

An Enigma from the South Seas: Early Studies of Vanuatu Sand-Drawing (1926-1936)

Une énigme venue des mers du Sud : les premières analyses des dessins sur le sable à Vanuatu (1926-1936)

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ABSTRACT: Between 1926 and 1927—the year of his untimely death in the field—British anthropologist Bernard Deacon drafted what is today regarded as the first systematic documentation of Vanuatu Sand-Drawing. Once sent to England, his notes and sketches sparked a heated academic debate about the nature and origin of this practice, pitting art biologists against artists and hyper-diffusionists. This contribution aims to reconstruct that early debate by bringing to the fore the theories that informed it and show how recent field data can help shed new light on some of the unresolved issues it raised—namely those concerning the role of agency and creativity within the practice.

KEYWORDS: Vanuatu sand-drawing, Arthur Bernard Deacon, Anthropology of Art, History of Anthropology

Une énigme venue des mers du Sud : les premières analyses des dessins sur le sable à Vanuatu (1926-1936)

RÉSUMÉ : Entre 1926 et 1927 –année de sa mort prématurée sur le terrain–, l'anthropologue britannique Bernard Deacon entreprit la première documentation systématique des dessins sur le sable à Vanuatu. Transmis en Angleterre, ses notes et croquis suscitérent un grand débat académique quant à la nature et aux origines de cette pratique, opposant notamment les tenants d'une approche biologisante de l'art aux artistes et aux partisans de l'hyperdiffusionnisme. La présente contribution se propose de reconstituer les termes de cette controverse initiale en mettant en lumière les cadres théoriques qui l'ont structurée. Elle montre également comment des données de terrain plus récentes permettent de réexaminer les questions demeurées en suspens, en particulier celles relatives au rôle de l'agentivité et de la créativité au sein de cette pratique.

MOTS-CLÉS : dessins sur le sable à Vanuatu, Arthur Bernard Deacon, anthropologie de l'art, histoire de l'anthropologie

An Enigma from the South Seas: Early Studies of Vanuatu Sand-Drawing (1926-1936)

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Introduction

In 1926, Arthur Bernard Deacon, student in Anthropology at the University of Cambridge, began the first systematic documentation of Vanuatu sand-drawings while conducting fieldwork on the island of Malakula.¹ This contribution aims to reconstruct that story and what followed—Deacon’s untimely death, the posthumous editing of his notes, and the three analytical exercises produced in the wake of his findings.

These three studies—the catalogue edited by Camilla Wedgwood and inspired by Alfred Cort Haddon’s studies on Art, the “aesthetic” analysis set forth by sculptor and art critic William Page Rowe, and the hyper-diffusionist paper written by John Layard—were all published between 1934 and 1936. Together, they constitute the seminal debate of sand-drawing studies and highlighted issues that are still relevant today, such as those concerning the origin and nature of the practice.

The article proceeds as follows. Section 1 reconstructs the circumstances of Deacon’s documentation, Section 2 delves into the process that brought Deacon’s notes to publication, and Sections 3 to 5 examine the three studies that sought to make sense of Deacon’s findings according to different theories about the origin and function of Art. Finally, the Conclusion briefly hints at the long-lasting legacy of these early studies, with particular attention to questions of artistic agency and creativity in contemporary sand-drawing practice on Ambrym Island. The contribution

1. Formerly the jointly administered Anglo-French condominium of the New Hebrides, Vanuatu achieved independence in 1980. Following independence, the orthography of several island names was revised: for instance, “Malekula” was replaced by “Malakula” and “Oba” by “Ambae”. In this contribution, colonial orthography is retained in original citations, while the contemporary forms are used throughout the main text.

ends with a call for further archival research, to work towards the construction of the comprehensive review that is still lacking in the intellectual history of sand-drawing studies.

Tracking The Path: Deacon's Sand-drawing Documentation (1926-1927)

Sand-drawing (French: *dessin sur le sable*; Bislama: *sandroa* or *sandroing*)² is a performative, multimodal art, developed and practiced by men and women in the central and northern islands of Vanuatu. Sand-drawing performances entail the execution of geometric figures on the ground, in volcanic dust or in the ashes of hearths, and their tracing is usually accompanied or followed by an oral commentary.

Sand-drawing graphic construction is usually characterised by the tracing of a framework made of dots or perpendicular lines and the subsequent unfolding of a continuous line, generally finishing at the same point from which it had started without lifting the finger from the ground. The result of such a graphic act is often a complex image that condenses into its lines a traditional narrative, an exceptional being or a memorable event, then evoked by an oral commentary. Once the story has been told, the image is swept away or left to decay, depending on the context, the inclination of the performer or the particular purpose of the design.

Sand-drawing is today listed as a Masterpiece of the Oral and Intangible Heritage of Humanity (Unesco, 2006), and the focus of considerable attention both in academia (see contributions to this volume, but also LIND, 2018; METSAN, 2025) as well as among the wider public—consider, for instance, the recent exhibition *Sandroing: Tracing Kastom in Vanuatu* held at Museum of International Folk Art in Santa Fe, USA, in 2025-2026. That said, the first scholar to take a keen interest in this practice and to compile a systematic documentation was the British anthropologist Arthur Bernard Deacon, exactly a hundred years ago (1926-1927).³

A bright student with wide-ranging interests, Deacon attended university in Cambridge and was eventually persuaded to turn to Anthropology by Alfred Cort Haddon, one of the great pioneers and leading figures in the field. Deacon was instructed by Wallace Edwin Armstrong, distinguished pupil of the late William Halse Rivers Rivers, and by Haddon himself (Haddon in DEACON, 1934: XIV). In 1925, Deacon sat for the academic examination in Anthropology and soon after began to prepare an expedition to central Vanuatu—an area that his mentors considered as key to unravel the cultural history of the Melanesian region (GEISMAR, 2014: 100).

2. With more than 135 vernacular languages and a population of approximately 300,000 inhabitants, Vanuatu is recognised as the most linguistically dense country in the world (FRANÇOIS et al., 2015). In the centre and north of the archipelago, the term for sand-drawing varies from region to region and sometimes from village to village. In this context, only the terms used in the national languages have been reported: English, French (due to colonial heritage) and Bislama (a Creole language that originated in the 18th century for commercial reasons and historically known as English of the South Seas or Sandalwood English).

3. In 2012, a joint initiative led by the Royal Anthropological Institute (RAI) and the Vanuatu Kaljoral Senta (VKS) led to the inscription of the Deacon Collection held by the RAI in the Unesco Memory of the World Register—an act that proved instrumental in supporting the digitisation of the material and its digital repatriation in 2024.

Before leaving England, Deacon visited John Layard, a former student of Haddon and Rivers, who had conducted fieldwork in the area between 1914 and 1915 (LAYARD, 1942; GEISMAR & HERLE, 2010), but whose poor health had, until then, prevented him from turning his findings into a comprehensive monograph. Deacon approached him asking for assistance regarding the choice of the best area to study, and the discussion turned to South-West Bay, on the island of Malakula.

Back in 1915, Layard had spent a few weeks there collecting valuable information concerning grade-taking ceremonies (LAYARD, 1928), and despite his warnings regarding the occurrence of blackwater fever in the area, Deacon was so struck by the potential of the site that he eventually determined to make South-West Bay his base (Layard in DEACON, 1934).

But Layard did not limit himself to giving Deacon his advice: positively impressed by the young student—"an absolutely marvellous chap", as he would later recall (GARDINER, 1984: 35)—Layard decided to entrust him with his fieldnotes as a basis for his own work. Loaded with a copy of Layard's unpublished notes, Deacon left England the first day of October 1925 and reached the long-awaited Malakulan shores on January 21st, 1926—the day of his twenty-third birthday.⁴

A sensitive and empathetic young man, Deacon was soon appalled by the plight of the islanders, hit, at the time, by a tremendous demographic decline. This post-contact trend, mainly caused by the spread of epidemic diseases (KIRCH & RALLU, 2007) had, by the 1920s, drawn considerable attention and much concern: a few years before Deacon's fieldwork, Rivers had edited a volume entirely dedicated to the subject (RIVERS, 1922), and by then, Malakulan people seemed doomed to extinction.

This context had a deep impact on Deacon and greatly enhanced the salvaging character of his fieldwork. Despite judging his work as "lamentably little" (DEACON, 1934: XVIII), Deacon committed himself relentlessly, acquiring a working knowledge of at least three vernacular languages (LARCOM, 1984: 178) and conducting enquiries throughout the South-West Bay area.

In the wake of what Layard had done while in the Small Islands (LAYARD, 1934), Deacon attempted to collect information concerning how the spirit of the deceased reached the Land of the Dead, obtaining quite unexpected results. As he later wrote in his notes:

In the course of an enquiry into the manner in which a ghost reaches the abode of the dead, it came out that the sine qua non for entry into this abode of the dead is the possession of the knowledge of a certain geometrical figure known as NAHAL (= the path) [Figure 1]. (Deacon Collection, MS 98/1/1, Royal Anthropological Institute Archive)

According to Deacon's reconstruction, this geometrical figure used to be traced in front of a rock called Lembwil Song, situated on the edge of the land of the dead.

