this object to control and expand the space-time in which he (usually he) exists.

A tree is something literally rooted to the ground, a stable, unmoving object on the Gawan landscape. Through the production process of felling, hewing, bespelling, and decorating the wood into a canoe shape, Gawans enact a transformation of something that in their terms is slow, heavy, and dark (a tree in a forest) into something that is fast, light, and shiny (a shimmering canoe rushing across the ocean). The specifics of the kin-based exchanges that allow the canoe to be sent out as a gift to another island in the kula system are too complex to summarize here. The important point is that the shell valuable that is given in return for a canoe is a kitomu, a personally owned valuable that has somewhat different rules of exchange compared with other kula shell valuables. Kitomu valuables are treated in such a way that they can always be used to open new exchange cycles, and largely because of this they can also be exchanged for ever higher quality shell valuables. Kitomu shells ideally stay in inter-island circulation endlessly, generating greater value for their owner with each exchange, a radical transformation of something that began as an immobile tree. Kitomu valuables received in exchange for canoes "therefore model in their conversion structure the power to reproduce for the individual . . . and for Gawa, the value generated by detaching materials from Gawa and sending away the objects so produced, i.e., the value created by spatiotemporal transformations which translate Gawa into the inter-island order" (Munn 1977, 46, emphasis removed).

https://doi.org/10.1086/701049 Published online by Cambridge University Press

As the valuable is transformed and up-converted into higher spheres of exchange, the space-time of the canoe-to-kitomu owner expands to coordinate the social worlds of larger and larger groups of people or farther and farther locales. This expansion, in Munn's argument, depends on the transformation of the material media of these exchanges, their qualia, as Munn (1986) describes it in her later work. Munn emphasizes how physical and symbolic transformations in material objects in exchange transform the space-time of the people involved in the exchange. The "fame" of Gawan kula participants is their capacity to organize the circulation of objects in space-time, obliging other participants to orient toward their circulatory constraints. Space-time is something that contracts or expands. There is an iconism between the objects exchanged and the space-time of the transactors: fast, shiny objects allow for someone to expand their spatiotemporal control better than slow, heavy ones.

How then can this be used to understand the Lutheran missionaries' turn to aviation for evangelism? I want to focus in particular on the ways in which symbolic and material transformations in the media of circulation create different values and affect the space-time of the participants: the change in modes of transportation for the Lutherans ideally created an endless increase of value in the state of heathen's souls, and a step-by-step expansion of the space-time in which the mission operates, from the infrastructural to the colonial to the eschatological. Unlike Munn's example, I am not examining a case of equivalent, interlocking bidirectional exchanges. Initially, missionaries thought of their evangelism as a unidirectional project of linear circulation: a Christian circulation of the Gospel message from one idealized locale ("the West") to another ("heathen New Guinea"). However, later missionaries came to see their evangelism as part of a delayed reciprocity, as aspects of missionary experiences "on the field" began to affect how Christianity was taught and experienced back home.[2]

Although much of the anthropology of Christianity focuses on convert cultures in the postcolonial global South, there has been relatively little work on the theorization of evangelism itself as a form of communicative circulation. There is an important and considerable body of work that emphasizes the sometimes agonistic forms of comparison that take place when specific missionaries end up engaging with specific local cultures of the colonial and postcolonial worlds (e.g., Comaroff and Comaroff 1991; Dombrowski 2001; Handman 2015; Meyer 1999). There are a few pieces that discuss the moment of person-to-person evangelism in various global contexts (Crapanzano 2000; Harding 2000; Web-

2. Thanks to Daniel Midena for comments on this point.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

ster 2013; Hardin 2017). But few scholars put the evangelistic encounter within a larger spatiotemporal framework of global circulation of Christian discourse, either as imagined by evangelizing Christians themselves or as theorized by anthropologists. One of the most profound examples of direct evangelism is Susan Harding's (2000) arresting account of being witnessed to by the Reverend Melvin Campbell. Harding analyzes her own reluctant baptism into evangelical ways of speaking as a process of temporal lamination of her event of salvation with the primary Christian event of salvation in the Bible, Jesus's death. Harding argues that to be addressed by evangelical witnessing speech entails starting to take up that speech in order to convert another. Every act of hearing evangelism is a repetition of the original act of evangelism that compels a further moment of creating an act of evangelism for others. It is a process of endless circulation, an imagined movement forward to more and more people that takes one back in time to Jesus's death.

The Lutheran missionary model of evangelistic circulation can be understood in somewhat similar terms. The Lutheran missionaries were, at least at an institutional level, less concerned with repeating the original moment of salvation than they were with the process of how one moves toward the next listener of the Christian message. While Christian circulation is ultimately imagined as circular—from heaven to earth and back again—much of the missionary emphasis in the twentieth century at least was on the expansion of the biblical message across the globe. In this circulatory imaginary, the message and the means of its circulation could sometimes be conflated.

The Great Commission, as described in Matthew 28:16–20, refers to Jesus's commandment to his disciples "to go and make disciples of all nations." Printed signs with this passage are a common sight on missionary compounds in Papua New Guinea, and the Great Commission is usually referred to as the foundation for mission work. Lutherans seem to have read the Great Commission at times in quite material terms, seeing in the movement of personnel and reading material a sacred project in itself. Being able to place an outpost of Lutheranism in the highlands of New Guinea, an area considered by Europeans and some contemporary Papua New Guineans to be the "last place" to be in touch with modernity, became part of an eschatological narrative that could usher in the end. And an airplane would help them do it that much faster.

Money sent by Christians from Germany, Australia, or the United States was converted into modes of transportation through which missionaries encountered heathens and through which some subset of those converts went on to become evangelists themselves. They made iconic linkages between the technolo-

https://doi.org/10.1086/701049 Published online by Cambridge University Press

gies of circulation and the people reached through them—the quick and light filled planes made for quick and light souls destined for a celestial eternity. In their most grandiose rhetorical moments, appeals for money from home churches for things like radios and airplanes could be directly linked up with the end of days, the fulfillment of Jesus's commandment to go out to all the nations of the world (I will discuss one such example toward the end of the article). It was a radical transformation of money to media of circulation to Christians, and likewise a radical expansion of the space-time of the Lutheran mission to eventually encompass what they would consider God's creation as a whole.

As much as the Lutherans and other missions of New Guinea treated the translation and propagation of the Bible as a core task, they also spent considerable time developing technologies for sending books and speakers out. Material circulation itself was a sign of Christianity. In that sense, while they were deeply concerned with the capacity to recontextualize the biblical message for the New Guinea communities they encountered, the capacity to get people and their recontextualized text artifacts into position around New Guinea seemed to be of almost equal concern. The concern with creating properly recontextualized tokens of biblical message types[3] was sometimes overshadowed by the problem of simply moving such tokens around, whether artifactualized in printed material or spoken by the missionaries and evangelists walking, riding, and flying across New Guinea.

Munn's theorization of Gawan exchange pivots on qualitative transformations of the objects transacted across different exchange spheres that create quantitative transformations of the space-time of the objects' owners. Moving from canoe to kitomu, one moves from lesser to greater fame, smaller to more expansive spatiotemporal control. But the conversion of the value of souls linked iconically through similar transformations in the modes of circulation ultimately depends upon something beyond just a quantitative increase in space-time. The final transformation of souls as saved and eventually circulating into heaven depends in Christian eschatology on an obliteration of, or transcendence of, human space-time. The challenge for the Lutherans was how—semiotically speaking—to get their airplanes all the way up to heaven, sacralizing what had been up to that point a very nonsacred vehicle.

