Flying a kite and catching fish in the Ternate panorama of 1600

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The account of the first Dutch visit to the Moluccas in the summer of 1599 includes a panorama of Ternate (Fig. 1). This was the first picture to give to the European public a visual impression of that famous source of cloves beyond verbal reports. The panorama shows characteristic topographic features such as the mountain which makes up the island of Ternate, the town at its foot, and the reef along the shore. It indicates places of historical interest relating to European voyages that had been there before, such as buildings dating from the arrival of the Portuguese (L, M), and the house where Francis Drake's cannon was kept (H). And, of course, it refers to the immediate presence of the Dutch expedition: the two ships, *Amsterdam* and *Utrecht* (A), and a Ternatean boat coming out towards the two ships to make enquiries (B). There are also references to military factors, like war galleys (C), and details like the head of a slain enemy suspended from a pole in the water (D).



Fig. 1. Panorama of Ternate, published in the account of the 'Second Voyage' under J. van Neck and W. Warwijck 1598-1600. After *Le second livre, journal ou comptoir*, 1609 (n. 14), pl. 15.

It is quite common that such depictions of coastal towns and roadsteads show, scattered upon the waters, a number of 'native craft'. Often these fulfill a background function to other and more significant aspects, giving a general impression of the everyday activities of townspeople or petty traders rather than conveying specific information (see Fig. 13). This, however, is not the case with the Ternate panorama (other than the two small sailing boats in the lagoon which are decorative elements). Here the fishing boats (T) actually do 'tell a story' of their own and illustrate information that is further explained in the accompanying text. What is more, they bear no intrinsic relation to the historical event or to significant matters like trade, diplomacy, customs relevant to interaction with the Ternate authorities, etc., except that they were observed at the time and for some reason aroused sufficient curiosity to have been included in the text and illustration. As such they represent a significant piece of ethnographic observation and record.

Among the boats is one illustrating a fishing technique which has been specific to Indonesian waters (and to the Moluccas in particular), to the Caroline Islands and parts of the Southwest Pacific, namely kite-fishing. In the latter part of the nineteenth century this fishing technique entered the purview of Western observers in these regions. Although descriptions were and are rare and sporadic they eventually added kite-fishing to the systematic and comparative study of fishing gear and methods.¹ This general background of documentation, as well as the fact that this is the earliest record of kite-fishing in European literature, and the most thorough specifically relating to Ternate, warrants a closer look at the source and what it communicates. Thus, the first two sections of this paper discuss the sources for the first Moluccas voyage, and they evaluate the ethnographic notes on kite-fishing within a wider comparative and chronological context.

Europe learned kite flying from Asia, and the plane kite became one of the 'precursors of aerodynamics and aviation'.² In whatever way we view kites today, around 1600 they were a relative novelty and not yet a familiar sight. In fact, the Ternate panorama seems to be not only the earliest source on kite-fishing, but also the very first depiction of a scene of plane kite flying in the European literature. The third section will turn, if only cursorily, to this historical context, including the question of why the activity of kite flying did not prompt any particular comment from the observer of 1599. As the account of the Dutch voyage entered compilations of voyages and discoveries, the Ternate panorama and its explanatory text eventually became part of the historical record and of the accumulating knowledge on the Moluccas. The fourth section of this paper will look briefly at selected

¹A. von Brandt, *Fish Catching Methods of the World*, 3rd edn, rev. and enl., Farnham, 1984, pp. 78 f.; Th. Monod, 'Contribution à l'établissement d'une classification fonctionelle des engins de pêche', *Bulletin du muséum national d'histoire naturelle*, 3^e sér., no. 156, 1973, pp. 213, 215 f.; H. H. Frese, 'The Classification of Fishing Gear', *Mededelingen van het Rijksmuseum voor Volkenkunde, Leiden*, 16, 1962, pp. 16 f.; J. A. Mauduit, *Manuel d'ethnographie*, Paris, 1960, p. 138; H. Major, *Salt water Fishing Tackle: the Complete Book of Equipment and its Use*, 3rd edn, New York, 1955, pp. 5 f.; T. W. Burdon, 'A Consideration of the Classification of Fishing Gear and Methods', *Proceedings of the Indo-Pacific Fisheries Council*, Sect. II/21, 1951, p. 157, www.apfic.org/Archive/techpapers/1951/12.pdf (last accessed 27 Febr. 2009); A. Leroi-Gourhan, *Évolution et techniques, II: milieu et techniques*, Paris, 1945 [repr. 1973, 1992, 2009], pp. 82, 84, 87; G. Montandon, *L'Ologenèse culturelle: traité d'ethnologie cyclo-culturelle et d'ergologie systématique*, Paris, 1934, pp. 244 ff.

² D. F. Lach, *Asia in the Making of Europe*, vol. II: *A Century of Wonder*, Chicago, etc., 1970-77, pt. 3, p. 403; E. A. De la Rüe, *L'homme et le vent*, 12^e édn, [Paris], 1951, pp. 174 f.; B. Laufer, *The Prehistory of Aviation*, Chicago, 1928, Field Museum of Natural History, Publ. 253, pp. 31 ff.

examples which provide an idea of how that particular knowledge of Ternate was carried forward. The last section continues in this way, looking at how our source entered modern scholarship, and at the curious chain of accidental errors that accompanied it.

The first Dutch voyage to the Moluccas

The first Dutch ships to reach the Moluccas belonged to a fleet of eight vessels, the so-called 'Second Voyage' to the East Indies before the formation of the VOC (1602). The fleet, under the command of Jacob van Neck and Wybrant Warwijck, departed in May 1598, reaching Banten (western Java) towards the end of that year. In January 1599, four ships under Jacob van Neck began their return journey, arriving back home in July. The remaining four ships under Wybrant Warwijck continued their eastward journey, arriving at Ambon (Hitu) in early March. A few days later, two ships under Jacob van Heemskerck continued to Banda where they stayed until early July 1599, eventually reaching the Netherlands in May 1600. The other two ships under Wybrant Warwijck remained at Ambon for about a month and then continued to Ternate where they stayed for three months (23 May to 19 August 1599). They were back in the Netherlands by the end of August 1600.³ During the three months a member of the crew observed and made a note of local fishing methods, and eventually this information made its way into the published record of the voyage. The author, or authors, of that record remain unknown.⁴

Naturally, interest in this voyage was considerable at the time. Commercially it was a success, and it was the first foray to those celebrated sources of nutmeg and clove – Banda, Ternate, and Ambon. News of the voyage found its way immediately into print, apparently as early as 1599 in the account of van Neck's journey to Banten and back,⁵ while the return of van Heemskerck and Warwijck from Banda and Ternate allowed the complete account of the 'Second Voyage' to become known.⁶ The full account, which included the Moluccan material, was published in 1600, followed by a second and expanded edition in 1601. English, French, German and, via German, Latin translations, appeared the same year. Further Dutch and foreign language editions followed throughout the course of the seventeenth and eighteenth centuries.⁷

³ The voyage has been fully documented in *De tweede schipvaart der Nederlanders naar Oost-Indië* onder Jacob Cornelisz. van Neck en Wybrant Warwijck, 1598-1600, ed. J. Keuning, 5 vols., 's-Gravenhage, 1938-51, Werken uitgegeven door de Linschoten-Vereeniging, 42, 44, 46, 48, 50. Keuning gives a summary chronology of the voyage in vol. 1, pp. xvii ff.

⁴ Tweede schipvaart (n. 3), vol. 3, pp. xlvii ff.

⁵ Dutch copies of that account are not extant but an English edn appeared in, so Keuning says, 1599, followed by a German edn in 1600 on which was based a Latin version in 1601. *Tweede schipvaart* (n. 3), vol. 2.

⁶ By the time Warwijck and his two ships were back in the Netherlands, van Neck had departed for eastern Asia again (28 June 1600), commanding six ships which were part of the 'Fourth Voyage'. On this voyage he made it as far as Ternate himself but it was an ill-fated visit: he lost 'the larger part' of his right hand in a battle with the Portuguese. He was back in the Netherlands three years later (July 1603). *De vierde schipvaart der Nederlanders naar Oost-Indië onder Jacob Wilkens en Jacob van Neck (1599-1604)*, ed. H. A. van Foreest & A. de Booy, 2 vols., 's-Gravenhage, 1980-81, Werken uitgegeven door de Linschoten-Vereeniging, 82 and 83, vol. 1 ('Inleiding'), pp. 92 ff.

⁷ On editions and translations see P. A. Tiele, *Mémoire bibliographique sur les journaux des navigateurs néerlandais*, Amsterdam, 1867, pp. 136 ff.; *Tweede schipvaart* (n. 3), vol. 5/2 ('Bibliografie van het Tweede Boeck'), pp. 205 ff.; D. F. Lach & E. J. Van Kley, *Asia in the Making of Europe*, vol. 3: *A Century of Advance*, Chicago, etc., 1993, pp. 439 ff.

A few comments may be in order to show how the material which is relevant here – the visual and textual information on fishing methods – appeared in the early prints.⁸ With regard to that particular material, all early editions are almost equally valid sources. There are some differences, but these pertain more to format rather than substance. That is, when the Moluccan materials arrived in the Netherlands, they went into print and stayed that way substantially unchanged, while publishers rearranged their position to a greater or lesser degree.

The first Dutch edition of 1600 was not available to me for inspection.⁹ However, this work was translated into German and published in 1601 by the brothers De Bry in their collection of East Indian voyages.¹⁰ This edition was in turn translated into Latin and published in 1601.¹¹ There is yet another German translation based, or mainly based, on the first Dutch edition of 1600, i.e. that published in the collection edited by Levinus Hulsius in 1602.¹² The second and expanded Dutch edition of 1601 is now easily accessible through the new edition by Keuning published in 1942.¹³ From it derive three more editions: a French edition (1601, republished in 1609),¹⁴ another in English (1601),¹⁵ and one in German (1601).¹⁶

With regard to visual information, the plates are differently executed but do not

¹⁰ Fünffter Theil der Orientalischen Indien [...], ed. J. Th. & J. I. de Bry, Franckfurt, 1601 (online edn, Universitätsbibliothek Marburg, 2010, http://archiv.ub.uni-marburg.de/eb/2010/0011/).