4. "Jan 21st 6:30 a.m. We have arrived at S.W. Bay, and I am just waiting to go ashore in the boats. It is a glorious morning, brilliantly clear. Incidentally it is my birthday, by a queer coincidence. Ought I to wish myself many happy returns?" (Deacon, Brief note in a letter to Haddon from the S.S. *Makatea*, dated January 16th, 1926).

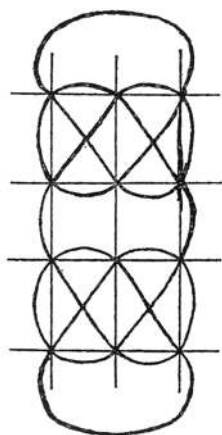


Figure 1. Nahal (The Path).

Reconstruction by Deacon.

Source: DEACON, 1934: 555, Figure 37a.

When the spirit of the deceased approached, Temes Savsap, the female guardian ghost sitting nearby, would hasten to sweep away half of the figure. If the spirit managed to retrace the figure correctly, it would safely walk along the path separating the two halves of the figure and enter the land of the dead; otherwise, it would be devoured by the guardian ghost (DEACON, 1934: 554–55).⁵ He then added:

Knowledge of these geometrical figures, of which there are a large number, is handed down from generation to generation. Geometrical figure-drawing is known as NITŪS, (= the noun from the verb TŪS), the word used by mission boys for European writing. (Deacon Collection, MS 98/1/1, Royal Anthropological Institute Archive)

Intrigued by the key role played by “geometrical figure-drawing” in the journey of the spirit of the dead, Deacon began a thorough documentation of the practice, trying to carefully record on paper the designs’ execution. He first made sketches on paper and, when possible, produced a final draft re-traced in ink. One of these latter final drafts (**Figure 2**) is of particular significance as it is accompanied by a note in which Deacon reflects on the relationship between reconstructions and originals:

these drawings are of course my own, & a good deal too accurate. They must not be taken for anything but “ideal” figures. I hope to get photos of native drawings of these in white ashes on black earth. (Deacon, MS 94/7/41)

Deacon eventually managed to take some photographs, both of the drawings traced on the ground and those made with chalk on a blackboard (DEACON & WEDGWOOD, 1934: 176). As he delved deeper into the subject, he learned that the designs could have different functions and be associated with local lore: he recorded

5. During his staying in 1914–1915, Layard had collected information concerning the itinerary of the journey made by the spirits of the deceased of Vao, Atchin and Wala to their final resting place—the volcanoes of Ambrym, located about 50 km southeast. The journey consisted of a series of well-defined stages, ending in the trial of the guardian spirit, locally known as Lev-Hevhev or Lee-Sawsaw. If the necessary sacrifices had all been made, the spirit of the dead was carried to Ambrym, otherwise it was devoured. In the versions collected by Layard there is no reference to the need to trace geometrical figure-drawings (LAYARD, 1934).

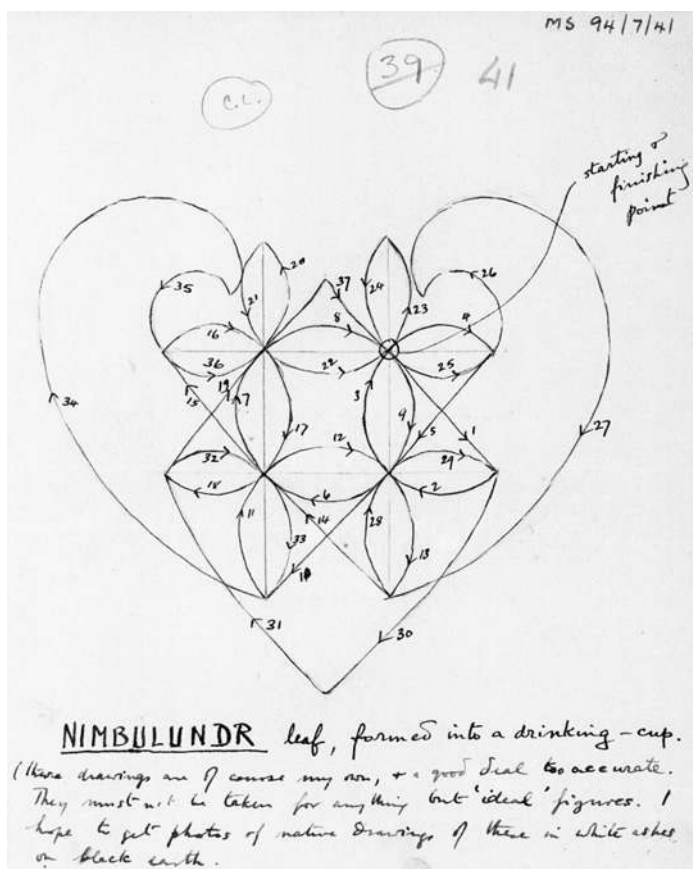


Figure 2. Nimbulundr (leaf, formed into a drinking-cup). Reconstruction by Deacon. Deacon Collection, MS 94/7/41. Source: RAI Archive.

designs linked to local cultural heroes and learned that there was a specific motif upon which oaths were sworn (ibid.: 132). His handwritten notes reveal his first attempts to grasp the principles underlying this practice:

Some figures are: – Sun, Moon, a Battle, a Rat, a Heart, a Path [blank space, probably left in view of further additions] In drawing these geometrical figures, a framework of squares or rectangles is first constructed, and then, starting from a certain point, circles, ellipses and curves described round the squares & rectangles in a continuous line, without lifting the finger from the sand or pencil from paper, till the original starting point is reached. For each figure there is an invariable path to be followed, the path being such that, as far as is possible in the particular figure, no line is traced over a second time. (Deacon collection, MS 98/1/1, Royal Anthropological Institute Archive)

Deacon soon communicated his findings to Haddon. From Cambridge, the old mentor replied enthusiastically:

My Dear Deacon,

I have received your letter of May 10—[...] and congratulate you heartily on what you have already done. [...] I am greatly intrigued with your geometrical

figures—you have struck an entirely new line here and you should follow it up all you can—& collect as many figures as possible. (Haddon, letter to Deacon, dated August 2nd, 1926)⁶

Presumably encouraged by Haddon's enthusiasm, Deacon continued his documentation. Over the following months, as he travelled north to continue his salvaging work on Malakulan cultures, Deacon kept recording new geometrical figures, enriching his knowledge on the subject. In Lambumbu district, for instance, the figure he had previously recorded as The Path was no longer to be regarded as the road leading to the land of the dead, but as the representation of the guardian ghost, while its function was fulfilled by another sand-drawing, known as The Stone of the Land of the Dead (*Nevat Hor Iambi* or *Nevat Kor Tinivinbumbew*; DEACON & WEDGWOOD, 1934: 131, 141, 162). In another letter sent to Haddon from Lambumbu, Deacon summarised his findings as follows:

I have been able to get a good deal of detailed information about social regulations, relationships, etc., cannibalism, chieftainship, polygamy, etc.: songs & games: cat's cradles, &, above all, the remarkable geometrical figures, of which I have now collected some 45, & which, in native art, I regard as my one important catch. I've certainly never seen or heard of anything like it. I hope to goodness I'm not duplicating Layard, as I've spent some time in getting a complete set of designs. He never showed me or referred to anything of the kind. Knowledge of the art is entirely limited to the men: women, of course, may see it. The whole point of the art is to execute the designs perfectly, smoothly, & continuously; to halt in the middle, or go back & alter a line, is regarded as an imperfection. I have photographed & got native drawings of some of the designs, but to the native these are not interesting, what is interesting is my execution of designs which I have taken down & numbered—each design is regarded rather as a kind of maze, the great thing is to move smoothly and continuously through it from starting-point to starting-point. [...] (By the way, it would be worthwhile looking out for "geometrical figures" in the Solomons, & New Guinea—I mean, the kind of thing I found here. It is practiced also in Oba, & probably thro'out the N. Hebrides). (Deacon, letter to Haddon from Lambumbu, dated October 1926)

Despite these results, Deacon felt that "depopulation, recruiting, & the gravitation of the natives to the big French settlement in Santo, to Vila, some to New Caledonia" had made in-depth work "impossible" and seemed to him a question of recording as much as he could, before its disappearance (Deacon, letter to Haddon from Lambumbu, dated October 1926). Thus, after working on the western coast

6. Deacon was also congratulated by a fellow student, Camilla Hildegard Wedgwood, who was going to play a crucial role in the editing of his fieldnotes: "[Dr Haddon] has been allowing me to read your notes. [...] the material you have got seems to me amazing, both in quantity & its own inherent importance. Your account of the drawings & the importance of knowing how to draw 'the path' for those who wish to get to the next world, interests me especially. It seems to be an entirely new element in that belief concerning the warden of the entrance to the next world—or is it that it has hitherto been systematically overlooked?" (Wedgwood, letter to Deacon, dated September 29th, 1926).

of Malakula, he crossed the island, and went as far as reaching the neighbouring island of Ambrym.