While Gawan participants in the kula were often in competition with others to secure access to particularly prized shell valuables and the fame that came with

3. For discussions of the type-token relations that have been theorized in terms of recontextualization, see Bauman and Briggs (1990), Briggs and Bauman (1992), Silverstein and Urban (1996), Silverstein (2005), and Gal (2017).

https://doi.org/10.1086/701049 Published online by Cambridge University Press

them, Gawans could nevertheless be somewhat secure in the sense that their exchange partners were also interested in the continued circulation of kula objects. That is, Munn did not theorize the problem of contested temporalities (outside of a culture-internal figure of the witch capable of contracting one's space-time). However, the Lutherans had to engage with a number of other colonial actors whom they considered antagonistic to, or at the very least obstacles to, forms of Protestant Christian circulation, whether these were the neighboring Roman Catholic missionaries, colonial businessmen, or administrators. Because of this, Lutherans always faced the problem of other actors who refused to recognize the kinds of Christian circulation they were trying to create and who worked against an expansion of the Lutheran mission's space-time into its final, heavenly form. In these contestations over the forms of Christian circulation and Lutheran mission space-time, Lutherans had to face the possibility that the biblical and heavenward aviation paths that they were creating would collapse, reduced down to a very earthly domain of pecuniary or nationalist desires—a human sense of fame at odds with the ultimate Christian conversion of the world into the space-time of heaven. In the following sections I trace out how the Lutherans defined their evangelism in terms of movement, how transformations in modes of movement created multiple overlapping space-times oriented toward the heavenly transcendence of space-time, and how these space-times sometimes fell to earthly pieces.

Christian Movements

When the first German Lutheran mission started operating in colonial New Guinea in 1886,[4] the missionaries encountered a landscape that seemed impenetrable for a number of reasons. Not only was colonial New Guinea the most linguistically diverse place on the earth, but it was also a mountainous, densely forested tropical island. Immediately, problems of communication and circula-

4. The Neuendettelsau Mission was begun by Johannes Flierl in 1886 when he started to work in the Finschhafen area of the Huon Peninsula. A few years later, the Barmen Mission started work near Madang, but it was never as successful as the Neuendettelsau Mission either in maintaining the health of its missionaries or in increasing the number of the Lutheran converts. After World War I, during which Australia took control of New Guinea from Germany, more and more Australian and American Lutherans joined the missions, especially because a number of the original German missionaries were not granted visas to return to New Guinea after the war. Interested readers are directed to several important histories of the Lutheran missions in New Guinea: Winter (2012) provides an important critical reading of the political context of the Neuendettelsau Mission, focusing on its connections to rising nationalist movements in Germany and the specific Nazi connections of some of the missionaries. Midena (2014) examines the early missionaries' overlapping religious and scientific orientations that influenced both their ethnographic output and evangelistic approaches. Wagner and Reiner (1986) collect essays and remembrances from many of the people involved in the original events, providing an insider's perspective on the Lutheran mission field. Although I usually focus on the post–World War II activities of the Lutheran mission, in this essay I am concerned with the mission's prewar entrance into aviation.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

tion—in both the linguistic and transport senses—became overriding concerns. Lutheran missionary texts depict non-Christians as immobile, stuck to defensive positions on the earth, in contrast to the missionaries' own urge for movement and evangelistic expansion.

> The very first missionaries who came to New Guinea could not do much in improving the bush tracks. The people were not interested to communicate with outsiders. They were fearful of enemies from every side. In the mountain areas people built their villages on ridges which were hard to reach and easy to defend. . . . The first mountain area in which this changed on account of the acceptance of the Gospel was around Sattelberg and Wareo. Christian Keyßer and Leonhard Wagner encouraged the people to give up their isolated hamlets and live together in larger villages which could be connected with better bush paths even suitable for travel by horse.[5]

Not only was movement equated with Christian salvation, but the speed and quality of movement mattered too. In a short history of transportation networks in the mission, one Lutheran missionary wrote about the quickening pulse of Christian life that went with an expanded road network:

> It may well be said that the building of better roads went hand in hand with the spreading of the gospel in the Morobe and Madang districts. Everywhere the missionaries encouraged the building of roads or at least paths suitable for travelling by horse. Along the coast local canoes could be used. But when the work spread inland it meant building suitable lines of communication. With the introduction of steel such as axes, knives and shovels work went ahead at great speed. As the influence of Christianity grew, the desire of the people to connect up with the pulsating life of the outside world grew at the same time.[6]

In colonial Lutheran thinking, "heathen" bodies that had been rooted to one small section of a vast mountain forest are transformed through Christian kinds of movement along the roads that the Lutherans were themselves constructing with their axes, knives, and shovels. The loss of fear (of the devil, of one's neighbors) that Lutherans believed would grow with conversion was visible in the

5. "The Secular Involvement," unpublished typescript manuscript, John Kuder Papers, Evangelical Lutheran Church of America Archives, p. 17.

6. "The Secular Involvement," unpublished typescript manuscript, John Kuder Papers, Evangelical Lutheran Church of America Archives, p. 19.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

greater range of movement of the Christian inhabitants of the convert villages. While the state of one's soul can be difficult to gauge, the capacity for movement seemed to be a sure footing on which to judge the mission's work. Regardless of the kinds of precolonial walking that New Guinean people engaged in (e.g., men hunting in far-off, uninhabited mountain areas), Lutherans thought of movement across the territory as the sign of newfound Christian faith.

The most valuable kind of Christian movement of local people from the Lutheran perspective was the training and sending of "native evangelists." These native evangelists were New Guineans who, after their own conversions, would become missionaries to other communities in which the Lutheran mission was just starting to work. With a constant shortage of European missionaries to staff all the different areas that Lutherans hoped to enter, native evangelists did much of the pioneering work of contacting and establishing mission buildings in newly approached communities. The native evangelists ran and taught Lutheran primary schools, led weekly church services, and identified and prepared candidates for baptism. They were also responsible for teaching local people the church lingua franca used in that area (one of several coastal languages from either the Papuan or Austronesian language families). On their twice-yearly visits the European missionaries would check on schools, baptize and give communion to those who were official church members, and try to solve any church-related problems the native evangelists were having. But unless one lived near the mission station at which the European missionary lived, a local New Guinean church member would rarely see that man.

The structure of the Lutheran mission thus depended on finding a few candidates from each newly engaged area to become evangelists for further incursions into more remote parts of the colony. Native evangelists would first have to travel to the evangelist schools at the coast, and then head inland into territory that they themselves would often be completely unfamiliar with. The mission could not operate if these young men (and sometimes their wives) could not move around the country.