¹¹*Quinta pars Indiæ Orientalis* [...], ed. J. Th. & J. I. de Bry, Francofurti, 1601. Microfiche copy (Urbana, Fig.[1998]).

¹² Ander Schiffart in die Orientalischen Indien, so die Holländische Schiff [...] verrichtet, ed. L. Hulsius, 2nd edn, Franckfurt, 1605 [¹1602]. Cf. Tiele, *Mémoire* (n. 7), pp. 143 f.; *Tweede schipvaart* (n. 3), vol. 3, pp. xlvii- f., vol. 5/2, p. 207 ff. On the Hulsius edition as being based on the Dutch edition of 1600, Tiele adds the remark: 'Il paraît que Hulsius a au moins consulté la 2^e édition hollandaise (celle de 1601) ...'. Keuning also relates the De Bry and Hulsius translations to the Dutch 1600 edn, but implies in another remark that the De Bry edn would have been derived from the second Dutch edn of 1601. On the close relation of the De Brys and Hulsius and their publications see M. van Groesen, *The Representation of the Overseas World in the De Bry Collection of Voyages (1590-1634)*, Leiden, etc., 2008, p. 346 ff.

¹³*Het tweede Boeck, Journael oft Dagh-register* [...], Amstelredam, 1601, ed. J. Keuning, in *Tweede schipvaart* (n. 3), vol. 3, pp. 1 ff. Cf. Tiele, *Mémoire* (n. 7), 138 ff. and *Tweede schipvaart* (n. 3), vol. 5/2, pp. 206 f. ('Bibliografie van het Tweede Boeck'). Like the edn of 1600, that of 1601 was published by Cornelis Claesz in Amsterdam and by Barent Langhenes in Middelburgh.

¹⁴Le second livre, journal ou comptoir [...], 2nd edn, Amsterdam, 1609 [¹1601]; photocopy courtesy of the University Library Göttingen. Cf. Tiele, *Mémoire* (n. 7), pp. 138 ff., *Tweede schipvaart* (n. 3), vol. 5/2, pp. 206 f.

¹⁵ *The Ivornall, or Dayly Register* [...], London, 1601, online edn at EEBO/Early English Books Online; also as facs. repr., Amsterdam, etc., 1974. Keuning (*Tweede schipvaart* [n. 3], vol. 5/2, pp. 207, 210) derives this translation from the Dutch 1601 edn.

¹⁶ Das ander Buch, Journal oder Tagh-handelbuch [...], Arnhem, 1601; a copy of the Ternate panorama and the related text was provided courtesy of the University Library Munich. Cf. *Tweede schipvaart* (n. 3), vol. 5/2, p. 208.

⁸ For a general overview of the modifications made to the first Dutch edn of 1600 for the second expanded edn of 1601 see Tiele, *Mémoire* (n. 7), pp. 136 ff., and *Tweede schipvaart* (n. 3), vol. 3, pp. xliv ff.

⁹Copies are rare. Tiele, *Mémoire* (n. 7), p. 136 f., saw one but three-quarters of a century later its whereabouts was unknown to Keuning. The latter knew of two copies, one (Amsterdam, 1600) in the New York Public Library, and another (Middelburgh, 1600) in the State and University Library of Königsberg (now Kaliningrad). A photocopy of the edn in New York was sent to the Linschoten-Vereeniging but arrived too late, due to the war, for inclusion in Keuning's edition. *Tweede schipvaart* (n. 3), vol. 3, p. xlvii, vol. 5/2, p. 206.

deviate in what they represent. In the Dutch edition of 1600, as well as that of 1601, together with the French and German translations derived from the latter, the Ternate panorama is plate 15 (Fig. 1). The plates appear interspersed at appropriate places in the running text.¹⁷ Typographically set apart, captions accompany the plates, capital letters cross-referencing the caption to elements of the illustration (A to V in the case of the Ternate panorama). In the De Bry edition (1601) all plates are, characteristically for the De Bry collection of voyages,¹⁸ assembled into one block, together with captions, following the main text, the Ternate panorama appearing as plate 13. The difference in numbering indicates that De Bry had modified the illustrations to some degree, for example merging motifs from different original plates into one,¹⁹ but for the Ternate panorama this is not the case. If anything, the De Brys were more thorough than the engravers of the Dutch 1601 edition who forgot to add the cross-reference letter V to their illustration even though it figures in the caption (see Fig. 1).



Fig. 2. Panorama of Ternate, from the Hulsius edition of the 'Second Voyage', *Ander Schiffart in die Orientalischen Indien*, 1605 (n. 12), facing p. 101 (reproduction by University Library, Heidelberg 2011).

¹⁷ Tiele, *Mémoire* (n. 7), pp. 137, 139 f., lists the plates in the two Dutch edns. The English translation (1601, n. 15) gives captions of eighteen plates which correspond to the Dutch 1600 edn (there are twenty-four plates in the 1601 edn). The copies quoted in n. 15 give the captions but there are no illustrations. Keuning's statement (n. 15) needs a degree of reconsideration, but this is beyond the scope of this paper.

¹⁸ Van Groesen, Representation of the Overseas World (n. 12), p. 125.

¹⁹ A comparison of the Dutch original plates with those in the De Bry edition: van Groesen, *Representation of the Overseas World* (n. 12), p. 519; Tiele, *Mémoire* (n. 7), pp. 143 f.

The Hulsius edition (1605, n. 12) is a special case altogether. The plates are not numbered, the Ternate panorama appears facing page 101 (Fig. 2), and Hulsius muddled it completely, merging two plates plus a motif from a third. The panorama as such, original plate 15 (De Bry pl. 13), remains the basis, but into it, or rather into the lagoon, Hulsius squeezes the original plate 14 (De Bry pl. 14) showing the arrival of the Dutch ships at Ternate and their reception. The result is that the two Dutch ships are represented twice, one pair retained from plate 15 and the other from plate 14.²⁰ In addition, from the original plate 17 (De Bry pl. 16; c.f. Fig. 16, lower section), a Ternate galley is placed into the panorama so that no space is left for all the fishing boats, only one remaining in place. It reappears on the title page (Fig. 3), into which two more boats are introduced, while three of the original boats disappear altogether. Accidentally, by this means, the kite-fishing depiction now receives a prominent position. However, in spite of this reshuffling, and although the fishing boats may not be so carefully executed, the core of the visual information is still there.



Fig. 3. Title page of the Hulsius edition of the 'Second Voyage'. Note the three fishing boats moved here from the original Ternate panorama (Fig. 1, T).

²⁰ Admittedly, one pair of ships is only partially visible at the margin on the right, but this does not alter the impression of there being four ships altogether.

When comparing captions to the Ternate panorama there is a characteristic difference in format between the Dutch edition of 1601 (and those derived from it) and the De Bry edition. The former has two types of caption: the 'short' and the 'long'.²¹ But this distinction raises the wrong expectations. Of the twenty captions marked by letters A to V, the short and long captions are identical or near identical in twelve cases,²² and one cannot avoid the impression that in other cases the short captions were deliberately 'shortened' to escape complete redundancy. The De Bry edition has only one kind of caption, and of these sixteen are almost identical (allowing for some stylistic variation) with the 'long captions' of the above mentioned group of 1601 editions.²³ It is, in fact, only with regard to letter T, the fishing methods, that the distinction makes good sense, the short caption being truly short (4 words), and the long caption truly extended $(224 \text{ words})^{24}$ to become by far the longest of all. The De Bry edition has the short caption only but adds that a 'clearer' explanation is to be found in the main text ('davon in der History klärlich zu lesen'). There, among the descriptive materials on Ternate, the relevant passage is clearly and helpfully marked by a marginal subheading which repeats the 'short caption' to the plate.²⁵ However, beyond these editorial variations there is no basic difference in the information on fishing methods which the texts convey to a reader.

This is also true, allowing for some leeway, in the case of the Hulsius edition (1605, n. 12). As a consequence of alterations to the illustration, Hulsius also changed the reference letters (fishing methods are now letter R). Since he did not include a caption, a list of letters with explanations ('short captions') is included within the main text (pp. 94–5). However, in the text containing the descriptive material on Ternate there also appears a pertinent marginal subheading relative to fishing methods ('Wie sie Fisch fangen') and a full explanation (pp. 97–8). A reference to the letter R of the illustration is included which would not take a reader very far since in the illustration he would find only one boat left, which leaves most of the explanations without visual reference as the intrinsic connection between the title page and the Ternate panorama remains opaque. Even so, when everything is pieced together, most of the substance is still there.

Kite-fishing

Kite-fishing gear involves a kite and cordage, the first length of which serves as a kite-line and the second as a combined tail and fishing line. At the end of the latter is attached a lure, usually, and according to region, consisting of a baited running noose or a wad of spider-web

²¹ 'Beschryvinghe' and 'breeder beschryvinge' (*Tweede Boeck*, n. 13), or 'description' and 'description plus claire' (*Second livre*, n. 14). The English edn (n. 15) has the 'long captions' only.

²² Identical: C, F, G, I, K, M, O, P, S; near identical: A, D, L.

²³ Identical: A, B, C, E, F, G, H, I, K, L, M, O, P, R, S, V. A borderline case is D: it is about a pole from which the Ternateans hung the head of an enemy. The long caption adds the detail of how exactly the rope was fastened to the head. Cases where the long captions add elements to De Bry are N (residence of the king's interpreter, the long caption adding that he was a Chinese who spoke Portuguese well), and Q (island of Tidore, the long caption adding that it was occupied by the Portuguese and that it is a great enemy of Ternate, facts also included in the running text). I have specifically compared the De Bry edition (n. 10) with the German language version of the Dutch 1601 edn (n. 16) for remaining within the same language.

²⁴ Thus in the German translation of the Dutch 1601 edn (n. 16).