As a matter of fact, it was on Ambrym that Deacon achieved what he and all his contemporaries considered to be his major ethnographic result, namely the alleged “resolution” of the “kinship puzzle” which had long obsessed Rivers.⁷ Deacon’s field-description of a six-section marriage system, published later that year, was hailed both in Australia and Great Britain as a masterpiece of ethnographic work, not only for its content, but also for the way in which it had been obtained: the people who had explained him the system’s working principles had done so through the construction of diagrams, one of which, just like a sand-drawing, had been traced in the ground (DEACON, 1927; Haddon in DEACON, 1934: xxiii):

It is really extraordinary that a native should be able to represent completely by a diagram a complex system of matrimonial classes. The way they could reason about relationships from their diagrams was absolutely on a par with a good scientific exposition in a lecture room. I have collected in Malekula, too, some cases of remarkable mathematical ability. I hope, when I got my material together, to be able to prove that the native is capable [*sic*] of pretty advance abstract thought. (Deacon, letter to Haddon from Bushman’s Bay, not dated)

The work on Ambrym had at last tempered Deacon’s dissatisfaction with the results of his fieldwork, and after leaving the east coast of Malakula, he returned one last time to South-West Bay. Once there, he received further good news: despite it appearing “unlikely” just a couple of months before (Deacon, letter to Gardiner from Bushman’s Bay, dated December 9th, 1926), he had been appointed Lecturer in Ethnology at the University of Sydney. As soon as he got the cable, he sent a telegram to Margaret Gardiner, his close friend, which reached her while in Cairo on March 3rd: “Sydney lectureship begins April. Come.” As she recalled nearly sixty years later in her memoir, her parents “were indignant and trotted out all the old arguments” but she was “determined to go” (GARDINER, 1984: 51).

The steamer that would have taken Deacon back to Port Vila—the first port of call ahead of his return to Australia—could arrive any day. After having sketched out a rough draft of the area’s cultural history, Deacon decided to put his writing on hold, postponing it to Sydney: the place was appallingly hot, and mosquitoes were bad. Then, suddenly, on March 5th, he began to feel unwell:

[...] two days later blackwater fever declared itself. On the evening of Wednesday [March 9th] the crisis came; the blackwater fever entirely left him, but he had great weakness. On Thursday, he suffered from palpitation, on Saturday 12th March, 1927, he took a good deal of nourishment, had no pain, and at times his mind wandered, but he had rational moments in between. Then the end came. (Haddon in Deacon, 1934: xxvii)

7. For an historical reconstruction of Deacon’s work on the Ambrym kinship system and its contemporary academic reception—especially considering the previous attempts made by Rivers on the subject—see Langham 1981, especially Chapters 3 and 6. The validity of Deacon’s hypothesis was later challenged by several scholars (for two recent summaries, see RIO 2007; HÉRAN 2009).

Deacon died that day, the steamer not yet in sight. He was buried in Malakula, at the top of a hill, within sight of the sea.

The Editing of “Geometrical Drawings” (1927-1934)

News of Deacon’s death spread rapidly through the anthropological community, which had just lost one of the brightest representatives of its younger generation. While some of his field material was lost (LANGHAM, 1981: 235–36), a substantial portion of his notes and sketches, including the “geometrical figure-drawings”, was safely shipped to England.⁸

In the same obituary that announced Deacon’s death to the academic world, a committed Haddon promised the forthcoming publication of his fieldnotes (HADDON, 1927a) and soon presented a concise summary of Deacon’s findings at the 1927 meeting of the British Association for the Advancement of Science (HADDON, 1927b). This intervention was followed by two seminars, held at the Cambridge University Anthropological Club and the Royal Anthropological Institute. Haddon’s prompt dissemination of Deacon’s findings soon led to further attempts at sand-drawing documentation, prompting the anthropologist Raymond Firth to record four figures on his way to Tikopia in 1928 (FIRTH, 1930).

Once Deacon’s notes were secured and their value acknowledged, Haddon was faced with another pressing matter, choosing an editor. At that time, John Layard had largely recovered from his health problems and asked his former mentor to entrust him with the task. On paper, Layard seemed the most logical candidate. He was the only scholar who had carried out intensive fieldwork in Malakula, and some of his own notes had even returned to Cambridge as part of Deacon’s collection.

Yet, as Ian Langham (1981: 236–38) has reconstructed, Haddon hesitated. He knew that Layard kept working according to the controversial hyper-diffusionist theories of the late Rivers and Smith, and feared that Deacon’s material might be forced to fit within such a frame.⁹ In the end, Haddon decided to entrust the task to Camilla Wedgwood, one of Deacon’s fellow students. Though less experienced with Malakulan cultures, Wedgwood’s views were closer to Haddon’s and, according to him, better aligned with those of Deacon’s himself.

Seven years later, Wedgwood completed the arduous work. After several revisions—including a dispute in which Layard protested misquotations and demanded

8. Deacon had also documented a series of string figures, but his collection was never published. Over time, scholars tried to track down the material in the archives of Cambridge and London but without success (VANDENDRIESSCHE, 2015). Then, around 2015, a private individual sent a parcel containing hand-written notes to Mark Sherman, president of International String Figure Association. Sherman realised the parcel contained Deacon’s collection, and subsequently arranged its publication (DEACON & SHERMAN, 2015).

9. To explain the presence of similar cultural features such as megalithic building, sun-worship and mummification in different regions of the world, at the beginning of the 1910s Grafton Elliot Smith put forward the hypothesis that these characteristics all belonged to an “heliolithic culture” which had first operated in Egypt to then spread throughout the globe. The aim of Elliot Smith, Rivers and some of their students, including William James Perry and John Layard became that of reconstructing the history of this “heliolithic” diffusion (RIVERS, 1914; ELLIOT SMITH, 1915; see LANGHAM, 1981).

a note of *errata* to be added after the introduction—the book was published as *Malekula: A Vanishing People in the New Hebrides* (DEACON, 1934). However, reproducing all the geometrical figures was too expensive, and they were omitted from the book (see BARON, 2020 for a reconstruction of the publication process). Thus, the drawings became the object of a separate publication, “Geometrical Drawings from Malekula and Other Islands of the New Hebrides”, which appeared in *The Journal of the Royal Anthropological Institute (JRAI)* in June of the same year (DEACON & WEDGWOOD, 1934).

In “Geometrical Drawings”, Wedgwood offered a summary of Deacon’s findings and presented the context of his documentation. To complement the material, Haddon added a note on the sand-drawings documented by Firth and included further information gleaned from his correspondence with former Anglican missionary Marion Hardacre (Haddon in DEACON & WEDGWOOD, 1934: 143–47). For the designs, Wedgwood selected a set of ninety figures. This consisted of Deacon’s ink sketches (**Figure 2**) and some of his pencil sketches, which Wedgwood herself had redrawn in a more geometric style. This final set was then carefully redrawn using a T-square and compasses by British Museum draughtsman C.O. Waterhouse (**Figures 4–6**),¹⁰ and “minor irregularities” were eliminated (DEACON & WEDGWOOD, 1934: 138, note 2).¹¹

The editors did not explain this choice, instead inviting readers to assess the relationship between reproductions and originals by comparing the figures with the photographs in the plate. The decision may have reflected a wish to remain true to Deacon, and to the way in which he himself had begun to redraw the figures while still in Malakula. It remains unclear, however, why his remarks on this issue (noted above) were omitted, since their inclusion might have mitigated later criticism of Waterhouse’s reproductions as overly geometric (LAYARD, 1936: 137; PAGE ROWE, 1936: 118).

With the publication of *Malekula* and “Geometrical Drawings”—and thanks to Wedgwood’s efforts—Haddon kept his promise, fostered further research on sand-drawing in other Pacific locations (BELL, 1935, 1936), but above all, he brought the practice into a new context, from the soil and ashes of Malakula and Ambrym to the salons and lecture halls of Cambridge and London. In this new setting, sand-drawing, or rather, what Deacon had managed to grasp about it—and Waterhouse redesigned—became the final point of contention in the long-standing debate concerning the origin, nature, and function of ornament, a debate that

10. In the RAI archives the draughtsman is sometimes recorded as “C.L. Waterhouse”, but recent research conducted in collaboration with the British Museum Archives (April 2026) allows me to confirm that the illustrator of “Geometrical Drawings” was Charles Oliver Waterhouse, who worked for the British Museum between 1915–1938. Waterhouse remained in the department until the outbreak of the Second World War, returning to the British Museum in 1946 after having been awarded an MBE for his services as “Draughtsman” in the Ministry of Economic Warfare.

11. This is rather curious given the stance usually adopted by Haddon. In *Evolution in Art* he had explicitly stated that, in ethnographic art, “No apparently insignificant superfluity is meaningless, they are silently eloquent witnesses of a past signification like the mute letters in so many of our words. Almost every line or dot of every ornament has a meaning, but we are without understanding, and have eyes and see not” (HADDON, 1895: 333).

shaped the Anthropology of Art in the late nineteenth and early twentieth centuries (MORPHY & PERKINS, 2006).

First, Wedgwood and Haddon approached this practice through the lens of what was then known as the Biology of Art—a natural science-inspired approach to the study of non-Western material culture in which Haddon himself had been a leading figure since the early 1890s (HADDON, 1895).¹² Soon after the publication of “Geometrical Drawings”, Haddon and Wedgwood’s interpretation of the practice was challenged by the sculptor William Page Rowe (1936), who regarded Deacon’s geometric figures as exemplary of the abstract creativity of so-called “primitive artists”—a capacity that Haddon and other scholars, such as Pitt-Rivers and Balfour, had denied in their writings (HADDON, 1895; BALFOUR, 1893: 22; PITT-RIVERS, 1906: 90). In the same years, a third hypothesis on the origin of sand-drawing was advanced by Layard (1935, 1936), who rejected both models and instead situated the practice within a broad diffusionist theory.