"Aviation in Search of Souls"

In addition to focusing on the presence or absence of movement, missionary attention to the qualities of movement increased when the mission started to use airplanes in 1935. A number of different qualities of travel, and the subsequent conversions that were attributed to this travel, became overt topics of discussion for missionaries and other colonial actors. Of greatest importance was the fact that airplanes were obviously quicker than horses, canoes, boats, or humans walk-

https://doi.org/10.1086/701049 Published online by Cambridge University Press

ing on foot. The radical change in travel times that the airplanes afforded made it possible for the mission to expand into the recently opened New Guinea highlands. Without the use of airplanes, a missionary and dozens of local people working as carriers would need three weeks to walk from the coast to the highlands. With the use of an airplane, they could make the same trip—bringing even more cargo—in just over an hour.[7]

As the Lutherans themselves often noted, they were learning about aviation from men working in the nearby Wau and Bulolo gold fields, where much of the early global history of civil aviation was made (Sinclair 1978). In fact, the statistics about transport times from the larger airplanes working out of Wau and Bulolo are even more astounding. According to one gold miner, when parts for a wireless station were transported from the coast to Wau, "we started with 300 native boys carrying the gear over trackless country on a journey which occupied six weeks. Recently a large dredge weighing 4000 tons[8] was carried in sections over the same country by air. The trip occupied 35 minutes" (The 'Reach' of Teleradio 1938, 13). Air travel seemed to erase the mountains and forests that had been until this point one of the most consequential features of working in New Guinea, whether as a missionary or a gold miner.

A second characteristic of airplane travel in addition to speed was the sense of lightness, both as the opposite of heaviness and as the opposite of darkness. Airplanes used in Lutheran evangelism flew above the steep mountain walls and rainforests. Not only were the planes associated with the sun-filled heavens, but also they were importantly above the heat of the valleys (Bergmann, n.d., 55) or the muck of the rainforest roads that had been so painstakingly built over the years. "The time was ripe to leave the muddy and leech infested mountain paths and to use wings."[9] Slow, muddy paths to the unconverted were transformed into fast, sunlit airplanes capable of creating more and better Christians.

The original pioneer Lutheran missionary to New Guinea, Johannes Flierl, first brought up the possibility of using airplanes in evangelism with his assembled missionaries during their annual conference in early 1928 (Theile). In his

7. Otto Theile, "A Miracle Before Our Eyes," unpublished and undated typescript manuscript, Evangelical Lutheran Church of America Archives, 7. Hereafter cited parenthetically as "Theile."

8. The article says "4000 tons," but with a payload limit of 4 tons, it would have taken an airplane 1,000 trips to carry up this dredge. It is more likely that the dredge weighed 4,000 pounds, i.e., 2 tons, and thus could have been flown up to Wau in one trip.

9. "The Secular Involvement," unpublished typescript manuscript, John Kuder Papers, Evangelical Lutheran Church of America Archives, p. 28. Note that even the Lutheran plane could not completely shake off the mud, since any time it landed it had to contend with unpaved airstrips that were often overly soft from the rain. Before the wheels on the plane were fitted with fatter tires, its original skinny tires would sometimes sink down into the ground upon landing (Bergmann, n.d., 57).

https://doi.org/10.1086/701049 Published online by Cambridge University Press

original pitch, Flierl emphasized the speed and smoothness of air travel. According to Lutheran accounts, the very idea of air travel seemed to play with time, turning an old man young again.

> The reverend pioneer of our mission, Senior J[ohannes] Flierl, had one evening set apart for the discussion of his proposal that the time was ripe for the installation of a mission aeroplane. How young he seemed that evening, how easily his mind accommodated itself to the age of modern technical progress and its terms! It was very humorous, when he described to us the great ease of travel in the air, where there were no spoon-drains and no watertables,[10] where the traffic police could not watch you, and where no dogs could run into your wheels, and where you need not be in constant fear of a pedestrian appearing around the corner. But we soon learnt that our old leader was very serious and was quite convinced of the necessity of an aeroplane for the proper development of our work in NG. (Theile, 1)

Flierl was making an argument for aviation being a mode of transportation that had already transcended the human world and was free of any kind of restriction, whether geological (the spoon-drains and water tables), governmental (the traffic police), or social (the dogs and pedestrians). Flierl's image of aviation was deeply mistaken, of course. Managing and understanding geology, civil administration, and social relations are all required for regular air traffic. Once the mission started depending on its plane in the mid-1930s, new stations were built only in areas adjacent to government airstrips or on level enough sections of land on which airstrips could be constructed.[11] They had to constantly maintain, and the Department of Civil Aviation had to constantly inspect, the airstrips in order to ensure proper drainage for their continuing "aerodrome" licenses. Missionaries had to ask their New Guinea congregations to help clear and level ground for airstrips.

Nevertheless, it is clear from this account that Flierl spoke of aviation as a space of great freedom of movement, almost entirely untethered from the ground and the earthly concerns that one has to take notice of while moving upon it. Flierl described an idealized form of aviation that has been sacralized. He de-

10. A spoon-drain is a shallow channel used to redirect excess water away from a road. A water table is the upper level of the zone of saturation of an area of land. The Lutherans would have had great experience constructing spoon-drains and discovering the water table of a given area of land through their extensive road-building projects along the coast.

11. "A Glimpse at Transportation in Lutheran Mission New Guinea," undated pamphlet, Evangelical Lutheran Church of America Archives, p. 5.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

scribed not just a form of circulation free from the muck and mud of the roads on which they had been walking up until that point. He described a form of circulation that was divorced from secular or earthly relations entirely, a space-time organized by the eventual heavenward movement all Christians are supposed to take at the end of history. It took seven years from this initial inspiration from Senior Flierl to get to the first "aeroplane" delivered on February 19, 1935: an all-metal Junkers F/13 christened the *Papua* and flown by a German ace from the First World War, Fritz Loose.[12]

As Munn anticipates, this transformation in the qualities of movement also produced a transformation in the space and time in which that movement occurred. Airplanes transformed the space-time of evangelism in ways that seem not to have been true of canoes, boats, axes, knives, or shovels. Even in a place that was derided for not being in the Iron Age, it was air travel more than steel axes that seem to have created a set of questions about the temporality of Christian evangelism in a colonial context. Some of this has to do with the fact that it was a novel form of transportation for the European missionaries as well as for the local people. Although airplanes had been used in the First World War as a military technology, civil aviation was still in its infancy when Flierl first proposed using an airplane for evangelism. Lutherans were able to change their concept of what the mission could be when they started to use airplanes in their work.[13]

This became particularly salient as the Lutherans in the early 1930s were starting a fierce competition with the Roman Catholic and Seventh Day Adventist missions for souls in the highlands of New Guinea, an area which European colonizers had only recently encountered and which seemed to have a population of perhaps half a million. Sometimes referred to as the "gold rush for souls," the competition among different missions in the 1930s for access to the highlands populations was intense. In the earlier-missionized coastal areas of Papua and New Guinea, colonial administrators had helped to define missionary spheres of influence—rough boundaries dividing up colonial spaces among various missions. While there were always accusations of "flock stealing" at the edges of these

12. According to Sinclair (1978), Loose was a pilot and engineer with the Junkers aviation company after World War I, but he ran afoul of the Nazi party and was happy to take the opportunity to leave Germany to fly for the Lutherans in 1935. As I discuss more below, the relationship of the Lutherans to Nazism becomes an important part of their aviation history.

13. Huber (1988, 77) talks about the use of boats as a "defining technology" for the neighboring Roman Catholic mission in earlier decades. Clearly aviation was a defining technology for the Lutherans in the 1930s and after (and for the Catholics too—they started using planes just after the Lutherans did). I hope to demonstrate not only how aviation defined the mission but also how the move to aviation transformed the mission.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

denominational zones, these gentlemen's agreements about mission regions had largely kept such complaints and fights to a minimum.