²⁵ Main text p. 52, marginal subheading: 'Wie sie ihre Fische fange'; caption to plate 13: 'T. Bedeut wie sie ihre Fische fangen [...]'. *Fünffter Theil* (n. 10).

(cf. Figs 4, 11, 14, 17). Fishing is carried out from a boat, involving one or two people for paddling, flying the kite and hauling in the line when a fish is caught. The method may seem unusual but it is one traditionally found in the Indonesian archipelago, the Southwest Pacific and in Micronesia.²⁶ As a rule it is documented for, and seems indeed to have been specific to particular localities, not practised in their neighbourhoods and not being a common method – such as spear fishing or the use of nets – widespread throughout entire regions.²⁷ It is also a rather specialised method targeting one particular kind of fish, i.e. certain members of the needlefish family (*Belonidae* spp.).



Fig. 4.1. Moluccan kite-fishing: 1599, Ternate (detail from Fig. 1). From the 'long caption': 'en haut du *roseau* font un *trou*, par lequel font caller une *corde*, & au bout il y a un croc, & un peu plus haut *une fueille*' (italics SD).

Given that kite-fishing was not a commonly encountered method; that in economic terms it was of peripheral significance (more for subsistence needs than for the production of a marketable commodity); that it was not self-explanatory;²⁸ and that it was often restricted to a particular season, its documentation was highly dependent on the right person being at the right place at the right time. It needed someone to see it, to develop an active curiosity (why is someone flying a kite out at sea?), to appreciate what was being seen rather than dismissing it as child's play, and to observe and describe it for publication. Thus, the ethnographic

²⁶ The classic studies of the method are H. Balfour, 'Kite-fishing', in E. C. Quiggin, ed., *Essays and Studies presented to William Ridgeway* [...] *on his Sixtieth Birthday, 6 August 1913*, Cambridge, 1913, pp. 583 ff.; H. Plischke, *Der Fischdrachen*, Leipzig, 1922, Veröffentlichungen des Städtischen Museums für Völkerkunde zu Leipzig, 6; B. Anell, *Contribution to the History of Fishing in the Southern Seas*, Uppsala, 1955, ch. 4. For a recent update, discussion and history see G. Barton & S. Dietrich, *'This Ingenious and Singular Apparatus': Fishing Kites of the Indo-Pacific*, Norderstedt, 2010. For the generalisations that follow I draw mostly from the latter publication.

²⁷ Cf. D. Vermonden, 'Reproduction and Development of Expertise within Communities of Practice: A Case Study of Fishing Activities in south Buton (southeast Sulawesi, Indonesia)', in S. Heckler, ed., *Landscape, Process and Power*, New York, etc., 2009, pp. 209 f.

²⁸ One survey of fishing in the Netherlands Indies, after giving a description of kite-fishing, goes on to mention other gear like spears, barbed arrows or harpoons but dismisses further description: 'L'emploi n'a pas besoin d'être expliqué'. S. C. J. W. van Musschenbroek, 'Moyens d'existence: chasse et pêche', in *Catalogue de la section des colonies néerlandaises à l'Exposition internationale coloniale et d'exportation générale, tenue du 1 mai au 31 octobre 1883, à Amsterdam*, Leyde, 1883, Groupe II, p. 104.

record is uneven and intermittent, beginning in the nineteenth century with that of Caspar Reinwardt and leading to a somewhat more complete picture only by the late twentieth century.²⁹

It seems all the more remarkable therefore, that in 1599 an anonymous member of a Dutch voyage should observe and describe the practice, and that it found its way into an illustration of the voyage (Fig. 4.1). The textual information accompanying the illustration, the 'long caption' or paragraph of the running text, depending on the edition, reads as follows:

T. Is their manner of fishing for great fishe: first, they catch some small fishe with a little casting net, then setting a long cane right an ende in the foreparte of the boate, in the ende whereof they make a hoale, thorowe which is put a long rope or corde, and in the ende of the corde is fastened a fishe hooke, with a leafe over it, that thereby the line may drive with the winde, then one that sitteth behinde casteth out his small fishe towards the hooke, which they keepe hanging close aboue the water, whereby they deceive the great fishe, and so with the hooke take them.³⁰

The description is up to the standard of many modern accounts. It neatly mentions two details typical of Indonesian waters: the single-leaf kite and the pole. In various localities (among them the Thousand Islands, Bawean and Ambon), fishing kites were directly derived from a single plant leaf, without any, or sometimes just one, further constructive element: a strengthening of the central axis. A typical plant providing a 'ready grown kite' was and is the Oak Leaf Fern (Drynaria quercifolia, J. Smith; see Fig. 12), and as such it was also reported relative to Ambon and Seram in the second half of the seventeenth century by Rumphius.³¹ The other detail, the use of a pole for flying the kite rather than flying it from the hand, has also been documented in recent ethnographic observations. This method often accompanies the use of a single leaf kite. A minor but precise detail is the hole at the tip of the pole, mentioned in the above quotation. This is also described in modern sources, and an example of such a pole with a hole consisting of an attached stone ring (provenance: 'Moluccas') has been preserved in the Tropen Museum, Amsterdam.³² Something ambiguously described and thus only vaguely captured in the illustration is the position of the leaf kite along the total length of the line. The text says that the leaf is 'over' a hook which is fastened, of course, at the end of the line. This is indeed what the artist literally depicted, but if one imagines the fishing kite at a somewhat higher altitude, the leaf would still be 'over' the hook but would sit more in the middle section of the length of cord between the tip of the pole and the hook, as is depicted in a modern drawing of kite-fishing in Banda (Fig. 4.2).

²⁹ See Barton & Dietrich, '*Ingenious and Singular Apparatus*' (n. 26). Unavailable, for example, at the time of finishing this book was a most recent addition to the distribution map: Vermonden, 'Reproduction and development' (n. 27), on Buton.

³⁰ English edn of 1601 (n. 15), p. 49. It is convenient to quote this language version; the orthography is the original one.

³¹G. E. Rumphius, *Herbarium Amboinense* [...], 6 vols., Amsterdam, 1741-50 (online edn SUB Göttingen 2003, http://resolver.sub.uni-goettingen.de/purl?PPN369547365), vol. 6, pp. 79, 81. Within Indonesia, complex fishing kites with sails put together from a number of leaf strips and fixed onto a frame were restricted to the islands in the south-east (Babar, Solor-Alor Islands) (Fig. 14).

³² Barton & Dietrich, 'Ingenious and Singular Apparatus' (n. 26), p. 150 and Fig. 1.12.

A debatable feature is the use of a hook and the method of 'chumming' (attracting fish by throwing live bait fish). It seems to me that in this case two different methods became mixed or merged into a single picture: kite-fishing for needlefish and angling for skipjack (bonito/tuna). In the Moluccas chumming, in the case of the latter, is an old and well-established method, whereas for kite-fishing it would be a singular exception. Ethnographic descriptions almost all agree that in the Moluccas either a baited noose (Fig. 4.2) or a spider-web lure was used.³³ Perhaps the lapse of time between observations taken on the spot and their commitment to text and illustration resulted in the two fish-catching methods becoming confused.



Fig. 4.2. Moluccan kite-fishing: 1899, Banda. From the running text: 'une *gaule*, dont une extrémité porte un *anneau* "a" par lequel passe la *ligne* que l'on fixe au *cerf-volant* "b". Ce dernier consiste [...] en *une feuille* longue et étroite' (italics SD). After Weber, *Introduction et description de l'expédition* (n. 38), p. 61. In place of a fishing hook Weber clearly depicts a baited noose. As in Fig. 4.1, the lure is at just about the surface of the water, the typical region where needlefish are hunting for prey.

The chumming described in the text relates, however, to four of the other fishing boats in the illustration (Fig. 1). The text neatly describes how live bait fish are obtained: with cast nets and scoop nets. While the English translation quoted above mentions only a cast net (as does the French translation, n. 14, p. 19), the second Dutch and the German editions of De Bry and Hulsius mention both ('schepnet off worpnet', n. 13, p. 122). My interpretation is that the use of the scoop net is illustrated by the two fishing boats to the right, while the third and fourth boat demonstrate the cast net, each type of net being shown at a different stage in the process (for example, the cast net as it is being cast and then hauled in).³⁴ The boats with nets therefore indicate two fishing methods in their own right, yet the text integrates them into an operational sequence which, from the ethnographic record, is traditional and

³³ This is not the place for a detailed ethnohistorical discussion. For lure types in kite-fishing see Barton & Dietrich, *'Ingenious and Singular Apparatus'* (n. 26).

³⁴ For a characteristic narrative element repeatedly encountered in De Bry engravings see van Groenen, *Representation of the Overseas World* (n. 12), p. 124.

particularly elaborate in the Moluccas,³⁵ namely angling for skipjack with pole, line and hook, preceded by live bait fish catching with, for example, a 'schepnetje' (scoop nets and relatively small cast nets were typically used for catching small fish).³⁶ However, kite-fishing, which makes use of a running noose, also needs small bait fish (Fig. 4.2). In northwestern Bali those who intended to carry out kite-fishing first caught their bait fish with cast nets.³⁷

Max Weber, the marine biologist, had seen kite-fishing at various Indonesian locations – Talaud, Ternate, Banda and Geser – during the famous Siboga Expedition of 1899-1900, exclaiming: 'Combien est limité l'esprit d'invention de nos pêcheurs, comparativement à celui des indigènes de l'Archipel!'³⁸ Interestingly, our observer of 1599 does not seem to have been particularly struck by what he saw as being anything odd, curious or exotic, although he did find it worth recording. The one thing that he did find astonishing was the clarity of the sea water. Following the description of kite-fishing there is a description of catching fish with ground traps. It is again a good observation: a trap is fixed to the sea bed, and after some time the fishermen return to the spot in their boat, look down to see whether there are any fish in the trap, and if so one of them dives down to bring it up.³⁹ This situation, that of being on the lookout for trap content, might well be represented by the fishing boat at the extreme left of the panorama whose occupants do not seem to be pursuing any particular activity (Fig. 1). The description as such is straightforward, but in this case the reporter foresaw doubts over the reliability of his report:

Here might be objeckted by some, how it might be possible that they should see and discerne 15. 16. or 17. fathome deepe whether there were any fishe in the baskets or not, let this suffise for an answere, that the water is there so cleere, that a man may out of the ship see the anchors very plainely as they lye in the water, and easily beholde multitudes of fishes swimming, yea in the very bottome of the sea, as manifestlie as if it were but a foote deepe.⁴⁰

The odd and exotic aspect was apparently not kite-fishing (as has been the case with most nineteenth and early twentieth century observers) but the stunning clarity of the waters, perhaps in comparison with the sandy, green North Sea waters.