***Omne vivum e vivo* (“All life from life”): The Biology of Art within “Geometrical Drawings” (1934)**

To fully understand “Geometrical Drawings”, one must bear in mind the theoretical background of its senior editor. Haddon began his career as a zoologist, and it was this sensibility to natural history that he applied to the study of ethnographic art. This disciplinary shift followed his first expedition to the Torres Strait in 1888—the fieldtrip convinced him of the urgency of the anthropological approach (HADDON, 1890; QUIGGIN, 2010 [1942]: 91; HERLE & PHILP, 2020).

The theoretical framework Haddon contributed to foster following his return from the field was presented in *Evolution in Art* (1895). Besides Haddon’s own work on the subject, the book gathered and wove together the studies carried out all over the world by a group of renowned scholars—Balfour, Colley March, Stolpe, among others—united by the desire to transform the study of Art into a positive science. Their goal was to establish a “Biology of Art” and seize its necessary elements, freeing it from the biases of subjective aesthetic evaluations. Haddon’s programmatic declaration, put forward in the very first lines of the book, is worth citing in full, as it has remained the implicit epistemological framework of “Geometrical Drawings” nearly forty years later:

I profess to be neither an artist nor an art critic, but simply a biologist who has had his attention turned to the subject of decorative art. One of my objects is to show that delineations have an individuality and a life-history which can be studied quite irrespectively of their artistic merit. [...] The scope, then, of the following pages is to deal with the arts of design from a biological or natural history point of view. (HADDON, 1895: 1–2)

12. This hypothesis, first developed while designing my doctoral research project and later substantiated in the thesis (BARON, 2020), emerged after reading Carlo Severi’s *Il percorso e la voce* (2004; see also SEVERI, 2015).

Treating objects as biological specimens required the construction of a series of parallels that could make the analogy valid. In this context, one of the crucial issues concerned the origin of the “works of art.” To keep the biological analogy running, Haddon ruled out any room for artists’ creativity—at least within “savage societies”—by extending Darwin’s principle of natural gradualism (“*Natura non facit saltum*,” see DARWIN, 1859: 471) to the realm of human cultures:

The fundamental law in biology is that expressed in the well-known aphorism, *Omne vivum e vivo* (“All life from life”). The belief in abiogenesis or spontaneous generation, as now taking place, has completely disappeared from biological teaching. In studying savage art [*sic*] we are irresistibly forced to an analogous conclusion. (HADDON, 1895: 308)

Negating the idea of an artistic and creative faculty, art biologists argued that the first step in producing a decorative pattern could only lay in the imitation of a prototype (HADDON, 1895: 7). But the link between the long-forgotten prototype and the pattern under study could sometimes be so unclear as to seem non-existent:

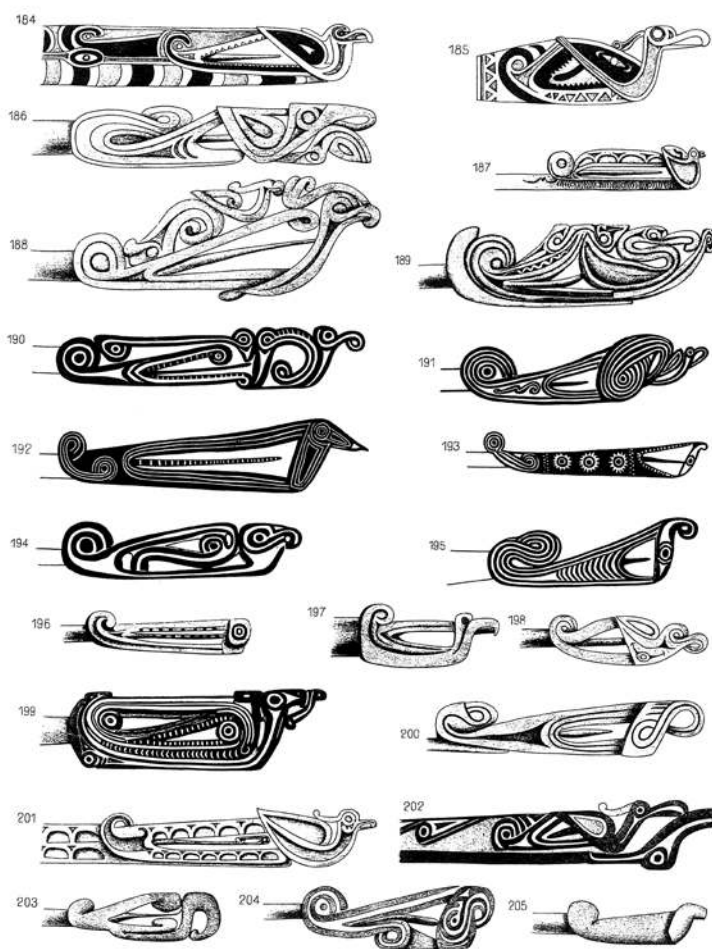


Figure 3.
“Bird and Crocodile”
design carvings,
Massim region.
Series illustrating
the “degradation”
from conventional
representations
(184–85) to more
abstract designs
(203–05).

Source: HADDON, 1977
[1894], Plate XII.

the pattern had eventually become a “cryptograph” that had to be deciphered (STOLPE, 1927: 32; see also SEVERI, 2015). This difference from the prototype was explained by resorting to processes of evolution and devolution, which could then be reconstructed through the assembly of morphological series: the analysis of the “degradation” (HADDON, 1895: 56–58; 1977 [1894]: 209–10) of the “bird and crocodile design” found on handles carved in the Massim region (**Figure 3**) is a good example of Haddon’s approach.

According to this perspective, even the most geometric and apparently abstract design once had a figurative prototype: a key argument that provoked much debate.¹³ But Haddon’s aim was not limited to identify the figurative prototype of a pattern or reconstruct the process that had contributed to its transformation. Haddon aspired to something loftier and more subtle, namely, to grasp the deep, primeval social meaning of the object’s design—the *necessity* that had originally spurred people to carve, engrave, or design *that* particular prototype.

It was within this long-established framework—tempered but not abandoned after Haddon’s shift toward localised diffusionism at the turn of the century (URRY, 1982: 77)—that Wedgwood sought to make sense of Deacon’s designs, and the implications of employing such a framework were immediate and structural.

After recalling the circumstances of Deacon’s encounter with the practice and describing it on the basis of his notes, Wedgwood tried to map the geographical distribution of the designs through the detection of a series of local styles (DEACON & WEDGWOOD, 1934: 135). She managed to distinguish at least two: a first style based on frameworks made of perpendicular lines, and a second one made of symmetrically arranged dots of circles. In addition to these main styles, Wedgwood mentioned variants, exceptions, plus a group of designs undoubtedly formally linked to each other and having the island of Ambae as the provenance site, probably collected by Deacon via enquiries made among plantation workers in Bushman’s Bay, on the eastern coast of Malakula (DEACON & WEDGWOOD, 1934: 135–37).

Unable to establish a definitive geographical classification of the designs due to lack of data, Wedgwood resorted to arrange the reproductions according to their original “subject-matter” (*ibid.*)—that is, their alleged prototypes—following the taxonomy (phyllomorphs, zoomorphs, anthropomorphs, and so on) that Haddon had established in *Evolution in Art* (see URRY, 1982). Each geometrical figure was

13. The conceptual weight of this claim can be sensed in Colley March’s defence of Haddon’s position following a (probably?) negative review of *Evolution in Art*: “A recent reviewer declares that the chief defect of Professor Haddon’s work is that ‘he wholly ignores the geometric origin of pattern-making.’ The objector is evidently one of those who believe that primitive man, having made a wooden comb, sat down before it in despair until he had invented some design with which it might be adorned; and that the first things that presented themselves to his introspection usually bore a geometric form. Circles or spirals, triangles or squares welled up in his mind, and satisfied his innate craving. The reviewer and his friends, when the matter is pushed against them, cannot avoid the affirmation, may indeed be proud of it, that such a desire to decorate a useful surface must have been intuitive and aboriginal. But the truth is Professor Haddon does not ignore the geometric origin of pattern-making; he denies it. He rightly declares (p. 309) that ‘savages [*sic*] do not deliberately invent patterns or designs, for artistic expression is the result of a pre-existing visual impression.’ ‘The contrary assumption is no longer permissible’ (p. 164)” (COLLEY MARCH, 1896: 454).

linked to a brief description, containing all the relevant information that she had been able to track down in Deacon's notes. The organisation itself constituted an attempt at interpretation: it assumed that each design referred to a figurative original, even where that reference was far from obvious.