However, the colonial administration had decided to change tactics when they opened up the highlands for missionaries. They refused to create spheres of influence and in fact hoped to spark missionary competition. The goal was to pacify and civilize the highlanders as quickly as possible. Using a kind of market logic, the colonial administration hoped that close competition rather than regional monopolies would spur the missions to work at a more rapid pace. Since the missions provided many of the services that are usually associated with states—schools, medical outposts, economic opportunities—the pace of mission work was considered especially important to the colonial administration's plans for "civilization."

Although administrators, planters, and mineral prospectors at the time laughed at the technological one-upsmanship and literal sprints to new territories involved in the Lutheran-Catholic competition for the highlands, the missions were playing by the administration's rules when they engaged in this heated race for congregants. And both missions took the challenge seriously.[14] For the Lutherans, the race to the highlands was a crucial part of their capacity to reimagine their mission on a vast scale: not just a regional mission, the Lutherans could envision extending across the colony as a whole and keeping pace with the Catholics. And while Flierl pitched the aviation program to his fellow missionaries in terms of light, fast freedom of movement, former missionaries then in Germany were also encouraging Flierl to start using airplanes because of the rumor that Catholics would soon start doing so. The future of Protestantism in New Guinea seemed to be on the line. In an annual report for 1927, Flierl writes:

> I received two letters from Bro. Keysser, written at the beginning of August, with the news that an airline company was being formed for all Catholic missions in the world, including New Guinea which would place aircraft at the disposal of the Mission. This is said to be the main purpose of the company. The Junker-Werke have already donated a plane to this company which will be piloted by a priest. Keysser complained in his letter that "always and everywhere the Catholics are ahead of the Protestants."[15]

14. Seventh Day Adventists also participated in this race to the highlands, although as a smaller mission they were not quite the existential threat that the vast Roman Catholic mission was to the Lutherans.

15. Johannes Flierl, "Report from Senior Joh. Flierl for 1927," trans. Wera Wilhelm, LMF 51-10, Evangelical Lutheran Church of America Archives, 1928, pp. 4–5.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

The Board of Foreign Missions of the American Lutheran Church that supported some of the New Guinea work also considered the Catholic competition as the crucial reason for supporting the purchase of a plane: "From various sources, we are told that the Catholics are going to missionize with planes in [New Guinea]. That would give them a big lead over us."[16]

Yet the development of the aviation program required a massive extension of the Lutherans' work: raising the money for the plane and pilot, building and maintaining airstrips across the colony, and developing a radio communication network that linked planes and people. While the aviation program created a novel formation and extension of space-time, the mission also had to regiment the secular and sacred aspects of the space-time in which an aviation-supported mission worked. Three different forms of time came into relation with one another through the use of airplanes: infrastructural time, colonial time, and Christian time. The program could proceed as long as sacred time dominated, but at the start of World War II this framing could not be maintained. It was a continual struggle to try to maintain Flierl's sacred image of heavenly aviation against the accusations that Lutherans used airplanes in a ridiculous contest for souls, an avaricious claim to native land and labor, or a nationalist drive for German supremacy. When these different forms of space-time did collapse into one another, the aviation program ran into immediate problems. In the next sections I outline these different spatiotemporal formations and their eventual collapse as the Second World War broke out.

Infrastructural Space-Time

The use of airplanes in the mission's work meant that it needed to add another layer to its already vast and complex transportation-communication network. In particular, the advent of "aviation for souls" required the purchase of what were then called tele-radios. These were two-way radios available for both receiving and sending transmissions, something akin to 100-pound walkie-talkies that initially were powered by a "native" pedaling a bicycle-like device.[17] Newspaper reports from the time describe the revolution brought on by these radios, reducing the feeling of isolation and increasing a sense of measurable distance from somewhere, at least from somewhere that was within the 400-mile range of the radio. Contemporary accounts emphasize the ways that tele-radios allowed

16. Board of Foreign Missions, minutes, December 6–7, 1927, Evangelical Lutheran Church of America Archives, p. 1. The translation from German is mine.

17. See Courtney Handman, "The Broad- and the Narrow-Cast: Christian Radio in the Making of Colonial Social Relations" (unpublished manuscript).

https://doi.org/10.1086/701049 Published online by Cambridge University Press

people in remote spaces to be located at a particular spot, rather than just "in the wilds." Newspaper articles detail the many ways in which people in need were able to be located by ship or by airplane because they had a tele-radio set: injured people could be picked up and patrols in remote New Guinea could radio in for more supplies ("Radio Telephony for Planes" 1938, 5). Tele-radios meant that one was not simply lost.

In the mid-1930s, it was still quite novel to have radios in airplanes, and civil aviation in Australia and New Guinea was just starting to use them regularly. Australian newspapers reported on the great progress made in 1937: *almost* every major "aerodrome" in the capital cities now had a radio, and all passenger-carrying planes did ("Radio Telephony for Planes" 1938, 5). In 1937, after the *Papua* started flying regular runs into the highlands, the Lutheran mission was granted licenses for two tele-radio transceiver sets, one at the Lae airstrip where the *Papua* was housed and one at the original Finschhafen headquarters of the mission.[18]

> The daily transmissions would include the flight plans of the Mission aeroplane "Papua." All missionaries concerned, for instance in the highlands, would listen in case their station was concerned [n.b. the highlands missionaries could only receive, not transmit, messages on their standard radios (CJH)]. Twice a week positions were given of the aeroplanes of Carpenters air line which flew from Australia to Rabaul. . . . The radio service was greatly appreciated by all people concerned, the missionaries as well as other persons profiting from it.[19]

Locating oneself—as well as the planes—was an important part of how the radios transformed the space and time in which missionization took place. Missionaries listening in for flight schedules could align their watches and clocks to standard time, since the Lutherans would broadcast from Lae or Finschhafen at specific times of day.[20] Planes traveling overhead were not just somewhere in

18. "The Secular Involvement," unpublished typescript manuscript, John Kuder Papers, Evangelical Lutheran Church of America Archives, p. 43.

19. "The Secular Involvement," unpublished typescript manuscript, John Kuder Papers, Evangelical Lutheran Church of America Archives, p. 43.

20. For the missionaries who had worked or continued to work along the coast, this regimentation to clock and calendar happened through the scheduled, monthly visits of the Lutheran ship *Simbang*: "her trips represent the inevitable passing of time; something which so often we tend to minimize here where work is generally made to conform to conditions of the weather, rather than by a predetermined schedule" ("A Glimpse of Transportation in Lutheran Mission New Guinea," undated pamphlet, Evangelical Lutheran Church of America Archives, p. 2). The aviation-related radio schedules meant that this regimentation to the time of the "outside world" happened on a daily basis. For more on missionary reformulations of time in colonial Papua New Guinea, see also Schieffelin (2002).

https://doi.org/10.1086/701049 Published online by Cambridge University Press

space, but locatable relative to the ground through radio transmissions broadcasting their position. Flierl thought of airplanes as allowing one a radical freedom of movement, yet the infrastructural innovation of a radio-enabled airplane was to allow planes to be located in regimentable time and navigable space, rather than just in a vast, unbroken expanse of heavens.