In all, we may only speculate on how our observer of 1599 perceived kite-fishing,

³⁵ J. G. Butcher, *The Closing of the Frontier: a History of the Marine Fisheries of Southeast Asia c. 1850-2000*, Singapore, 2004, p. 45.

³⁶ H. E. Haak, 'Memorie van overgave van de onderafdeeling Ambon', in Ch. F. van Fraassen, ed., *Bronnen betreffende de Midden-Molukken 1900-1942 (dl. 3)*, Den Haag, 1997, p. 202.

³⁷ Thus described by Th. van der Paardt, 'Onbewoond noord-west Bali', *Tijdschrift van het Koninklijk Nederlandsch Aardrijkskundig Genootschap*, 2^e ser., 46, 1929, p. 58. In this area, kite-fishing was not carried out from a boat, but on foot along a reef.

³⁸ M. Weber, *Introduction et description de l'expédition*, Siboga-Expeditie, Monographie I, livr. 3, Leiden, 1902, p. 61. At exactly this time, around 1900, kite-fishing was in the process of being re-invented (inspired by Pacific precedents, one presumes) as a sport in the USA and Britain; see B. Dunn & P. Goadby, *Saltwater Game Fishes of the World*, South Croydon, 2000, pp. 200 f.; Balfour, 'Kite-fishing' (n. 26), pp. 605 f.

³⁹ See, for example, the English translation (n. 15), p. 49, or the Dutch edition 1601 (n. 13), p. 122. These are the *bubu tanam* of Moluccan ethnography; see, for example, 'Zeevisscherijen langs de kusten der eilanden van Nederlandsch-Indië, VI: Moluksche archipel', *Tijdschrift voor Nijverheid en Landbouw in Nederlandsch-Indië*, 26, 1882, pp. 342 f.

⁴⁰ English translation (n. 15), pp. 49 f.; Dutch edn of 1601 (n. 13), p. 122.

what he saw in it, and how he related it to what was familiar to him (among which, it seems, was a notion of the sea being muddy). Perhaps he saw it merely as a type of line fishing, nothing spectacular, but worth reporting because of the unfamiliar leaf at the line. The word 'kite' is not used in the text, and one may wonder whether our observer was at all aware of the fact that he did see a 'kite'.

Kite flying

In addition to kite-fishing the Ternate panorama also offers the earliest depiction in European sources of flying a plane kite. Plane kites were a novelty of eastern Asian origin which came to Europe in the late sixteenth and early seventeenth centuries in connection with the intensified contacts of that period.⁴¹ The first illustration of kite flying in a European setting appears in a plate accompanying a poem by Jacob Cats, published in 1618, showing a town square in the Netherlands with children playing, one of whom is flying a kite of the diamond-shaped type familiar today (Fig. 5).⁴²



Fig. 5. Depiction of a town square, 1618, after Cats, Silenus Alcibiadis (n. 42), pt. 2, p. 106.

In 1619, another illustration of plane kite flying appeared in a work by Robert Fludd. The scene is more abstract, showing a man flying a kite without a tail, set in the context of a

⁴¹Lach, Asia (n. 2), pt. 3, p. 403. On the history of the plane kite see H. Plischke, 'Alter und Herkunft des europäischen Flächendrachens', in Nachrichten von der Gesellschaft der Wissenschaften zu Göttingen, Philologisch-historische Klasse, N.F., Fachgruppe II, 2. Band, 1936-39, Göttingen, 1939, pp. 1 ff.; C. Hart, Kites: an Historical Survey, rev. and exp. edn, Mount Vernon, 1982; J. Needham & W. Ling, Science and Civilisation in China, 4: Physics and Physical Technology, pt. 2: Mechanical Engineering, Cambridge, 1965, pp. 568 ff. See also the discussion and sources in Barton & Dietrich, 'Ingenious and Singular Apparatus' (n. 26), pp. 233 ff.

⁴² J. Cats, *Silenus Alcibiadis, sive Proteus* [...], Middelburg, 1618, pt. 2, after p. 106 (digital edn at www.archive.org). See also the online version at http://emblems.let.uu.nl/c1618.html (last accessed 24 May 2008); H. Luijten, *Jacob Cats: Sinne- en minnebeelden*, vol. 3, Den Haag, 1996, Monumenta Literaria Neerlandica, IX/3, pp. 72, 256.

typical coastal landscape (Fig. 6).⁴³ The generic character of the illustration, rather than showing a 'real-life scene', is apposite to the context, which is one of esoteric philosophy and science, and not one of childrens' games or moral instruction. Subsequently, from the 1630s onwards, kite illustrations became more frequent (Fig. 7 is an example of 1640).



Fig. 6. Flying a plane kite, as depicted by R. Fludd in 1619, Tomus secundus De supernaturali (n. 43), p. 139.



Fig. 7. Allegorical illustration, 1640, to a poem in a history of the Jesuit Order in the Low Countries, after *Af*-Beeldinghe van d'Eerste Eeuw (n. 56), p. 396.

The first textual reference to a plane kite appears about a half-century earlier in Giambattista della Porta's *Magia naturalis* (1560).⁴⁴ Della Porta does describe a kite with

⁴³C. Hart, 'Early European Kites', *Notes and Queries for Readers and Writers, Collectors and Librarians*, 28/3, 1981, p. 245 (http://nq.oxfordjournals.org, last accessed 6 Sept. 2010); R. Fludd, [*Utriusque cosmi maioris scilicet et minoris metaphysica, physica atque technica historia,*] *Tomus secundus De supernaturali, naturali, praeternaturali et contranaturali microcosmi historia*, Oppenheim, 1619 (online edn SLUB Dresden 2008, http://digital.slub-dresden.de/ppn277598370), p. 138 (text) and 139 (plate).

⁴⁴G. della Porta, *Magia naturalis sive de miraculi rerum naturalium libri IIII*, Antwerpen, 1560, bk. 2, ch. 14. In the expanded and revised edn of 1589 (and reprints): bk. 20, ch. 10; cf. Hart, *Kites* (n. 41), pp. 84 ff.

frame and a sail of paper or thin fabric, but overall his exposition remains 'somewhat ambiguous'.⁴⁵ Also, he partly perpetuated what may be briefly referred to as the *draco volans* concept which has an older European history than that of the plane kite. The notion of *draco volans* applies on the one hand to a mysterious appearance – an atmospheric phenomenon often considered a bad omen – characterised by John Swan as a 'fierie exhalation' and which was often described as being dragon-shaped.⁴⁶ On the other hand it refers to various mechanical flying devices, usually designed as a dragon and regularly associated with fire (Fig. 8).



Fig. 8. The early European idea of a 'flying dragon' (*draco volans*), c.1490. After Feldhaus, *Technik der Vorzeit* (n. 89), 1st edn, 1914, Abb. 449.

These devices remain obscure. They might relate to three-dimensional pennons or aerostats, or they might equally represent varieties of 'pseudotechnical imagination'.⁴⁷ The earlier notion of the *draco volans*, with its elements of appearing in the air and of a mysterious light or fire (the 'fierie exhalation'), tended to become associated with the kite when it became known in Europe. This tendency manifested itself by suggestions of, for example, a kite designed like a dragon, by using dragon-shaped figures in connection with pyrotechnic effects, or by combining kites and fireworks, to delight the knowledgeable (who understood the artifice behind the effect) and cause wonder and awe in the ignorant (who mistook the artifice for a real and ominous *draco volans*). This style is also apparent in Della Porta's work, and it continued well into the seventeenth century and beyond (Fig. 9).⁴⁸ It persists

⁴⁶ J. Swan, *Speculum mundi* [...], s.l., 1635 (online ed. at EEBO, http://gateway.proquest.com/openurl? ctx_ver=Z39.88-2003&res_id=xri:eebo&rft_id=xri:eebo:citation:99853252), p. 93; on this notion see S. K. Heninger, Jr., *A Handbook of Renaissance Meteorology*, Durham 1960, pp. 91 ff.; S. Werrett, *Fireworks: Pyrotechnic Arts and Sciences in European History*, Chicago, etc., 2010, pp. 51 ff.

⁴⁷ U. Lindgren, 'Technische Enzyklopädien des Spätmittelalters: Was ist daran technisch?', pp. 13, 15 f. and E. Berninger, 'Die technischen Handschriften des 15. Jahrhunderts in der Bayerischen Staatsbibliothek München', p. 80, both in *Konrad Kyeser, Bellifortis Clm 30150*, München, 2000; here the term 'pseudotechnical utopia' is used. In *Bellifortis* [1405], vol. 2, Düsseldorf, 1967, pp. 78 f., the editor G. Quarg refers to the devices as 'typical imaginary construction ideas'. Needham & Ling, *Science and Civilization* (n. 41), p. 597, seem to put it mildly by saying that 'it is rather difficult to evaluate' these constructions.

⁴⁸ Werrett, *Fireworks* (n. 46), pp. 47 ff.; Hart, *Kites* (n. 41), p. 82; Barton & Dietrich, *'Ingenious and Singular Apparatus'* (n. 26), p. 239. The late eighteenth-century example is from M. Guyot, *Nouvelles récréations physiques et mathématiques* [...], 3^e éd. augm., vol. 2, Paris, 1786 [Nouv. édn, Paris, 1799], pp. 326 f., pl. 44 (fig. 5).