Wedgwood was not blind to the tension between this framework and the actual appearance of the designs. She acknowledged their "considerable aesthetic sensibility" and observed that they appeared "remarkable for their beauty no less than their intricacy". However, she declined to interpret this aesthetic quality as evidence of deliberate creative intent: the designs were "peculiarly interesting" not primarily as aesthetic objects but for their being "representations", "for we can see what characters in his models seemed the most significant to the artist, and with what success he seized upon them and wove them into a pattern" (DEACON & WEDGWOOD, 1934: 135). "It is true", Wedgwood continued,

that the significance of some of the drawings, particularly those of a ritual nature, is not apparent, [...] but in others the artistic truth of the work cannot fail to attract attention [see Figure 6] while in Fig. 35 [Figure 4] the nature and spirit of a rat are expressed remarkably in a rather "impressionistic" manner. (DEACON & WEDGWOOD, 1934: 135)

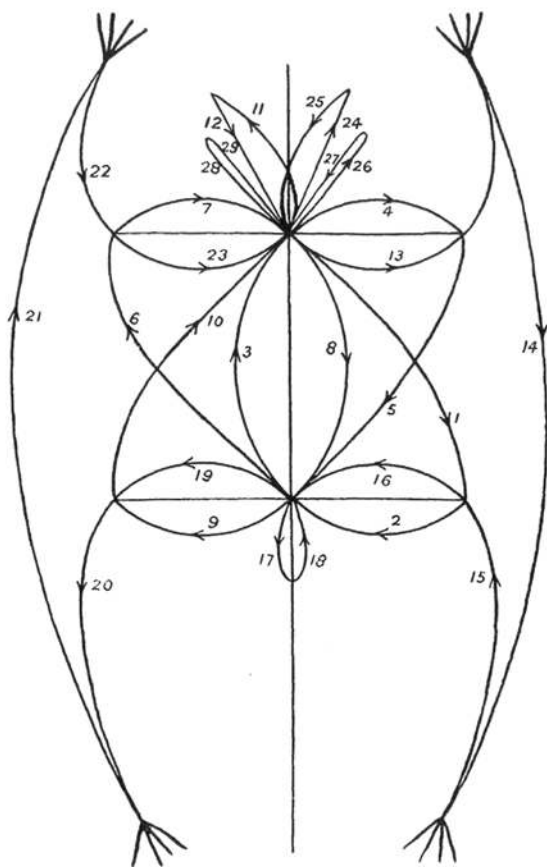


Figure 4. Nilambüt (The Rat).

Reproduction by Waterhouse from a drawing by Deacon.

Source: DEACON & WEDGWOOD, 1934: 158, Figure 35.

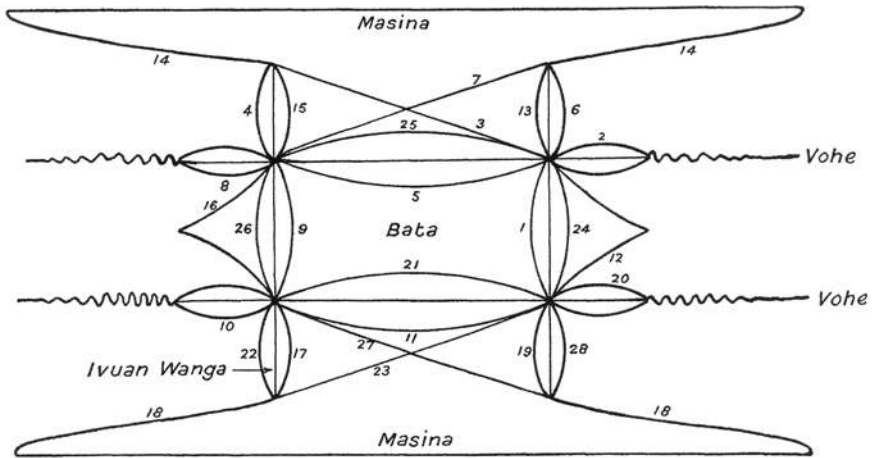


Figure 5. Rue Rue (Double Canoe).

Reproduction by Waterhouse from a drawing sent to Haddon by Hardacre, showing the two hulls (*Masina*), the connecting poles (*Ivuan Wanga*), the platform (*Bata*), and the paddles (*Vohe*).

Source: DEACON & WEDGWOOD, 1934: 145.

The direction of the tentative, interpretative arrow set by Wedgwood is clear: from prototype to figuration, with imitation as the original impetus. But she was not alone in this. Haddon's separate commentary on Firth's material tried to develop this attempt at decryption a step further, and in a direction that reveals the interpretive ambition underlying the biological framework.

Haddon described Firth's reproductions as "carelessly drawn" (DEACON & WEDGWOOD, 1934: 144; HUFFMAN, 1996: 250), and resorted for his analysis on further material he had gathered through correspondence with Marion Hardacre. Hardacre has served as a missionary in Raga (North Pentecost), the same district from which Judah Butu, the author of the drawings documented by Firth, came from.¹⁴

Combining these data with the knowledge gained from his keen interest in canoes—a subject he considered key to reconstructing migration patterns in the Pacific (HADDON & HORNELL, 1975 [1936–1938])—Haddon showed how the prototype of the sand-drawing Firth had collected as Rue Rue could actually be a double-hulled canoe, leading him to describe the more detailed reproduction obtained through Hardacre (Figure 5) as "the only valid record of the occurrence of double canoes in the New Hebrides" (Haddon in DEACON & WEDGWOOD, 1934: 145). The claim was typical of the Biology of Art: what appeared to be an artistic or aesthetic expression was revealed, through the expert eye of the trained morphologist, to be the highly informative outcome of a historical process rooted in meaningful imitation.

Rue Rue's analysis was one of the few positive conclusions reached by Wedgwood and Haddon, who, overall, were unable to explore in detail the meanings of most

14. According to Huffman, the author of the drawings that Hardacre sent to Haddon was Harper Liñi, father of the first prime minister of Vanuatu, Walter Hadye Liñi (HUFFMAN, 1996: 250).

designs, nor to explain their origin or pattern of diffusion. But we can safely assume that reaching definitive conclusions was not the main objective of “Geometrical Drawings”: this remarkable article was intended more as a much-deserved tribute to Deacon’s effort, and as a cornerstone for further studies.

The impact of “Geometrical Drawings” on the academic world was almost immediate. It soon stimulated the production of new analysis, but these did not take the form that Haddon probably hoped for. In fact, the publication of “Geometrical Drawings” and their tentative interpretation as geometrised figurations hiding functional and/or ritual meanings soon provoked the reaction of that camp of scholars who had always opposed the biologisation of the study of Art. It was clear that these abstract designs, ethnographically recognised as the result of a chiefly leisure activity, could provide a chance to reaffirm the concept of Art for Art’s sake, and this opportunity was eventually seized by William Page Rowe.

Page Rowe was an artist, art critic, and “enthusiastic member of the anthropology section of the Auckland branch of the New Zealand Institute” (NEICH, 2001: 144). His response to “Geometrical Drawings”, issued in 1936 on the *JRAI*, is one of the most unusual documents in the history of sand-drawing studies: an analysis of the practice conducted entirely from the standpoint of a practising artist.¹⁵ In this work Page Rowe tended to dispense the reader from bibliographical references, but to better appreciate his critique to Haddon and Wedgwood’s analysis, it is useful to take a couple of steps back and briefly frame the issues at stake.

“Playing Hamlet without the Prince of Denmark”: the Return of Aesthetic Intuition in Page Rowe’s *Study* (1936)

In their attempt to promote a scientific approach to Art, Haddon, and Pitt-Rivers before him, had ruled out the idea of artistic creation. But it is worth noting that this position had wider implications. For Pitt-Rivers, for example, the issue was political: Darwinian gradualism, which he applied to nature as well as history, was more than a scientific hypothesis; it was a revelation. And museums had a duty to convey that revelation to the masses, “to make men cautious how they listen[ed] to scatter-brained revolutionary suggestions” (PITT-RIVERS, 1891: 115–16).

But not everyone agreed. German architect and art critic Gottfried Semper, for instance, exiled for life from the Kingdom of Saxony for the leading role taken on the barricades of the May Uprising in Dresden in 1849, was firmly opposed to such a sweeping extension of Darwinian gradualism:

This application of the famous axiom, “nature makes no leaps” and of Darwin’s theory on the origin of species to the special world of the small re-creator—man—seems somewhat questionable to us, in view of what the study of monuments shows. [...] We can quite rightly describe the old monuments as the fossilized receptacles of extinct social organizations, but these did not grow on the backs of society like shells on the backs of snails, nor did they spring forth

15. For a later analysis of sand-drawing from an artistic point of view, see Robert Allerton Parker’s contribution in *VVV*, a magazine devoted to the dissemination of Surrealism published in New York City from 1942 through 1944 (PARKER, 1944).

from blind natural processes, like coral reefs. They are the free creations of man, on which he employed his understanding, observation of nature, genius, will, knowledge, and power. (SEMPER, 1989: 268)¹⁶

Semper claimed that styles were not to be considered as inevitable stages in a single evolutionary trajectory, but rather as *variations*—in development, exploitation and internal rearrangement—of few common, basic “elements”: styles were the result of Man’s thoughtful “play” with these elements, under the constraint of the environment and the technological achievements of their own time and culture (Mallgrave in SEMPER, 1989: 28).

A few years later, Austrian art historian Alois Riegl radicalised Semper’s position in *Problems of Style* (1992 [1893]). Riegl argued that decoration derived not from imitation but from an inborn *Kunstwollen* (Will-to-Art). This universal impulse transcended not only the exclusively imitative notion of Art (Haddon’s stance), but also the limitations imposed by the need of mastering “allegedly related” techniques (what Semper had described as the “intrinsic factors” bearing upon a work). Riegl’s discussion of the Māori spiral motif perfectly illustrates this claim: this motif could not be reduced to a mere technical derivation nor be regarded as the result of a process of degeneration departing from a naturalistic prototype. Rather, the Māori spiral could legitimately be intended as the result of a purely “creative activity” involving the transformation of an abstract circle (RIEGL, 1992 [1893]: 78).