In his memoir, Missionary Wilhelm Bergmann writes about the weeks when the *Papua* was just starting to be used for mission business. His very business-like account of the novel transportation system is noteworthy for its attention to exactly this sense of locatability. Bergmann seems to have been most impressed by the speed with which mission business could be conducted, since his memories of the plane are largely prose itineraries:

> On the 26th of March we flew back to Kajabit. Since the weather was so nice, the pilot said we could once again look to fly inland. . . . The next day we left. We had loaded a lot of fuel. It was wonderful weather. Until shortly before the Elimbalim there wasn't a cloud in the sky. We flew over and landed in Mogei. We first flew over Ogelbeng and dropped off a letter. We soon got word from Ogelbeng that [Missionaries] Vicedom and Horrolt were in Ega. [Missionary] Löhe came to Mogei. We went to Ogelbeng. The airfield seems to be quite good, even dry. (Bergmann, n.d., 60)

His memories of the plane are of the speedy movement across dates, times, and places. Rather than a strict focus on the phenomenological experience of speed as such (cf. Schivelbusch 1977), Bergmann memorializes his ability to get the mission's business done at a novel pace.

Bergmann delights in his capacity to locate himself and the plane relative to the ground. This was not always guaranteed. Sinclair (1978, 34–35) describes the first planes trying to land at the Wau airfield near the gold mining operations in which miners who had walked the tracks up to Wau many times could not orient themselves when in the air. It took the first pilot several attempts to locate the Wau airfield after it was constructed, since no aerial maps or routes existed yet. But even with heavy cloud cover, Bergmann boasts of his orientation in the plane. During one early, cloudy flight on the *Papua* he ends up guiding Pilot Loose, then still quite new to New Guinea: "I told the pilot that he could fly down to the valley. He said a few times: Is that certain? I said yes. He was totally dependent on me because he did not know the area" (Bergmann, n.d., 56).

Being able to locate someone not just "in the wilds" but at a particular place and time at a destination airstrip or supply drop site also meant that one could communicate with those who were so located. That is, airplanes during the early

https://doi.org/10.1086/701049 Published online by Cambridge University Press

days of New Guinea civil aviation were as much elements in communication networks as they were elements in transportation networks. An early reference to the Lutheran mission's use of airplanes for their highlands aviation says in fact that the plane was "to be used in maintaining communication between the different Lutheran stations" ("Mission Aeroplane" 1938, 6). The airplanes were extremely expensive postal services linking people across thousands of miles: "Previously it took three months for letters to arrive from home, for in some cases missionaries, their wives and children were thousands of miles apart. Now, however, an aeroplane left the ship [on which the mail was carried from overseas] and mails arrived at their destination two and a half hours later. The missionary was able to reply immediately, as the 'plane waited for mails" ("Aeroplanes in Mission Work" 1939, 6).[21]

Airplanes and radios combined to create an infrastructural space-time, in which particular persons and machines could be located at particular places and moments. Medical emergencies or provisions emergencies could be handled swiftly. Relatives could communicate with one another at a much quicker pace. The business of missionization was able to move smoothly, or at least more smoothly and quickly than it had in the past. The missionaries stationed in the highlands were no longer just "in the wilds" and out of reach, but part of a communications-transportation network linking the disparate corners of the mission as a whole.

Colonial Space-Time

The infrastructural organization of the radio network for the aviation service is interconnected with the colonial framework in which sensibilities of isolation and Pacific wilds could flourish. Not just with pith helmets and native-driven radios, the radios and aviation program exacerbated the feeling of colonial penetration that suffuses the Lutheran mission thinking about roads and communication networks. Yet they encountered these "souls" using the tools that they recognized as the tools of the gold rush in the nearby Wau and Bulolo areas, where in 1932 more commercial air freight was transported between the coast and Wau/Bulolo than all the air freight in the United States, the United Kingdom, and Germany combined (Sinclair 1978). "Aviation was introduced [into New Guinea] in search of gold. Should this also be the answer to the problem

21. Pilots did not always wait for return correspondence; sometimes they did not even land. Bergmann (n.d., 52–61) describes dropping mail bags down to waiting missionaries from the window of the low-flying *Papua*.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

of Christianizing the mass of people in the highland? Aviation in search of souls? The great old man of the Mission Johann Flierl shortly before he retired wrote a letter to his Home Board: 'One day we will have to fly like homing pigeons to their cote. The men in search of gold are now trying it out for us.'"[22]

The men of the mission were going to help make colonial modernity happen by spreading the techniques of colonial resource extraction. But the missionaries were concerned about using such a secular, business-related technology in evangelism. As early as his 1927 report, Flierl wrote that some people in Germany considered the use of airplanes in aviation "absurd" and that at one point he himself had thought it "atrocious."[23]

While these qualms were never fully overcome, the drive to get to the highlands was so intense that they could be diminished enough to get the aviation program going. Colonial actors of all kinds were rushing into the highlands, imagining this new territory as one of the last places to be brought under European control and thus the last place in which colonizers can experience that peculiar sublime feeling of perfect superiority. The administrator of New Guinea, Brigadier-General W. R. McNicoll, wrote about an airplane flight from the relatively built-up Wau/Bulolo area at the gold fields into the highlands: "A direct flight westward of two hours transported us from electric light and power, wireless, mammoth dredges, cars and lorries and picture shows, to a primitive people who had seen not more than a dozen white men" (quoted in Sinclair 1978, 216). The constant refrain was that missionaries, miners, and businessmen had to "push inland" as quickly as they could. And the only way to do that was with the airplane.

Airplanes figure prominently in the first patrols into the highlands, where pilots dropped supplies for the patrol parties, and one of the first things that the prospecting Leahy brothers did on reaching the Mt. Hagen region is clear an airstrip for a plane to land. The sudden interruption of the sound of an airplane's engine in the lives of local highlands people caused panic the first few times one landed (Connolly and Anderson 1988). For the colonial actors who made their way up from the coast, the airplane's intervention in the highlands was the perfect visual and aural statement of the abrupt arrival of colonial modernity. By 1934 the Lutherans and Catholics were both chartering planes to scout for potential mission stations and subsequently to bring up building supplies.

22. "The Secular Involvement," unpublished typescript manuscript, John Kuder Papers, Evangelical Lutheran Church of America Archives, p. 44.

23. Johannes Flierl, "Report from Senior Joh. Flierl for 1927," trans. Wera Wilhelm, LMF 51-10, Evangelical Lutheran Church of America Archives, 1928, pp. 4–5.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

The push inland was seemingly a universal obsession among the colonial classes. Missionaries were, by administration design, locked in competition for congregations. Gold prospectors were hoping to find another lode as rich as the discoveries near Wau and Bulolo. Planters were imagining "a second Kenya" in which they could take over vast swaths of land for cash crops and ranching ("New Guinea Patrol Back . . ." 1939, 4). Not only do the gold prospectors liken the missionaries' desperate searches for souls to their desperate searches for plots of land, but after the Lutherans get their own plane the planters complain that the missionaries are simply too involved in business all together. Because in addition to using the *Papua* for communication, the Lutherans used the *Papua* to supply the small trade stores that they built on each of their European-staffed mission stations, and secular businessmen felt that the missions were getting unfair access to this new crop of potential customers. The question of "missions and trade" came up throughout the 1930s.[24] While the push inland was a Christian move for the Lutherans and Catholics, it was also framed as a timed race to establish "market share" in one of the last places for European experiences of discovery and colonial "first contact."

Could aviation be a Christian project if it seemed to only be a tool for gold miners and trade store managers trying to colonize what they thought of as one of the last uncontacted spots in the world? For the missionaries themselves during their deliberations about using aircraft, potential objections to the use of airplanes in evangelism could be partially resolved by moving the conversation into a Christian key, throwing it into God's lap, so to speak. If it was God's will, then money would be found and bureaucratic application processes would be successful. If not, then no plane would appear. But even when the *Papua* did appear in 1935, the missionaries had to constantly justify the great expense of the plane, trying to move the plane from infrastructural or colonial temporalities into an appropriately Christian one. They did so by emphasizing its place in a sacred circulation.