⁴⁵ Hart, Kites (n. 41), p. 84.

linguistically, for example, in the German and Spanish words for kite: Drachen and cometa.49



Fig. 9. The plane kite and the 'flying dragon' combined, late eighteenth century, after Guyot, *Nouvelles récréations* (n. 48), pl. 44, fig. 5. A plane kite lifts the dragon figure. Those who cannot see the former but only the latter 'seront étrangement surpris'.

Before this background of spectacle and wonder, the kite in Cats's work seems altogether mundane – one of many children's games – even though it would have been a relative novelty at that time. Fludd's kite appears in a very specific context, that of esoteric philosophy, but the kite as such does not seem to share in this esoteric aspect, nor does it appear as an everyday object. The common hypothesis is that kite flying, through contacts with the East, first took root in the Netherlands and England, and from there spread to other parts of Europe.⁵⁰ Again linguistics gives us a hint. Fludd calls the kite 'artificial kite' (*milvus fictitius*), using the common name for the kite as 'bird-of-prey'. The use of the bird name for a device is usually explained as a borrowed translation from Chinese, which also uses the bird name for the flying device, the designation of which translates literally as 'paper kite [bird]' (*zhi yuan*).⁵¹ In fact, Chinese is just one candidate since other South-East Asian languages also name the kite/device after the kite/bird-of-prey (Fig. 10).⁵² Cats uses the common Dutch and very much matter-of-fact name 'vlieger' ('vliegher van papier'), literally 'the flying [one]'.⁵³ Another route by which kites as devices became known in Europe must have been

⁴⁹ Della Porta uses both words for the same thing ('Draco volans, vel cometae [...]', n. 44). See also S. Stubelius, *Balloon, Flying-machine, Helicopter: Further Studies in the History of Terms for Aircraft in English*, Lund, 1960, Acta Universitatis Gothoburgensis, vol. 66/5, pp. 102 f.

⁵⁰ See Plischke, 'Alter und Herkunft' (n. 41).

⁵¹Needham & Ling, Science and Civilization (n. 41), p. 580; Stubelius, Balloon (n. 49), pp. 99-100.

⁵² E. Porée-Maspero, *Étude sur les rites agraires des cambodgiens*, 3 vols., Paris, etc., 1962-69, vol. 2, pp. 480 ff.

⁵³ Although the name is so much matter-of-fact, in a footnote one may speculate on another possibility, along the lines of the English 'kite'. In Malay the kite/device is called *lelayang* or *layang-layang*. This derives from the root *layang*, to fly, float in the air without moving the wings (bird). Thus *layang-layang* would be something like 'floating (in the air)', 'the flying (one)', or 'vlieger'. Ultimately *layang* seems to derive, or be related to, the word *elang/lang*, referring to various birds-of-prey, including the kite/bird. Porée-Maspero, *Études sur les rites* (n. 52), vol. 2, p. 482; *Kamus Besar Bahasa Indonesia*, 2nd edn, 4th pr., Jakarta, 1995; J. M.

through Iberian relations with eastern Asia. Della Porta (1560) might have taken his inspiration from Iberian sources, but his work does not seem to have had far reaching effects, except, to some degree, in Germany.⁵⁴



Fig. 10. Three Cambodian kites (left to right): *Klèn bau, Klèn kantón* and *Klèn kón măn*. After Porée-Maspero, *Étude sur les rites* (n. 52), vol. 2, fig. 7. *Klèn* means 'kite (bird)'. The *klèn kantón*, always without tail, is specifically a kite for children's games.

The Ternate panorama with its kite was published in 1600 at a time when kites were becoming popular in the Netherlands. Whether our observer at Ternate in 1599 was already familar with them, we cannot know. On the one hand, he did not use the word 'vlieger', which might suggest that it was still something alien to him, or he had no word to describe what he saw and therefore could not see it for what it was, so that his description had to be an indirect one. On the other hand, he might well have known of kites but did not make the connection between what he knew at home and what he saw at Ternate. This latter possibility

Echols & H. Shadily, An Indonesian-English Dictionary, 2nd edn, Jakarta, 1980, s.v.

⁵⁴ Lach speculates (*Asia* [n. 2], p. 403) that Della Porta 'saw Asian kites that the curious had brought back to Europe'. One route by which a report of kite-like devices arrived in Iberian circles may be the following. In 1604 Fr. Gabriel Quiroga de San Antonio published in Valladolid a treatise on Cambodia which mentions kite flying ('papagayos echos de papel'), especially of musical kites. The friar had never been to Cambodia but spent his time in Manila and Malacca in 1595-1600. However, in Manila he met Portuguese and Spaniards who had been resident in the Cambodian capital since the early 1590s, and they may have spoken of this detail. *Brève et véridique relation des événements du Cambodge par Gabriel Quiroga de San Antonio*, ed. and tr. A. Cabaton, Paris, 1914, pp. 7, 98 f.; S. Subrahmanyam, 'Manila, Melaka, Mylapore ...: A Dominican Voyage through the Indies, ca. 1600', *Archipel*, 57, 1999, pp. 223 ff. The channels through which Della Porta heard about kites might have been of this kind. The Cambodian musical kite, making civilized use of a chord, may then have inspired Della Porta to suggest his own rude variant for achieving an acoustic effect (binding whelps or kittens to a kite whose fearful cries would be heard below). *Papagaio* is also the current word for kite/device in Portuguese. Especially with regard to southern Europe, the connections with the Middle East, where kite-flying had been known at an early date, tend to be neglected by historians (Plischke, 'Alter und Herkunft' [n. 41], pp. 2 and 16; Hart, *Kites* [n. 41], p. 31 f.). This aspect cannot be pursued here.

is just as likely, and it would be understandable that our observer did not introduce the object he saw as a kite, and that contemporary readers did not recognise it as such.

In Cats's poem accompanying the illustration of childrens' games, the kite stands for vain ambition, and the characteristic which is underlined is that it rises 'almost to the sky'.⁵⁵ The astonishing thing was that an artificial physical object, which under normal conditions should fall to the ground, does in fact soar upwards and is capable of reaching remarkable altitudes.⁵⁶ On the whole, I suggest that this is still reflected in our present standard image of what a kite is: a device consisting of a substantial sail, sailing stately at high altitude above the person controlling it. Nowadays we especially admire the artistic manipulation of the kite in kite fighting. The 'standard image' usually evokes the kite flying of East Asia, South and South-East Asia (Fig. 10), and Polynesia definitely fits this image as well.⁵⁷



Fig. 11. Kite-fishing off Pitilu (Admiralty Islands) as photographed in 1908 by H. Vogel of the Hamburg Südsee Expedition. After H. Nevermann, *Admiralitäts-Inseln*, Hamburg, 1934, Taf. 10. The kite is a single-leaf kite, similar in type to the one used in Banda (Fig. 4.2). It can be recognised in the upper left part of the picture. Just about visible are the kite and fishing lines, leading at oblique angles to the dugout and the sea respectively.

Fishing kites are somewhat different and possess different flying characteristics. Some bear all the marks of the 'proper kite' - a frame with a sail fixed onto it (even if the

⁵⁷ Take, for example, this description for Mangaia: 'Kites were usually five feet in length, covered with native cloth, on which were the devices appropriate to their tribe, – a sort of heraldry. The tail was twenty fathoms in length, ornamented with a bunch of feathers and abundance of sere *ti* [*sic*] leaves. Parties were got up of not less than ten kite-flyers; the point of honor being that the kite should fly high, and be lost to view in the clouds'. W. W. Gill, *Historical Sketches of Savage Life in Polynesia*, Wellington, 1880, p. 18.

⁵⁵ 'Let op de vliegher van papier, gheresen tot den hemel schier'. Cats, *Silenus Alcibiadis* (n. 42), p. 108.

⁵⁶ A Catholic moral poem for a kite-flying illustration (Fig. 7) of the same period puts it like this: 'En laet hem [vliegher] schieten wel soo hoogh, Dat bouen hem noyt voghel vloogh: Dan siet hy sijnen vlieger gaen, veel hoogher als de torens staen'. The moral lesson for the Jesuit authors is just the opposite of that of Cats: achievement under adverse conditions ('Ghy die de Compagnie beschimpt, Ghy gheeft haer windt daer sy mé klimt'). *Af-Beeldinghe van d'Eerste Eeuw der Societeyt Iesu*, Antwerpen, 1640, pp. 396. Fludd remarks on the kite: '... videbimus ventum machinam illam satis gravem facilimè in altum attollere' (*Tomus secundus De sepernaturali* [n. 43], p. 138; see Fig. 6).

materials are simple) – which can reach considerable altitudes (Fig. 11).⁵⁸ The single-leaf kite, as it was observed in 1599 and in later centuries, is quite different. Its small size and its form create certain problems with lift and flight stability. It does not reach a high altitude and its flight is characterised by jerky and erratic movements, suddenly dipping and soaring again, and jumping to right and left: more a plaything of the wind than something cleverly controlled by man.⁵⁹ In this context, the pole is important for it helps keep the leaf kite at an altitude which corresponds roughly to the length of the pole (which would be relatively long: about three to six metres). Also, the total line length is considerably shorter than for other types of kite, which allows some degree of control. Admittedly, the single-leaf kite does not look like a 'standard kite' (Fig. 12) in flight, and even less so in a still photograph, yet a kite it is.



Fig. 12. Thousand Islands (Kepulauan Seribu), early twentieth century. A single-leaf fishing kite made from a leaf of the Oak Leaf Fern, after Balfour, 'Kite-fishing' (n. 26), fig. 2. Note the running noose for catching fish (cf. Fig. 4.2).