In 1928, more than thirty years after Riegl’s analysis of the Māori spiral, Page Rowe published “the first serious study by an artist of the characteristics of Maori Art” (Āpirana Turupa Ngata in PAGE ROWE, 1928: V). In his book, Page Rowe drew heavily on Riegl and reiterated his challenge to the analyses of art biologists. Six years later, Haddon and Wedgwood published their interpretation of Deacon’s geometrical figures, and Page Rowe seized the chance to provide an alternative reading (PAGE ROWE, 1936), defending that “art-impulse” (PAGE ROWE, 1930: 6) which he held at the core of artistic practice, sand-drawing included.

Page Rowe introduced his paper offering a clear statement about his opinion on the matter, namely that “any study of primitive art [*sic*] should proceed from the fact that art is the coherent expression of the aesthetic intuition” (PAGE ROWE, 1936: 117). Page Rowe’s aim was to prove this point practically by providing an analysis of Deacon’s reproductions.

Page Rowe began his analysis by stressing what he felt Haddon and Wedgwood had overlooked. According to first-hand accounts (FIRTH, 1930: 58), these figures were primarily intended for “*amusement*” and “*public entertainment*” (PAGE ROWE, 1936: 117, *italic in the original*)—multimodal performances designed

16. With this, one should not think that Semper always opposed the application of methodological insights elaborated within the field of natural sciences to art, architecture and material culture; rather, he began to resist this transfer as soon as he ceased to see the analogy work, namely when gradual evolution finally established itself as Nature’s law in the mid-1860s. Until then, Semper had been “biologically backed” by the respected, anti-evolutionary theories of Georges Cuvier’s comparative zoology, which he often quoted and used as a benchmark for his own work (see SEMPER, 1989: 31–32).

to captivate an audience through a combination of graphic and narrative skills. For Page Rowe, these conditions urged the performers to conceive designs that could not limit themselves to be “structurally intelligible”, but had to be “pleasing to the eye”, “aesthetically admirable”; and it was this, and not the rote repetition of “long forgotten illustrations”, that constituted the primal motivation at the core of their production:

In the course of my reading, I constantly find anthropologists expressing their admiration of the beauty of primitive art, and equally constantly attaching no sort of importance to the fact. I am somewhat puzzled by this attitude, which seems to me very like “playing Hamlet without the Prince of Denmark.” I cannot see how any human activity can be studied with profit by ignoring its specific purpose. Dr. Haddon indicates this point of view in his concluding note to this collection, in observing that Deacon ‘spent a considerable amount of time in collecting and analysing these designs, doubtless because their intricacy and their often beautiful forms appealed to his artistic sense, but also because they had a psychological value and an obvious connection with the social and religious life of the people.’ Is not the aesthetic motive the prime factor?

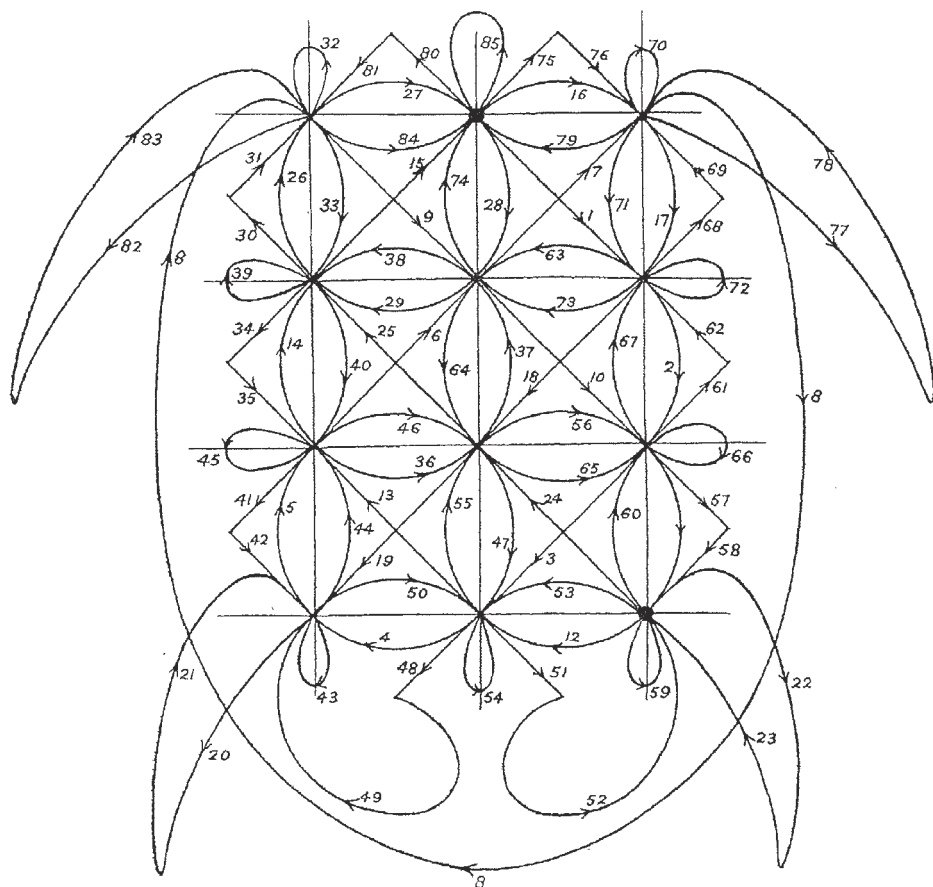
(PAGE ROWE, 1936: 127–28)

But Page Rowe didn’t want to just emphasise the aesthetic component of the drawings: he wanted to make them a concrete example of the universal creativity of the artists, by showing their abstract and mental origins.

To do so, he strategically proceeded to classify the whole set as a collection of “abstract” or “geometric” designs, relying on the definition given in *Notes and Queries on Anthropology*. The 1929 edition, to which Haddon had contributed as one of the editors, reminded the reader that “many, but not all, seemingly geometric designs” could be “traced back to naturalistic designs through a process of simplification or elaboration” (BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, 1929: 288). Taking this general statement as his starting point, Page Rowe embarked on a “structural” analysis of the motifs, in the attempt of answering the following question: were these drawings the geometric derivative of figurative representations, or was the abstract geometric combination actually the primary driving force, with “the representational element in form or title, merely an afterthought?” (PAGE ROWE, 1936: 119).

To answer this question, Page Rowe set aside most of the drawings in which the intention of representation was “*objectively undetectable*” (PAGE ROWE, 1936: 121, italic in the original), to challenge the representational character of all sand-drawings by tackling the few figurative ones, such as those collectively described as “Turtles”. Page Rowe observed that one of these turtle-shaped drawings shared a series of formal relationships with another motif, The Pigeon, and showed how these seemingly figurative designs could be interpreted as retrospective elaborations developed from a common abstract template:

Miss Wedgwood follows the common habit of anthropologists, which derives from the popular belief that, as Professor Balfour puts it, “Imitation is the mother of art.” [...] But though we can reasonably enough assume representational intention in these [...] figures [Figure 6], it does not, in my opinion, follow that the maker or makers of these designs necessarily started off with



that idea. The shape and continuity of the outer line [of Figure 6, left], which is in the same formal relation to the same spear-shape at the base, as at the sides in [Figure 6, right], might readily result without any thought of the turtle, *until that outline was completed*. Then comes the idea, “Let’s make a turtle of it.” This could easily be done by enlarging the upper point of the top central “star” (No. 85) and by adding the flippers. [...] As against the theory that the present form is a degenerate remainder of a long-ago naturalistic representation, I submit this explanation, which is objectively sustainable. (PAGE ROWE, 1936: 120–22)

The implications of such analysis were significant: even in the case of apparently figurative sand-drawing, the representational character would be the by-product of a variation in the aniconic geometric structure.