Christian Time

The Australia-based leader of the Lutheran mission, Otto Theile, titled a speech about the quest for a mission airplane "A Miracle before Our Eyes," placing the

24. In 1932, at least ten short articles or letters to the editor cover the topic of "missions and trade," but the topic continues to come up throughout the prewar period. In 1935, the editor of the *Rabaul Times* called missionaries little more than businessmen in search of souls (Sinclair 1978, 218). The trade in goods/trade in souls comparison was a constant refrain.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

work of the aviation program firmly within the sacred work of the mission, particularly given the opening up of the highlands to Christian evangelism.

> At that time the question of further extension of our mission into the far inland among the newly discovered tribes . . . was agitating our minds incessantly. . . . We were aware that it would mean much treasure and many men to do effectually what we were setting our hands to do, we were especially quite alive to the great difficulties of transport. But there were the open doors, there were the opportunities! From the highlands of the inland we heard a call: "come over and help us" and within our hearts we heard the command of the Master "Go and preach the gospel!" (Theile, 5–6)

Echoing the Great Commission to "go and make disciples of all nations," geographic spread is a sacred project. Aviation for souls was not just an improvement in the communication network, and not just an increase in the speed with which those many masses of highlands souls could be encountered. The plane filled missionaries (and supposedly New Guinean Christians) with deep emotion and heartfelt offerings that Theile describes in operatic terms: "Missionaries and natives sacrificed of their possession to try and make it possible to acquire a plane. It is deeply touching to see on the list, how missionaries sacrificed a whole year's salary and it is pathetic to hear how the villagers at home and the Christian laborers on the plantations and on the goldfield brought all the cash they had in order to help along the cause" (Theile, 7–8). The extent to which the airplane was considered a sacred project is also evident from the fact that the archive of the Lutheran Church in Papua New Guinea has retained a file with some of the original receipts noting the individual contributions that the missionaries made to help purchase the plane. Even though the mission had other major donation drives related to raising funds for earlier modes of transportation (e.g., ships), receipts of this sort were not usually archived.[25]

There was thus a sense that the aviation program was able to create a particular kind of converted person—someone who was truly able to move about. Not just across the rainforest landscape of New Guinea, but above it, surpassing it. In other words, there was a sense in which God was all the more present in an evangelistic project that was able to literally transcend the dirt and earth in a world historical event.

25. "UECLA-NG General–Personal Donations for Aircraft 1934–1935," Archives of the Evangelical Lutheran Church of Papua New Guinea, Ampo.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

The missionaries hoped to resolve the contradictions and conflicts among the different temporalities at issue in the aviation program: a bureaucratic and infrastructural space-time of management, a secular space-time of rushed competition and capitalism, and a Christian space-time of Protestant salvation and freedom. Having an airplane would help create that ultimate movement, the final reconciliation of God and man that is the Christian culmination of time, as the missionary Hanselmann puts it in an extraordinary plea for funds to the Auxiliary Society of the American Lutheran Church's Board of Foreign Missions.

> Aeroplane, workshop, machinery, pilots, mechanics, landing places, another one after the first one crashes, radio sending and receiving sets, electricians—all will mean many worries, many prayers, and much money. We don't need all this if we stay out of the interior, but as certain as the Lord wants us to bring the Gospel message to those in an area as yet untouched by anything of civilization and Christianity, so sure it is that He has His people who will help to solve the transport problems, may they cost what they will. And especially, since the area is apparently the last primitive corner in our universe (making mission work a serious business, since the Gospel is to be brought to all ends of the world and THEN COME THE END), it seems that God wishes to give every member of our Lutheran Church an opportunity to do mission work as it has never been done before. All cannot go to a foreign country, but all have money and so all have a chance to help to fulfill God's highest desire, to help that all mankind might be saved thru the Gospel of Jesus Christ.[26]

Hanselmann's appeal for funds for the aviation program moves from the infrastructural and colonial engagement with New Guinea missionization into a grand salvational narrative that heralds the overcoming of all human-centered space-time. Technology and manpower to create the landing grounds and links among them define the request. A colonial spatiotemporal framework pits New Guinea as the last remote place on earth, after which Western contact will have been achieved everywhere. But then, as if movement itself was the core of the Great Commission, the capacity to reach those last corners in the highlands of New Guinea becomes the catalyst for the obliteration of time and space as humans have known it. It is an operatic appeal for funds that encapsulates the Lutheran sacralization of aviation. The *Papua* can be sacred if it can transcend the infrastructural and colonial contexts to reach toward heaven.

26. R. R. Hanselmann, "Transportation," LMM 55-20, Evangelical Lutheran Church of America Archives.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

The successful combination of these different spatiotemporal formations brought about an important event in history that was to foreshadow an ultimate end of history: "The Lutheran mission was, as far as it is known, the first mission in the world to use aviation as a tool in spreading the gospel. The 'Papua' had made history."[27] The nitty-gritty of geolocation via radio and the accusations of partaking in a gold rush for souls could be handled so long as aviation brought all the freedom from the terrestrial and the erasure of time when "then comes the end." Here, finally, the comparison with Munn's concept of space-time extension breaks down, as these Christians do not just expand their reach, but in doing so hope to achieve the radical conversion of human space and time into a promised heavenly form. This requires a shift from the human to the divine. The mission will ideally stop being able to create any kind of space-time at all, as the conversion into a New Heaven and New Earth heralds a space-time fully from the God's-eye view.

The Menace from the Sky

The Lutherans still had to live in the space-time between their present and the promised end times that Hanselmann alluded to in his funding appeal. Without the final radical conversion of the aviation program into an eschatological conclusion, there remained an ongoing threat that the *Papua* would never be able to transcend its earthly origins. The connection between God and technological progress is constantly threatening to pull apart these three different modes of time that the missionaries hope can combine into a heavenly haul of souls. What happens to God when he is made accessible by machine? For one thing, other objects connected with those same machines may be conflated with the mission project. This fear is made quite explicit in a 1942 cover image from the *Pacific Island Monthly* magazine during the Second World War captioned "Menace from the Sky."

The menace from the sky—bombs being dropped on New Guinea and other Pacific territories—seemed particularly menacing from the European perspective because these Europeans imagined Pacific Islanders to have intimately connected sky, God, and airplane. The text on the cover reads "For 150 years, the native peoples of the Pacific Islands have been taught by Europeans to look into the sky for hope and salvation. Today, their world is crashing around them. The Europeans are fighting for their lives: while out of the sky come only terror, de-

27. "The Secular Involvement," unpublished typescript manuscript, John Kuder Papers, Evangelical Lutheran Church of America Archives, p. 3.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

struction, and death. The outlook is black—but it is the darkness before the dawn" (see fig. 1). Note that airplanes had only been around for a few decades. The 150 years referred to here is the 150-year history of missionary operations in the Pacific. The cover image and text present a direct conflation of the space and time of God with the space and time of the Allied and Axis bombers.