Also, it would be quite mistaken to see in it a 'proto-form' or 'primitive kite', the precursor of 'proper kites'. In a general way, this is more a prejudice originating in preconceived notions because we cannot arrange the different kite types into any historical or developmental sequence. More specifically, the jerky flight of the leaf kite is not the result of deficiencies in, or ignorance about, construction (which would later be overcome), because the jerkiness is intended. It keeps the lure in motion without the necessity for moving the pole

⁵⁸ In the Santa Cruz Islands, the ethnographer estimated an average altitude of 10-20 m and a total line length of 40-50 m. G. Koch, *Materielle Kultur der Santa Cruz-Inseln*, Berlin, 1971, Veröffentlichungen des Museums für Völkerkunde Berlin, N.F., 21, Abt. Südsee IX, p. 39. See G. Koch, *Fischfang im Santa-Cruz-Archipel (Riff-Inseln)*, Göttingen, 1971 [brochure to film D 1013, IWF] for brief but excellent film material of kite-fishing.

⁵⁹ The best film recording of flying a single-leaf kite of which I am aware is a short sequence by Dr Ivan Polunin on kite-fishing from the Johore Causeway at Singapore in the late 1950s or early 1960s. It is unpublished, and I wish to express my gratitude to Ms Yvonne Tan for making this sequence accessible to my colleague G. Barton and myself.

to and fro, while the jerky movements of the lure attract the fish. In other words, in the technical process of making a device adapted to a particular target, the 'simple' kite is simply perfect. In addition, in the process of fishing, the kite is exposed to wear and tear and eventually breaks,⁶⁰ so it would make little sense to expose an elaborate and artistic kite to such conditions. Thus the identification of a suitable leaf (not just any will do) from a plant which grows naturally makes optimal use of environmental resources for a specific technical use. The possibility cannot be excluded from first principles that the 'simple' fishing kite is a secondary, specialised adaptation that developed from more complex or 'proper kites'.

Such considerations do not alter the fact that single-leaf kites may not be recognised as 'proper kites'. Next to the flying characteristics – 'majestic versus jumpy' and 'high versus low altitude' – another relevant aspect which made identification as a kite difficult would have been that not many European observers would expect to find a 'kite' in the context of fishing,⁶¹ and that it is flown in the wrong way (with a pole and not from the hand). As in 1599, one nineteenth-century observer simply mentioned 'a leaf of a tree' in his description of kite-fishing.⁶² Another wrote that the leaf is 'like a kite',⁶³ while some decades later the same kind of device was described simply as a 'leaf kite'.64 All three recognised the important effect the kite had, namely that it caused the lure to dance, jump or play on the surface of the water. In the seventeenth century, Rumphius mentions single-leaf kites (see above). He speaks of 'kite' ('vlieger') in the context of the toy kites made by children in Java and elsewhere. What might have helped was that he recorded the name of the said leaf as daun layang-layang (literally 'kite leaf'), which immediately clarifies its use: 'to make a *layang*, that is a kite', as Rumphius explains. He also saw kite-fishing at Ambon and Seram, but on this occasion he does not use the word 'vlieger', nor, as far as I could make out, is such a meaning implied in the local names he quotes. Rather he uses the expression that the leaf 'flies like a little sail'.⁶⁵ What this suggests is of course not a systematic change over time in naming an object seen in the context of fishing, but that the fishing kite of the single-leaf type always had the tendency to easily escape an association with the idea of a 'standard' or 'proper kite'.

Our observer of 1599 was in no way superficial. Quite the contrary, he was one whose interest was captivated by details of everyday life, and who reported it in a sensible account which became the basis for what must be regarded as the earliest European representation of

⁶⁴ H. J. Jansen, 'Ethnographische bijzonderheden van enkele Ambonsche negorijen (±1930)', *Bijdragen tot de Taal-, Land- en Volkenkunde*, 98, 1939, p. 347.

⁶⁵ 'Naam ... in 't Maleits en Javaans *Simbar layangan*, item *Daun layang-layang*, derwyl de jongens van de onderste zeilformige bladeren een *Layang*, dat is een vlieger maken ...'. The Latin translation by J. Burmann has '... *Layang*, seu draconem formans ...'. The second quotation: '... het driekantige blad werd aan een lyn gebonden, welke dan door de Zee vliegt als een zeildje'. Unlike the Malay/Javanese words, the Moluccan leaf or plant names quoted by Rumphius in most cases do not imply a kite device but, in some cases, the fish which is caught with the technique. A partial exception is the name Rumphius gives for Ambonese Malay: '*Terbang saccu*', where *terbang* means 'to fly' (in a more general sense than in Malay *layang;* see n. 53); *saku* is the name for needlefish (*Belonidae* spp.). Rumphius, *Herbarium* (n. 31), vol. 6, pp. 79, 81.

 $^{^{60}}$ For this reason, and in certain localities, people chose to replace the leaf with plastic sheet – it keeps longer.

⁶¹ Since the modern reinvention of kite-fishing and its popularisation in sport fishing (n. 38), the circumstances have been changing.

⁶² 'Zeevisscherijen' (n. 39), p. 354.

⁶³C. F. H. Campen, 'De vischerij op Halmahera', *Tijdschrift voor Nijverheid en Landbouw in Nederlandsch-Indië*, 28, 1883, p. 258.

kite flying, albeit of a kite which contradicts preconceptions of what a kite really is. The preconceptions, in turn, were formed in the course of Europe adopting the kite as a pyrotechnic element or as a toy (as in the Cats illustration of 1618). The point of departure for European kites were the East and South-East Asian game kites (Fig. 10), which were and are very different in shape and construction from those of fishing kites (Fig. 12).

From contemporary account to historical record

When the account of the 'Second Voyage' appeared in 1599-1601, it was of immediate interest to contemporaries. In the course of time it became part of the historical record of the period when foundations were laid for what was to become the formidable enterprise of the VOC. As such the account of this first voyage to the Moluccas was re-edited and adapted several times. But what happened to the visual-textual piece of the ethnography of Moluccan fishing in this process of recirculation? In the following remarks, no attempt is made to cover all possible sources, their selection being determined mainly by local availability in one format or another.⁶⁶ The picture that emerges is, it would seem, fairly balanced, and not at all unexpected.

Isaac Commelin's *Begin ende Voortgangh* of the 1640s is one example of the inclusion of the account in a collection of voyages.⁶⁷ It is 'an abridgement of the original edition of 1600, couched in the third person, and with various insertions (*inwerp*) concerning the Moluccas, Amboina, etc.'.⁶⁸ It includes the Ternate panorama with 'short captions', while the lengthier explanation of fishing techniques appears in the running text where it is indicated by a marginal sub-heading, as in the De Bry edition of 1601 (n. 10).

Another example of the recycling of material from the Moluccas voyage is found in Pontanus' history of Amsterdam. The textual information is there, the visual one too, but both text and illustration on fishing have lost their connection.⁶⁹ The space devoted to the 'Second Voyage' is due to the fact that Pontanus includes a whole section (bk. II, ch. 19-26) to narrate the rise of Amsterdam as a global centre of commerce,⁷⁰ chapters being devoted to each of the first two voyages to the East. The chapter on the voyage of van Neck and Warwijck is 'un

⁶⁶ In particular, I could not consult the 1608 and 1619 reprints of the Dutch 1601 edn. Also unavailable were the versions included in the collections published by J. Hartgerts in 1648 and 1650, and by G. J. Saeghman *c*.1663. The latter are said to rely basically on the Commelin collection, *Begin ende voortgangh*. Tiele, *Mémoire* (n. 7), pp. 140 ff., 146 f.; *Tweede schipvaart* (n. 3), vol. 5/2, pp. 210 ff.

⁶⁷Begin ende Voortgangh van de Vereenighde Nederlantsche Geoctroyeerde Oost-Indische Compagnie, ed. I. Commelin, Amsterdam, 1646, facs. repr. Amsterdam, 1969. The account by van Neck and Warwijck, 'Waerchtigh verhael van de Schipvaerd op Oost-Indien ...', is, with separate pagination, no. 3 of the collection.

⁶⁸C. R. Boxer, *Isaac Commelin's Begin ende Voortgangh: introduction to the facsimile edition*, Amsterdam, 1970, p. 9, quoting Tiele, *Mémoire* (n. 7), p. 145 f.

⁶⁹ J. I. Pontanus, *Rerum et urbis Amstelodamensium historia*, Amsterdam, 1611, and *Historische Beschrijvinghe der seer wijt beroemde Coop-stadt Amsterdam*, Amsterdam, 1614, facs. repr Amsterdam, 1968. Latin edn: Second Voyage, bk. II, ch. 25; text on kite-fishing etc. pp. 199 f.; Ternate panorama, pl. 49 on p. 216; illustration of Moluccan fishing methods, pl. 41 on p. 199. Dutch edn: Second Voyage, bk. II, ch. 25; text on kite-fishing etc. pp. 247 f.; Ternate panorama, pl. 50 on p. 267; illustration of Moluccan fishing methods, pl. 45 on p. 247.

⁷⁰ The theme appears in the heading of chap. 19: 'Een Transitie tot de handelinghen der inwoonders ende nieuwe navigatien, ende andere onderwindinghen om nieuwe wegen te openen tot verre geleghen landen: ende de occasien derselver'.

extrait du journal imprimé; ce que Pontanus y a ajouté est peu de chose'.⁷¹ Textual information on Ternatean fishing is included in full and indeed expanded at one point. Whereas the original text says only that 'large fish' are caught by kite-fishing, Pontanus names a specific fish, the tuna (skipjack/bonito). Pontanus's passage reads:

Den visscher sittende by het riet, worpt vischkens voor wt nae den haeck toe, die zy recht boven t'water laten hangen: om de welcke in te slicken de Thonijnen ende andere groote visschen toeloopende, slocken met eenen den haeck in.

[The fisherman who sits near the cane throws small fish towards the hook which they keep hanging just above the water: and in order to swallow them, the tuna and other large fish approach in haste and devour the hook as well.]

The original passage is:

... alsdan sitter achter een eñ worpt de cleyne vissche voor uyt na den hoec toe, die zy recht bovent water laten hangen, eñ weten hier door de groote vissch te verschalcken eñ te vange.