In addition to this hypothesis, Page Rowe also introduced a first analysis of what we may retrospectively call the “affordances” (GIBSON, 1986 [1979]: 127) provided by the material through which the patterns were achieved, listing the lack of shape and limitations of the “field of operation” as a further aspect that

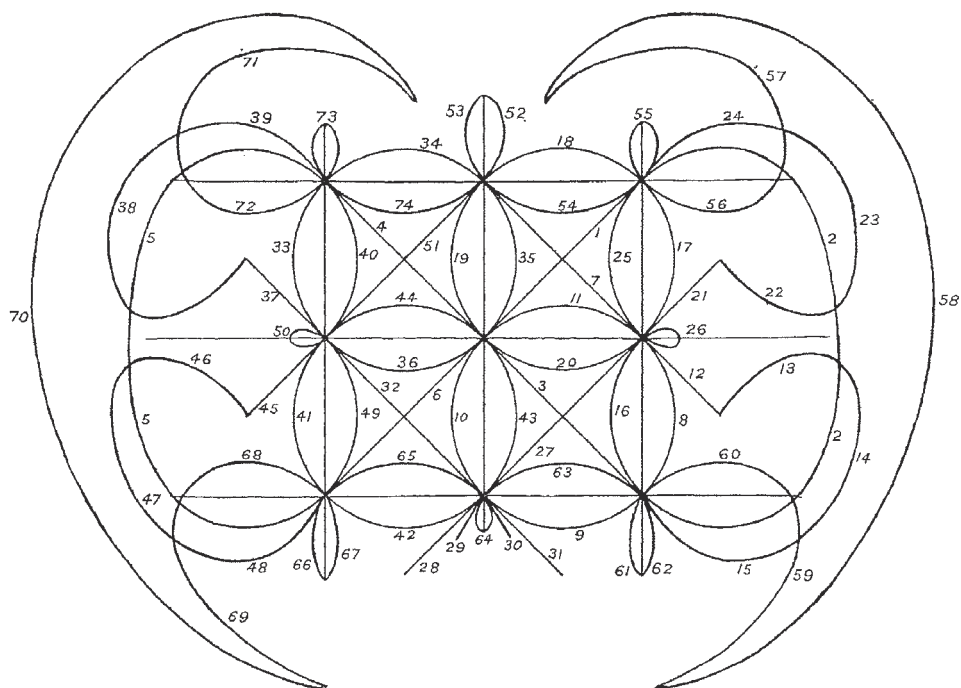


Figure 6. Examples used by Page Rowe to demonstrate how the apparent figurative character of a sand-drawing may result from the exploration of abstract geometric configurations.

Reproductions by Waterhouse after Deacon.

Source: DEACON & WEDGWOOD, 1934, Figures 19 and 13 respectively.

could be stimulating to “contemplation, frequent experiment, and to virtuosity” (PAGE ROWE, 1936: 127). The designs were, in his reading, primarily aesthetic objects: the product of a creative, formal intelligence whose motivations were artistic rather than representational or symbolic.

Grounding his assumptions in formal analysis and field reports, Page Rowe ended up overturning Haddon’s accusation against “professional art critics” (HADDON, 1895: 1), challenging the bold imagination of scientists in their search for ritual associations or figurative prototypes:

[The Rat] is also quoted as an example of “artistic truth,” with the comment that “the nature and spirit of a rat are expressed remarkably in a rather ‘impressionistic’ manner” [Figure 4] not, observe, the make and shape of the beast. I suggest that “post-impressionistic manner” would be nearer the mark. The remark puts me in mind of the Cubist theory of portraiture, according to which the essential personality of the sitter cannot be portrayed in terms of the visual facts, and that abstract qualities must be expressed by abstract forms. (PAGE ROWE, 1936: 122)

Page Rowe concluded his analysis of *The Rat* (**Figure 4**) with a rather caustic comment which effectively conveys the challenging tone that pervaded his study: “This is not the first time that I, as artist, have been moved to envy by the agile imagination of the scientist” (PAGE ROWE, 1936: 122). Whether this criticism is to be considered limited to the work of Haddon and Wedgwood or whether it extends to John Layard’s contribution, which I present in the next section, it is unclear.

Lost in the labyrinth: Layard’s ghosts and degraded mazes (1936)

In the same year that Page Rowe published his study, the *JRAI* issued a third hypothesis on the origin, function, and meaning of sand-drawing—one that rejected both the art-biological and the aesthetic interpretations and located the practice within the framework of a wide diffusionism. The author, John Layard, had first put forward this hypothesis during a Communication given at the RAI on the 11th December 1934, six months after the publication of “Geometrical Drawings” (LAYARD, 1935).¹⁷

As he later claimed, Layard had observed these drawings during his fieldwork but had considered them to be simply “pure games of skill” (LAYARD, 1942: 649–50). However, confronted with Deacon’s findings and having maintained his theoretical commitment to diffusionism, he realised that the interpretation of sand-drawing as “mazes” (see also DEACON, 1934: 130; see PAGE ROWE, 1936: 117) could provide empirical evidence to support its cause.

As Haddon and Wedgwood had pointed out in the introductory note of “Geometrical Drawings”, the spread of this practice afforded “a problem of cultural diffusion” which, in their view, could not be solved “until further inquiry and research” had been made (DEACON & WEDGWOOD, 1934: 129). Deacon had remained very cautious on this point, and in his own reconstruction of the cultural history of the area, sketched during his last week in South-West Bay and issued as the last chapter of his monograph, he had not yet ascribed sand-drawing to any of the four “cultural layers” he had detected (DEACON, 1934: 711). In his analysis, Haddon considered as “probable” the attribution of the geometrical designs to the last of these cultures but had not advanced any further (DEACON & WEDGWOOD, 1934: 147).

According to Layard, the only way to settle the issue was to move away from prudent regional comparisons and work on the practice from a wider perspective. This meant the rejection of the cautious taxonomic classification provided by Haddon and Wedgwood that, in his view, “did not lead to any elucidation of the problem” (LAYARD, 1936: 134), opting for a daring typological classification that linked the structure of contemporary sand-drawings back to that of the labyrinths once built in Ancient Egypt to protect royal tombs (**Figure 7**).

By means of such connection, Layard provided “sand-tracings”—the term he coined to highlight their nature as trajectories (LAYARD, 1936: 132)—with a new figurative prototype and with an extended temporal span in which to frame its devolution. This led him to rearrange Deacon’s designs into four different classes

17. I would like to thank one of the anonymous reviewers for bringing this information and the related publication to my attention.

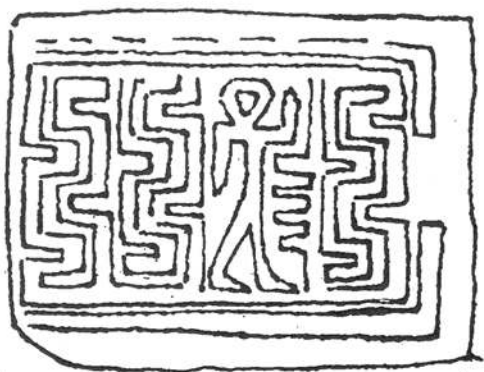


Figure 7. Labyrinth on Egyptian schist seal. Figure of king-god in centre.

Source: LAYARD, 1936: 169, Figure 27.

(A1, A2, B, and A2+B), each reflecting a given stage in the sequence of “degradation” from the prototypical Egyptian labyrinth (Figure 7) to the continuous line design of The Path (Figure 1).

Layard reconstructed the degradation of the labyrinth (Figure 8) as follows: Class A1 tracings coincided with the set of Ambae figures, that retained the linear framework and the outward-inner path of the original labyrinth. Class A2 represented a first degeneration of this set, resulting in a side-to-side tracing. Aside of this, Layard identified a Class B, whose tracings were characterised by a dotted framework and a never-ending line enclosing a space; the prototype of this class was not the labyrinth, but the figure of the guardian ghost itself. Finally, Layard set a last class including those designs of the A2 Class that had been transformed in continuous line pattern through the influence of Class B. It was to this last A2+B Class that the tracing called The Path belonged:

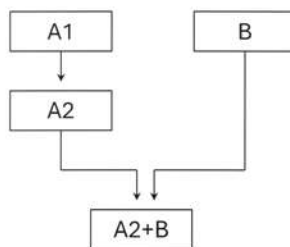


Figure 8. Diagram showing Layard’s sand-tracing classes and the progressive degeneration of the figurative representation of the labyrinth (Class A1) down to The Path (Class A2+B).

Source: LAYARD, 1936.

Author’s diagram.

We are now in a position to assess the meaning and function of [The Path, Fig. 1]. If it is true that these designs do in fact represent degraded mazes or labyrinths, it is clear that of the two elements of which they are composed, the framework represents the structure of the labyrinth and the continuous line the path trodden by those who enter it. While the more accurate knowledge that it is the continuous line itself that represents the baffling path has clearly been lost, the native still possesses the knowledge that such a baffling path does in fact exist, that the ability to trace it is essential if the land of the dead is to be reached, and that it is in some way connected with this geometric figure. (LAYARD, 1936: 140–41)

According to this reading, what Deacon had found—the requirement that a ghost must be able to trace The Path (Nahal) to gain entry to the after world—was not an independent local development but the degraded memory of an Egyptian ritual. The guardian ghost who devoured those unable to trace the Path was the

remnant of the guardian of the labyrinth's inner chamber. The continuous-line technique was a later modification, arising from confusion between the path traced through the labyrinth and the structure of the labyrinth itself.

But Layard did not limit himself to offer a solution to the enigma posed by The Path. In the second part of his paper, he linked his analysis of sand-tracings to that of local dances, recognising the influence of the labyrinthine path in ritual choreographies in which he himself had taken part (LAYARD, 1936: 147). He described these dances as “maze-dances” (see also GELL, 1998: 94–95), treating them as what we may refer to as choreographic “transmutations” (JAKOBSON, 1959: 233) of Class A sand-tracings:

the lines formed by the main body of dancers correspond [...] to the linear framework of the maze designs, in other words the structure of the labyrinth, and [...] the solo dancer represents the candidate for admission threading his way between them, the path he treads corresponding to the continuous line of the design. (LAYARD, 1936: 151)

To make the analogy more coherent, Layard needed to find a choreographic equivalent to his Class B: this he found in the pantomimic dances in which the actors impersonated “ghosts”, that were by this way linked to the Class B continuous line tracings depicting the guardian ghost Temes Savsap, evoked in Deacon's account of the journey of the deceased's ghost (DEACON, 1934: 554–56; DEACON & WEDGWOOD, 1934: 131).