We can turn a bit farther from the Pacific to see an even more explicit use of aviation technology to make God accessible. At roughly the same time that the Lutherans were making history in the use of aviation to spread the gospel, agitprop air squadrons were criss-crossing the rural Soviet countryside in order to prove to naïve Russian peasants that God did not exist (Palmer 2006). In what were called "aerial baptisms," peasants were taken up in Soviet planes in order to prove to them that neither God nor angels were visible in the skies as the priests had told them. These baptisms into atheist technological progress both depended upon and subverted the Christian association of skies with God. Peasants were even presented with Stalin-centric Soviet postcards after their atheist baptisms by air in lieu of the miniature icons that Orthodox priests would give to those recently baptized by water (Palmer 2006, 242).

The menace from the skies and the aerial baptisms at once link aviation and Christianity, and sever that link. In the case of the bombs raining down on the Pacific Islands, this is an uninvited consequence of the war; in the Soviet agitprop flights this was the stated goal. The Lutheran mission linked speed, lightness, and heavens together in a way that was immediately recognizable to missionaries and mission supporters long used to stories of muck and mud. Once the Roman Catholic threat in the highlands appears, the mission raised funds for the *Papua* even though it was roughly equivalent to the entire yearly operating budget of the mission at the time. But the question of speed and lightness—the capacity to fly over the land in an instant—also made aviation for souls suspect. Secular observers at the time thought of the use of airplanes by missions as the height of greed—missionaries flying over the land consuming souls as if in a Christian gold rush.

As the time grew closer and closer to the outbreak of the war in Europe, the Lutheran airplane played a crucial role in a series of accusations against the Lutheran missionaries. Rumors swirled that German Lutherans were not only Nazi party members, but were teaching New Guineans to salute Hitler and, if necessary, defend the Fatherland.[28] The infrastructure of the aviation program now

28. Winter (2012) discusses at length the accusations of Nazism among the German Lutheran missionaries. While many of the particular details of the Nazi rumors mentioned here were false, some of the missionaries did have sympathies for Hitler or were active party members. And as Fritzsche (1992) argues, aviation was a central part of the German nationalist imagination in the decades leading up to the war.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

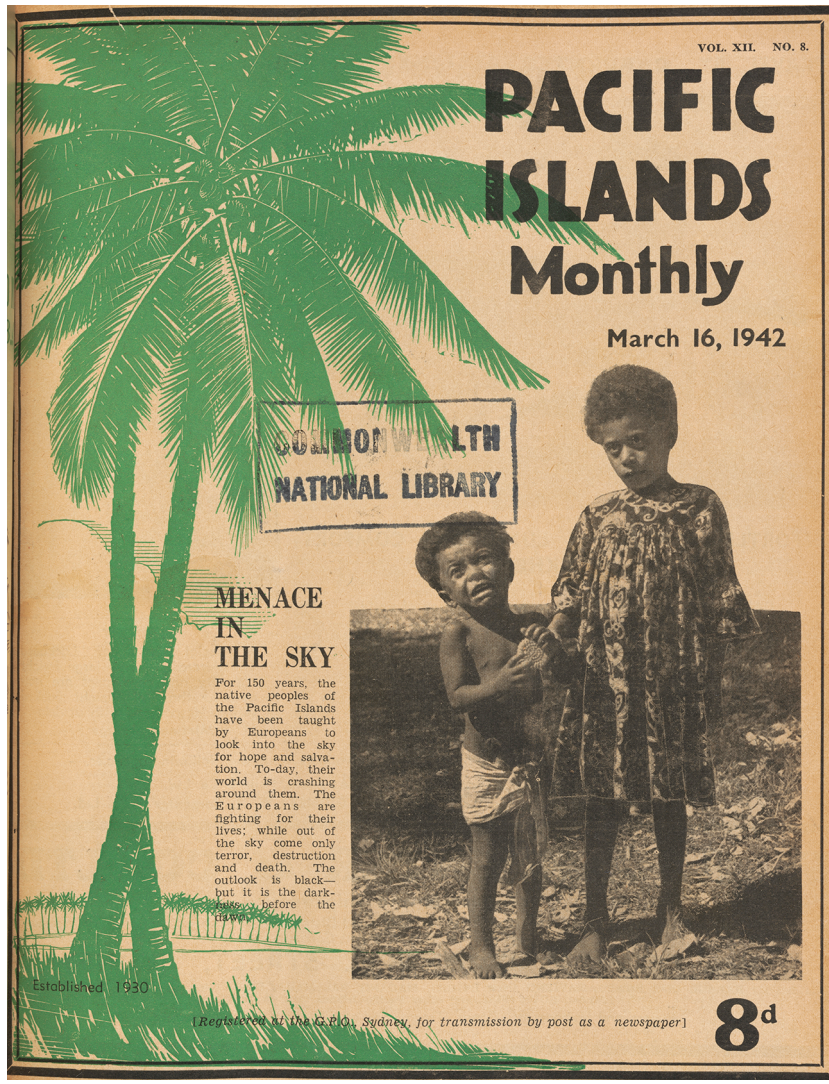


Figure 1. The March 16, 1942, cover of *Pacific Islands Monthly* linking God and airplanes. The text on the cover reads: "MENACE IN THE SKY. For 150 years, the native peoples of the Pacific Islands have been taught by Europeans to look into the sky for hope and salvation. Today, their world is crashing around them. The Europeans are fighting for their lives; while out of the sky come only terror, destruction, and death. The outlook is black—but it is the darkness before the dawn." (*Pacific Islands Monthly*, vol. 12, no. 8, National Library of Australia, nla.obj-310385031.)

https://doi.org/10.1086/701049 Published online by Cambridge University Press

seemed to be the ingredients of a propaganda machine much speculated on in Australian newspapers: "The Lutherans had a secret radio transmitter, a miniature factory for production of swastika flags and armbands, and always maintained excellent aerodromes" ("Clash Likely . . ." 1942, 1). The Lutherans' ability to bring in trade goods by airplane likewise became the basis of rumors: "Among the presents sent out to the natives to win their sympathy were cheap trade mirrors with a picture of Hitler on the back" (Folkard 1942). One Australian brigadier-general was quoted as saying that the Lutherans had 500 airplanes ready for use in the war, not just the lonely *Papua* ("New Guinea Missions" 1939, 22). New Guinea aviation expert Ian Grabowsky knew that the Lutherans had only one plane, but he nonetheless worried that with the right pilot and payload it might be used to bomb all the Australian planes in New Guinea "in half an hour" (Sinclair 1978, 222). Well before the war broke out, Lutherans in Australia had to try to refute claims of a German military force being readied under a New Guinea Lutheran missionary disguise ("Report Refuted" 1936, 6).

In the end, the *Papua* had an even stranger role to play, taking part in neither a heavenly haul of souls nor a German nationalist attack on Australia. When war in Europe was declared in 1939, the two German laymen employees who at that point piloted and took care of the *Papua* took off for the highlands in the hopes of escaping over the border into Dutch New Guinea. At one point during a refueling stop, an Australian colonial officer held them and tried to get them to swear an oath of neutrality, which they refused to do. Realizing that the men had just onboarded enough fuel to make it over the border, the Australian had them sign instead an oath saying that they would not use their fuel to escape. The men signed the oath, flew to another Lutheran station, dumped out the fuel about which the oath had been made, filled the engine's tanks with new fuel, and made a desperate flight over the border to Merauke in Dutch New Guinea.[29] From there they traveled by boat to Japan, crossed into the Soviet Union, rode the Trans-Siberian Railway into Germany, and joined the Luftwaffe (Sinclair 1978, 222). The *Papua* was never recovered, and the Lutheran aviation program had to start from scratch when, after the war, American Lutherans tried to reconstitute the vast mission program.