[... the one who sits aft throws the small fish forward towards the hook which they keep hanging just above the water, and in this way they trick and catch large fish.]⁷²

Leaving aside the detail of who is throwing the small fishes into the sea, Pontanus describes what one would have expected from recent Moluccan ethnography: chumming for skipjack (tuna/bonito/*cakalang*). As has been noted, there is a good likelihood that the printed account merged kite-fishing and chumming into a single picture, but it is impossible to guess why Pontanus particularly specifies 'tuna'.⁷³ Anyway, this text passage comes with an illustration which has Ternatean fishing as its theme, except that it bears no relation whatsoever to the text apart from the location and the general topic. The illustration was adapted from De Bry's publication of van Neck's second voyage to the East, 1600-03 (n. 6), and it shows torch and poison fishing.⁷⁴ Yet, Pontanus also includes a faithful reproduction of the Ternate panorama of the 'Second Voyage', placing it only in the final chapter of the section dealing with overseas navigation, along with a cursory survey of other voyages. The reference letters remain in the panorama but without captions. Its details remain unexplained and the relation to its narrative context is broken.

It may be noted in passing that the Ternate panorama of the first Moluccas voyage was also used in the decorative elements on early seventeenth-century maps of Asia.⁷⁵ One

⁷³ Did he speak with a former member of the expedition?

⁷⁴ *Indiae orientalis pars octava* [...], ed. J. Th. & J. I. de Bry, Francoforti 1607, pl. 2: 'Delineatio Piscatvrae Ternatensis'. Cf. Lach & Van Kley, *Asia* (n. 7), bk. 3, pl. 268.

⁷⁵ For the materials referred to in this paragraph see G. Schilder, *Cornelis Claesz (c. 1551-1609): Stimulator and Driving Force of Dutch Cartography*, Alphen a/d Rijn, 2003, Monumenta Cartographica Neerlandica, 7, pp. 346 f., 350 ff. (Fig. 14.22, 14.28, 14.33); G. Schilder, *Tien wandkaarten van Blaeu en Visscher*, Alphen a/d Rijn, 1996, Monumenta Cartographica Neerlandica, 5, pp. 66 ff., 75, 80 ff., 134 f. (Fig.

⁷¹ Tiele, *Mémoire* (n. 7), p. 144 f.

⁷² Pontanus, *Historische Beschrijvinghe* (n. 69), pp. 247 f., and *Rerum et urbis* (n. 69), p. 199: 'Piscator arundini assidens pisciculos, qua hamus in aquam dependet, jacit: ad quos deglutiendos accurrentes thynni, alijque pisces maiores, hamum una vorant'); *Tweede schipvaart* (n. 3), vol. 3, p. 122.

version, on a map published *c*.1602 by Cornelis Claesz (one of the publishers of the 'Second Voyage', n. 13), reduces the content of the panorama, leaving only one of the fishing boats: that employing the cast net, as in the Hulsius version of the panorama (Fig. 2). Another version of the panorama, first used it seems on a map by Willem Jansz in 1608 and later copied on maps of 1612, 1617 and 1624, shows two fishing boats, both variants of the original depiction of kite-fishing. This is quite clear in the case of one of the boats since the long pole rises from the boat like a mast, and a fishing line runs from its tip to the water at an oblique angle. The leaf kite has simply been omitted. In the case of the second boat there is a mast-like element near the bow, and, unless it had been added in an ad hoc manner, the kite-fishing boat would have provided the inspiration for this representation.

In eighteenth-century compilations, which by different means adapt the account of the Moluccas voyage (re-narration, summary, extract, etc.), the Ternate panorama has generally disappeared. Where a representation of Ternate is included, it is a more up-to-date illustration (Fig. 13).⁷⁶ Such depictions still show local boats, but unlike the first panorama they do not illustrate details of local life. Rather, they simply add to the scenery.



Fig. 13. An eighteenth-century panorama of Ternate, from *Allgemeine Historie der Reisen* (n. 83), vol. 18, 1764, facing p. 50 (reproduction by the University Library, Heidelberg). It appears in various eighteenth-century publications and is a mirror inversion adaptation of a plate in F. Valentyn, *Oud en Nieuw Oost-Indiën* (1724-26).

In Renneville's collection of voyages the ethnographic notes on fishing were usefully reproduced along with the account itself (which, in turn, was based on Commelin),⁷⁷ and the same is the case with a Dutch collection published in 1784.⁷⁸ The English version of the

^{2.48, 2.49, 2.110).}

⁷⁶ For typical examples see *Atlas of Mutual Heritage*, http://www.nationaalarchief.nl/amh/main.aspx? lang=nl (last accessed 22 Oct. 2010), under search term 'Ternate'.

⁷⁷ Recueil des voyages qui ont servi a l'établissement et aux progrès de la Compagnie des Indes orientales [...], ed. C. de Renneville, vol. 1, Amsterdam, 1702, p. 588 (in the second edition of 1725 of the same volume, the passage occurs on p. 513). The account of the voyage itself, 'Relation du second voiage des hollandois aux Indes orientales', begins on p. 509 (p. 448).

⁷⁸ Nederlandsche reizen tot bevordering van den koophandel, na de meest afgelegene gewesten des

Renneville volume, however, abbreviates the account, and, instead of describing the use of the leaf and the wind, simply says that 'they throw the small Fishes into the Water, to decoy the great Ones, and so catch them with a Line'.⁷⁹ This reads like shorthand for chumming and angling.

In the massive collection, *Histoire générale des voyages*, initiated by the Abbé Prévost, the attempt is made to separate historical from descriptive and ethnographic matters. Thus, the Paris edition first presents the narrative of the 'Second Voyage' as such, together with a later chapter entitled 'Description des Isles Moluques', which includes materials from various sources of different dates. In the first, the abbé includes paragraphs on 'Galanteries du Roi de cette Isle [Ternate]', or 'Commerce & prix des marchandises', and in the later chapter paragraphs on 'Alimens que la nature fournit aux habitans' or 'Habillement & caractere des habitans', but fishing is absent.⁸⁰ However, a new edition was in the making, published at The Hague. Here the account of the 'Second Voyage' is the same as that of the Paris edition,⁸¹ but the description of the Moluccas, also drawing on multiple sources but more thoroughly so, does indeed include notes on kite-fishing taken from the 'Second Voyage'.⁸² Thus, a supplement volume to the Paris edition was prepared and published in Amsterdam, adding omissions in the earlier description of the Moluccas, and now including the notes on kite-fishing dating back to the original report on the first Moluccas voyage.⁸³

The recent history of the historical evidence

In 1821-22, C. G. C. Reinwardt (d. 1854) travelled extensively in the eastern part of the Indonesian archipelago, and in March 1821 observed and described kite-fishing off the island of Adonara. He was lucky, so to speak, because at this locality people did not use the small single-leaf kite flown from a pole, but larger and more complex devices which were immediately recognisable as kites (see Fig. 14). Reinwardt mentions a 'paper kite' ('papieren vlieger') but was probably mistaken about its material. In all likelihood he saw it only from a distance, assuming the 'familiar material' for the 'familiar object'. This familiarity was evident from the fact that the kite sailed 'very high and also far from the boat' ('zeer hoog en tevens ver van de boot').⁸⁴

aardkloots, pt. 2, Amsterdam, etc., 1784. The 'Second Voyage' on pp. 1 ff.; notes on kite-fishing on pp. 62 f. ⁷⁹ A Collection of Voyages undertaken by the Dutch East-India Company for the Improvement of Trade and Navigation [...], London, 1703, p. 288. The account of the voyage, 'A Relation of the Second Voyage of

the Dutch into the East Indies', begins on p. 250. ⁸⁰ *Histoire générale des voyages* [...], vol. 8, Paris, 1750, pp. 121 ff. (Second Voyage) and 357 ff.

⁶⁰*Histoire générale des voyages* [...], vol. 8, Paris, 1/50, pp. 121 ff. (Second Voyage) and 357 ff. (description of the Moluccas).

⁸¹*Histoire générale des voyages* [...] *Nouvelle Édition* [...], vol. 10, La Haye, 1753, pp. 139 ff. (account of the Second Voyage).

⁸² *Histoire générale des voyages* [...] *Nouvelle Édition* [...], vol. 11, La Haye, 1755, p. 31 (in the section 'Mœurs & usages des Moluques' of the description of the Moluccas).

⁸³ Suite de l'Histoire générale des voyages [...] Tome XVII, contenant les restitutions & les additions de l'édition de Hollande, pour servir de supplement à l'édition de Paris, Amsterdam, 1761, p. 62 (in the chapter 'Supplement pour la description des Isles Moluques, tiré du Tome XI de l'édition hollandoise'). There is also a vol. 17 belonging to the series *Histoire générale des voyages* published at The Hague. I could not see the Dutch language edition of this work. The German edn, *Allgemeine Historie der Reisen zu Wasser und zu Lande ...*, vol. 8, Leipzig, 1751, contains the account of the Second Voyage (pp. 63 ff.) and a description of the Moluccas (pp. 314 ff.); the supplement is vol. 18 (1764, pp. 49 ff. on the Moluccas; kite-fishing on p. 66).

⁸⁴C. G. C. Reinwardt, *Reis naar het oostelijk gedeelte van den Indischen Archipel in het jaar 1821*, ed. W. H. de Vriese, Amsterdam, 1858, p. 331. For a critical discussion and contextualisation of Reinwardt's



Fig. 14. The first nineteenth-century depiction of a kite-fishing scene in Indonesia, off Adonara Island, published in 1896. After Jacobsen, *Reise* (n. 95), p. 77. The sketch is a composite, merging two different fishing techniques, harpooning and kite-fishing, into one illustration.