Layard's argument was way more ambitious than either of his predecessors'. Where Haddon and Wedgwood had proposed tentative figurative derivations for individual designs, Layard offered a single grand structural origin—the labyrinth and its guardian—that could account for the entire corpus and link it to a global diffusion narrative. Where Page Rowe had denied any meaningful relationship between form and social function, Layard proposed multiple, if speculative, connections between graphic structure and ritual practices.

The heliolithic framework has not survived closer scrutiny. But Layard's focus on the structural properties of sand-drawing as trajectories—as paths to be traced rather than pictures to be deciphered—constituted a genuine and lasting contribution. Equally significant was his pointing to the one hundred or so designs he had collected during his 1914–1915 fieldwork and that he proposed to analyse in a subsequent publication (LAYARD, 1936: 146). However, if we exclude the few sand-drawings published in his later monograph, such dedicated publication never appeared, and these designs are yet to be recovered.

Voices from the field: exploring sand-drawing composition with contemporary experts

The seminal debate of sand-drawing studies raised a series of conceptual questions that have never been fully answered and that continue to shape research: the question of the practice's origins and distribution; that of the relationship between graphic form and social function; and, finally, that of creative agency within a practice governed by rather strict formal rules.

Over the past decade, I have studied sand-drawing from an ethnographic perspective, primarily working with the communities of the western and northern region of Ambrym Island (BARON, 2020, 2021, 2023, 2024, 2027 [forthcoming]). I have tried to understand how sand-drawings are traced, transmitted, evoked and created, their past and current functions, as well as the continuities and the transformations that have occurred in the practice since the time of Deacon's documentation.

Addressing these topics—and in particular that of the creation of sand-drawings—required engaging directly with one of the main questions that had structured the founding debate: are sand-drawings imitations of figurative prototypes, or abstract configurations open to interpretation?

The ethnographic evidence I have gathered suggests that this opposition does not capture the actual cognitive processes involved in sand-drawing creation—and that both Haddon and Wedgwood, on one side, and Page Rowe on the other, were partially right.

For instance, sand-drawings such as *The Helicopter* (**Figure 9**) created by Karu Ifrem of Fanrereo and recorded in 2018, would appear to support the art-biological hypothesis. When asked about the process of composition, Ifrem explained to me how this had been triggered by the challenge posed by the rendering of the aircraft, and how the graphic work had consisted in finding a continuous-line configuration that captured its essential features (BARON, 2024: 15–16). The process was effortful, iterative, and ultimately successful—the framing, explicitly representational.

This example seems to support Haddon and Wedgwood's theory. But the analysis of other recently composed sand-drawings shows that Page Rowe was not wrong either. Sand-drawing expert Augustino Batick of Mehsap, for instance, with whom I also worked with in the same year, showed me how he had derived two of his own new designs—*The Airplane* (Plen) and *Ambrym Island*—from the traditional one known as *Rom*, by introducing structural modifications to the standard framework (BARON, 2024: 13–14). Batick worked knowingly from an existing

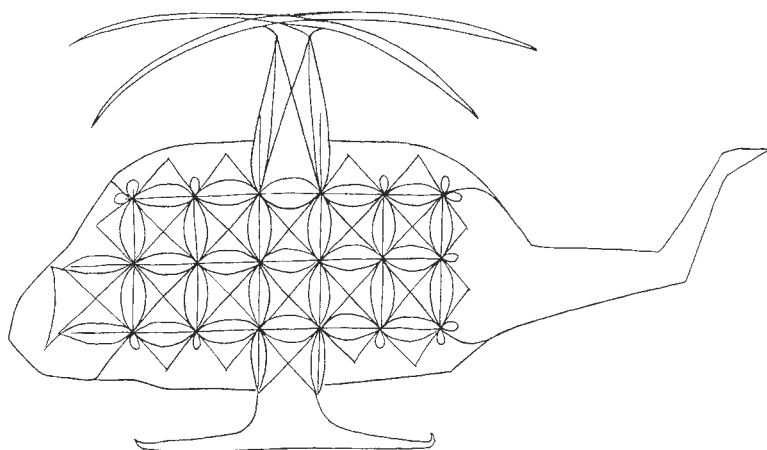


Figure 9. *The Helicopter.*

Reproduction by the author of an original sand-drawing conceived and traced by Karu Ifrem in Fanrereo (Ambrym), 2018.

design, exploiting its structural potential to generate new configurations that could then be given new representational meanings.

Based on this data, I would suggest that the sand-drawings traced on the ground represent consistent renderings, not of figurative representations or abstract forms, but of mental representations ordered according to the practice's graphic principles (continuous line, symmetry, avoidance—for a more analytical description, see Baron, 2020, 2021, 2023). Sand-drawings are complex thought-prints, unfolded and put on the ground for us to see.¹⁸

What these findings suggest is not a single mode of sand-drawing construction but at least two. The first is direct figuration: a subject is identified, and the creator works to find a continuous-line rendering that captures its essential features. This is the mode Haddon and Wedgwood implicitly assumed for all sand-drawings. The second is structural transformation: an existing design is modified by altering its framework, its looping path, or both, with the resulting configuration subsequently interpreted as representing something new. This is the mode Page Rowe's formal analysis described.

But we can also add a third one—documented in the most analytically rich performances I have observed. This might be called “layered encoding”: the design serves simultaneously as a representation of multiple things, accessible at different levels of knowledge, with additional meanings revealed only to those who possess the appropriate contextual information. This third approach directly addresses the issue of aniconicity that has puzzled outside observers from the beginning. The apparent abstractness of many Malakulan and Ambrymese designs is not, in this view, the result of evolutionary degeneration or of purely formal abstraction. It is rather the structural expression of a communicative practice in which knowledge is simultaneously shared and selectively withheld.

A last example from my Ambrym fieldwork illustrates the point. The sand-drawing known as *The Yam*, documented at sessions in both north and west Ambrym between 2017 and 2018, was described by several performers as a representation not simply of the plant but of its process of growth (BARON, 2020; 2023: 121–24). Performers first described the complete figure as a depiction of the yam plant in vertical section: the continuous line acts as the vine, the framework strokes as the wooden stakes supporting it. They then demonstrated that the same figure may simultaneously offer a representation of the yam's life cycle from above: two flattened ovals embedded in the continuous-line pattern represent, respectively, the old tuber from which the plant originated and the new one ready to harvest. The design is at once a lateral view of a living plant and an aerial view of its entire temporal arc—a “holographic form” (RIO, 2005: 408) in which gestalt images are superimposed on a single continuous-line figure.

The concept of sand-drawings-as-trajectories, introduced by Layard's analysis and developed by Knut Rio's observations on sand-drawing *depth* (ibid.), finds its

18. In this sense, it is worth mentioning the insightful remarks of art theorist Emmanuel Löwy, who hypothesised that ethnographic drawings should be considered “mnemonic representations,” seeking to fix their subjects “with each of their parts in its broadest aspect” (Löwy 1907: 5–6).

most compelling ethnographic confirmation in these layered performances. The continuous line is not simply a formal constraint or an aesthetic device: it is a temporal structure. The design is not just an image to look at, but also a path to take, to follow, or to get lost in.

Conclusion

As I have attempted to demonstrate with these few examples, research on sand-drawing has made significant progress since the pioneering studies, but substantial gaps remain. Of these, the most consequential from a historiographical perspective is the absence of systematic knowledge regarding early sand-drawing collections. If we limit ourselves to the statements made by the authors in the sources quoted in this article, we are already missing twenty-eight of the thirty or so drawings sent to Haddon by Hardacre (DEACON & WEDGWOOD, 1934: 144),¹⁹ and the more than hundred figures that Layard had proposed to analyse in subsequent publications (LAYARD, 1936: 146). To these, one must add the one hundred-eighty and more motifs allegedly collected by Henry Tailhade in the 1970s (TAILHADE, 1983: 2) that were never published. In 2001, an extensive sand-drawing catalogue was produced by Stephen Zagala (ZAGALA, 2001). This includes published material and several unpublished sand-drawings, but not the complete catalogue of Layard, Hardacre or Tailhade, or drawings documented by missionaries (PATON, 1979).

The retrieving of this documentation and the expansion of the scope of investigation to include the archives and publications of missionaries would provide the necessary information to put together a comprehensive review of the last hundred years of sand-drawing studies. By situating each contribution within its intellectual context and tracing the lines of influence that fostered each documentation, such a review would not only cast new light on the intellectual history of sand-drawing but provide researchers currently working in the field with a far richer comparative baseline than any currently available.

In the meantime, the story reconstructed in this contribution, although incomplete, makes at least one broad claim plausible: the key to understanding sand-drawing lies in the intensive engagement with this living practice in all its dimensions. It is through collaboration with local experts and cross-reference with archive analysis that our understanding of this singular practice will be advanced. Thanks to these tools, each of us, in this current issue, is trying to work through and make sense of at least one facet of this ephemeral crystal made of dust and thought. My hope is that through this collective effort, we may work to piece it together, to offer an ever-clearer glimpse of its shimmering, elusive beauty.

19. However, it is interesting to see how from Haddon written description (Haddon in DEACON & WEDGWOOD, 1934: 145-46), one may cross-reference these with contemporary figures and guess the probable shape of some of them.

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