29. "Translation of enclosure in letter no. 40/1073, dated 23/4/40, from O. Thiele, Brisbane, to the Superintendent, Lutheran Mission, Finschhafen," Lutheran Mission Aircraft–New Guinea, National Archives of Australia.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

Conclusion

The Lutheran mission's use of airplanes was a way for them to structure their whole mission project. The space and time in which missionization took place were organized by the introduction of the *Papua:* its speed, its capacity to seemingly erase mountains and distances, its flight in the sunlit sky in the direction of the Christian heaven. Even though the mission often tried to downplay its large institutional and infrastructural footprint as simply a "secular concern," the mission project itself cannot be understood outside of these forms, where speed and lightness are not only characteristics of modes of travel but characteristics of modes of Christian evangelism.

What Hanselmann leaves unstated in his operatic appeal for funds is that the plane will not just move around New Guinea, but it will carry messages and messengers of a specifically Christian type. The airplane travels so that missionaries can bring a set of texts and linguistic knowledge to new recipients. In recent linguistic anthropological discussions of circulation (e.g., Silverstein 2005; Gal 2017), theoretical emphasis has been focused on processes of recontextualization and typological regimentation. Under this approach, circulation is at best illusory: no text "moves" as such; it only has copies that display similarities to a prior version to greater or lesser extent in a process of recontextualization. Certainly missionaries were and are concerned with circulation in this sense, creating translated versions of Bibles that adhere closely to prior versions of Bibles. But this did not exhaust Lutheran missionary concerns with circulation, where properties of speed, of lightness, or of movement itself were as much a crucial project as Bible translation was (see Yeh [2017] for a contrastive context in which the speed of circulation is at issue). Regardless of whether texts move in the same ways that (other) material objects do, Christian models of circulation emphasize the movement of "the gospel message" as a project in which the qualities of movement take on moral properties. Linguistic anthropology theories of circulation need to be able to account not just for the regimentation of circulating texts to a typological norm, but also to the infrastructural networks across which texts appear and ways in which actors themselves conceptualize the spatiotemporal movement of texts, people, and objects along such paths.

References

"Aeroplanes in Mission Work." 1939. *Queensland Times*, August 2.

Bauman, Richard, and Charles Briggs. 1990. "Poetics and Performances as Critical Perspectives on Language and Social Life." *Annual Review of Anthropology* 19:59–88.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

Bergmann, Wilhelm. n.d. *Vierzig Jahre in Neuguinea. Band V*. Typescript manuscript, https://library.ucsd.edu/dc/object/bb18447733.

Briggs, Charles, and Richard Bauman. 1992. "Genre, Intertextuality, and Social Power." *Journal of Linguistic Anthropology* 2 (2): 131–72.

"Clash Likely, Japanese Advance in New Guinea." 1942. *The Mercury*, March 21.

Comaroff, Jean, and John Comaroff. 1991. *Of Revelation and Revolution*. Vol. 1. Chicago: University of Chicago Press.

Connolly, Bob, and Robin Anderson. 1988. *First Contact*. New York: Penguin.

Crapanzano, Vincent. 2000. *Serving the Word: Literalism in American from the Pulpit to the Bench*. New York: New Press.

Dombrowski, Kirk. 2001. *Against Culture: Development, Politics, and Religion in Alaska*. Lincoln: University of Nebraska Press.

Folkard, F. C. 1942. "Clash Soon in New Guinea." *The Sun*, March 20.

Fritzsche, Peter. 1992. *A Nation of Fliers: German Aviation and the Popular Imagination*. Cambridge, MA: Harvard University Press.

Gal, Susan. 2017. "Registers in Circulation: The Social Organization of Interdiscursivity." *Signs and Society* 6 (1): 1–24.

Handman, Courtney. 2015. *Critical Christianity: Translation and Denominational Conflict in Papua New Guinea*. Berkeley: University of California Press.

Hardin, Jessica. 2017. "Sisters in Christ: Gendered Mentorship in Global Christianity." Paper presented at Biannual Meetings of the Society for the Anthropology of Religion, New Orleans, LA, May 15–17.

Harding, Susan. 2000. *The Book of Jerry Falwell: Fundamentalist Language and Politics*. Princeton, NJ: Princeton University Press.

Huber, Mary Taylor. 1988. *The Bishop's Progress: A Historical Ethnography of Catholic Missionary Experience on the Sepik Frontier*. Washington, DC: Smithsonian Institution Press.

Malinowski, Bronislaw (1922) 1984. *The Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea*. Long Grove, IL: Waveland.

Meyer, Birgit. 1999. *Translating the Devil: Religion and Modernity among the Ewe in Ghana*. Trenton, NJ: Africa World Press.

Midena, Daniel. 2014. "The Wonders of Conversion: Objectivity and Disenchantment in the Neuendettelsau Mission Encounter in New Guinea, 1886–1930." Doctoral dissertation, Københavns Universitet, Det Humanistiske Fakultet.

"Mission Aeroplane." 1938. *Pacific Islands Monthly*, June 22.

Munn, Nancy. 1977. "The Spatiotemporal Transformations of Gawa Canoes." *Journal de la Société des Océanistes* 54–55: 39–53.

———. 1986. *The Fame of Gawa: A Symbolic Study of Value Transformation in a Massim (Papua New Guinea) Society*. Durham, NC: Duke University Press.

"New Guinea Missions." 1939. *The Advertiser*, October 28.

"New Guinea Patrol Back after 18 Months in Wilds." 1939. *Barrier Miner*, July 14.

Palmer, Scott W. 2006. *Dictatorship of the Air: Aviation Culture and the Fate of Modern Russia*. Cambridge: Cambridge University Press.

"Radio Telephony for Planes." 1938. *Northern Star*, January 5.

https://doi.org/10.1086/701049 Published online by Cambridge University Press

"The 'Reach' of Teleradio." 1938. *The Age*, September 16.

"Report Refuted." 1936. *Queensland Times*, July 27.

Schieffelin, Bambi. 2002. "Marking Time: The Dichotomizing Discourse of Multiple Temporalities." *Current Anthropology* 43 (S4): S5–S17.

Schivelbusch, Wolfgang. 1977. *Railway Journey: The Industrialization of Time and Space in the 19th Century*. New York: Berg.

Silverstein, Michael. 2005. "Axes of Evals: Interdiscursivity and Intertextuality." *Journal of Linguistic Anthropology* 15 (1): 6–22.

Silverstein, Michael, and Greg Urban, eds. 1996. *Natural Histories of Discourse*. Chicago: University of Chicago Press.

Sinclair, James. 1978. *Wings of Gold: How the Aeroplane Developed New Guinea*. Sydney: Pacific Publications.

Wagner, Herwig, and Hermann Reiner. 1986. *The Lutheran Church in Papua New Guinea: The First Hundred Years, 1886–1986*. Adelaide: Lutheran Publishing House.

Webster, Joseph. 2013. *The Anthropology of Protestantism: Faith and Crisis among Scottish Fishermen*. New York: Palgrave Macmillan.

Winter, Christine. 2012. *Looking after One's Own: The Rise of Nationalism and the Politics of the Neuendettelsauer Mission in Australia, New Guinea and Germany (1921–1933)*. Bern: Peter Lang.

Yeh, Rihan. 2017. "*La Racha:* Speed and Violence in Tijuana." *Signs and Society* 5 (S1): S53–S76.

https://doi.org/10.1086/701049 Published online by Cambridge University Press