Reinwardt's notes on his journey were posthumously published, edited by Willem de Vriese, Reinwardt's successor as professor of botany and director of the Hortus Botanicus Leiden. Circumstances allowed him to add a footnote to Reinwardt's notes on kite-fishing, although the eighteenth-century sources mentioned earlier were, not surprisingly, unknown to the botanist:

Dat deze wijze van visschen oudtijds ook in de Molukken gebruikelijk was, blijkt uit een plaatje in Middleton's "Voyage to Bantam and the Moluco islands" door de Hackluyt Society [*sic*] uitgegeven naar de editie van 1606 en met facsimilés der oude plaatjes voorzien, op een van welke onder andere praauwen, die bezig zijn met visschen, ook eene voorkomt, bij welke daartoe van een' vlieger gebruik gemaakt wordt, even als hier beschreven is. [The fact that this manner of catching fish was known, in former times, in the Moluccas as well, is apparent from a small plate in Middleton's "Voyage to Bantam and the Moluco islands", published by the Hakluyt Society after the edition of 1606 with facsimiles of the old plates; on one of these one can see, among other fishing boats, one boat which makes use of a kite, in the same way as described here [by Reinwardt for Adonara].]⁸⁵

Here De Vriese refers to Bolton Corney's edition of the second voyage of the English East India Company to Java and the Moluccas, 1604-06, under the command of Henry Middleton, first published 1606. Corney's edition was published in 1855 in the first Hakluyt Society series.⁸⁶ However, the plates included in this edition do not belong to the original publication of 1606. Following the introduction ('Advertisement') and the facsimile of the original title page, there is inserted a 'Description of the Plates' which also gives their sources. Here, plates 5 and 6 are relevant (Figs 15.1-2), and it is indicated, albeit somewhat obliquely, that

observations see Barton & Dietrich, 'Ingenious and Singular Apparatus' (n. 26), pp. 31 ff., 45; for an

illustration of an Adonara fishing kite see E. Vatter, *Ata Kiwan: Unbekannte Bergvölker im Tropischen Holland*, Leipzig, 1932, pl. 78c.

⁸⁵ De Vriese, in Reinwardt, *Reis* (n. 84), p. 331, note 2.

⁸⁶ J. Farrington, 'The First Twelve Voyages of the English East India Company, 1601-13: a Guide to Sources', *Indonesia and the Malay World*, 29, 2001, pp. 144 f.; Lach & Van Kley, *Asia* (n. 7), p. 550; *The Voyage of Sir Henry Middleton to Bantam and the Maluco Islands*, ed. B. Corney, London, 1855, Works Issued by the Hakluyt Society, First Series, 19.

they came from the French edition of 1609 (n. 14) of the first Dutch Moluccas voyage. What the editor forgot to mention was that he substantially altered the originals, the net effect being the total banishment of the Dutch expedition from the illustration (Fig. 16). Thus, plate 5 (Hakluyt Society edition, 1855) is the original Ternate panorama minus the two Dutch ships (A), while the Ternate boat greeting the Dutch arrivals (B) has now lost its role. The fishing boats (T) were neutral but they may have disturbed the resulting overall format of the plate. Hence B and T were moved to plate 6 of which they became the lower half, while the upper half was taken from plate 17 of the French edition of 1609. We may only guess at the reason for these changes, but the suspicion is that the editor contrived to present the image as one derived from a uniquely *English* voyage.



Fig. 15.1. Plate 5 from the 1855 Hakluyt Society edition of Henry Middleton's voyage to the Moluccas, 1604-1606 (n. 86). The Ternate panorama.

The depiction of fishing methods in the Hakluyt edition is correct, and De Vriese's identification of the single-leaf kite as a 'kite' was a good one, nobody having seen it in this way before. Subsequently, comparative studies of fishing methods would refer to De Vriese, or adopt his attribution of the illustration to the wrong source. How this erroneous attribution came about is a matter of conjecture, and my guess is that the footnote was added at the last moment and in haste to a finished manuscript. The Hakluyt edition seems to have become available only in 1856,⁸⁷ and must have come to De Vriese's attention considerably later. In 1857 he was busy preparing a research expedition to the East Indies, departing from the Netherlands in October that year. By that time, the manuscript for the Reinwardt edition would have been ready for the printer, to appear in 1858.

⁸⁷ The volume includes the 1856 annual report. See www.hakluyt.com (last accessed 6 April 2011).



Fig. 15.2. Plate 6 from the 1855 Hakluyt Society edition of Henry Middleton's voyage to the Moluccas, 1604-1606 (n. 86), the lower section of which is adapted from the original Ternate panorama.

The mistake is not too serious and could easily have been corrected simply by checking the Hakluyt edition (the series is not uncommon in scholarly libraries). It is all the more surprising that it was perpetuated in the literature. In his 1922 monograph, an otherwise thorough work, Plischke attributes the illustration to Middleton, adding his own new error, albeit a minor one, by giving 1616 as the publication date of Middleton voyage.⁸⁸ Feldhaus, in his encyclopaedia of technology, repeats this dual error.⁸⁹ Luedecke got it right in an article in 1938, but that was published in a popular magazine of geography and travel.⁹⁰ Anell names

⁸⁸ Plischke, *Fischdrachen* (n. 26), p. 2. He refers to the Hakluyt edition of 1855 but he also knew and cited elsewhere de Vriese's Reinwardt edn.

⁸⁹ F. M. Feldhaus, *Die Technik der Vorzeit, der geschichtlichen Zeit und der Naturvölker*, 2nd edn, München, 1964, app., col. 10-11. This edn reproduces the first of 1914, except for the new appendix in which the kite-fishing entry appears. The appendix is not dated but I would assume that the materials were compiled in the 1920s or 1930s. Feldhaus relied on Plischke but also quoted the Hakluyt Society edn of 1855.

⁹⁰ H. Luedecke, 'Papiervögel und Feuerdrachen', *Atlantis*, 10, 1938, p. 559 (with illustration and correct attribution of the source: the French edition of 1609, as in the Hakluyt Society edn of 1855, of the 'Second Voyage'). It was noted in popular kite literature, leading to a correct (Luedecke) and mistaken (Plischke/Feldhaus) attribution in the same publication. H. Snoek, *Und sie fliegen heute noch: Geschichte und Geschichten um den Drachen*, Bremen, 1992, pp. 10 (Luedeke) and 147 f. On pp. 134 ff. this book prints an extract of F. Denk, *Bibliographie des Flug-Drachens unter besonderer Berücksichtigung seiner Geschichte*, Erlangen, 1943, unpublished corrected proofs which introduced the mistaken attribution.

Middleton as the earliest source on kite-fishing,⁹¹ and in Von Brandt's *Fish Catching Methods of the World* we now read:

The English traveller, Sir Henry Middleton, is said to have been the first of the Europeans to see kite fishing in the South Seas during a visit from 1604 and 1606. He introduced the kite in sports fishing (1616).⁹²



Fig. 16. Diagram showing how features from plate 15 (the Ternate panorama, Fig. 1) and plate 17 of the original account of the 'Second Voyage' (n. 14) were reshuffled and deleted to produce plates 5 and 6 of the Hakluyt Society edition of 1855. The Ternate galley of plate 17 (below) was included in Hulsius' version (Fig. 2) of the panorama.

⁹¹ Anell, *Contribution* (n. 26), pp. 36 f., referring to the Hakluyt Society edition; but he knew and used both Plischke and the Reinwardt edn.

⁹² Von Brandt, *Fish Catching Methods* (n. 1), p. 113; *Von Brandt's Fish Catching Methods of the World*, ed. O. Gabriel, et al., 4th edn, Oxford, etc., 2005, p. 149. Similarly: A. von Brandt, *Das große Buch vom Fischfang: Zur Geschichte der fischereilichen Fangtechnik*, Innsbruck, etc., 1975, p. 258.

It is curious how such a 'chain of transmission' developed which obscured the correct source and, indeed, the full information it provided (the explanation of the panorama and more specifically the fishing elements), although this information, on the whole quite reliably, had been transcribed through re-editions, adaptations and compilations from the early seventeenth century to the late eighteenth. But no one could look at the account of the 'Second Voyage' as long as the tradition persisted about Middleton and his voyage as the 'original source' of the kite-fishing scene.

Concluding remarks

The account of the second Dutch voyage under the command of Jacob van Neck and Wybrant Warwijck includes in its materials on Ternate, published in 1600 and thereafter, the earliest description and illustration of kite-fishing and, by implication, of flying a plane kite. Historians of Indonesia have taken little interest in either. In the specialised literature, kite-fishing was recognised in the nineteenth century in a version of the original illustration used to embellish a Hakluyt edition of 1855 of Middleton's voyage, which also happened to become mistaken as the original source of the illustration. This cursory error became established and abided as 'fact'. In this way the connection between illustration, the original source, and thus a substantial part of the original information was lost, and precluded the recovery of the textual part, as it was re-edited and adapted in more accessible eighteenth-century works. Taken as a whole in its original form, however, the fishing section forms a respectable, albeit small piece of ethnographic observation.

One thing which may be noted is the matter-of-fact nature of the account. About half a century later, Rumphius characterised kite-fishing as a 'zeldzame en by ons belaggelyke manier' of catching fish ('curious and, for us, ridiculous way').⁹³ It is not entirely clear whether he refers to the use of the leaf kite, to the lure made of a wad of spider-web (instead of a hook), or to both. He may also have wanted to communicate something that might have seemed 'ridiculous' for the reader at home but which was, in fact, a practicable method. The account of 1600 gives a plain description, and the depiction is straightforward, without fancy elements or distortions.

With regard to the account of 1600, I have speculated that two fishing methods were combined into a single picture: kite-fishing for needlefish, and chumming and angling for skipjack. But one can take a positive view of this. Chumming and the operations associated with it were also documented, giving historical depth to a typical and exceptionally well-developed Moluccan method of tuna fishing. In addition, weaknesses in the early account should be put into the context of modern documents. The first nineteenth-century depiction of a kite-fishing scene appears in a book by master mariner William Wawn on the Solomon Islands and his activity in the Queensland labour trade. It is a sketch without textual explanation which shows kite-fishing and trolling (Fig. 17).⁹⁴ The fishing kite is a fancy type, bearing no relation to actual fishing kites of the region. Similarly, the landscape and setting

⁹³ Rumphius, *Herbarium* (n. 31), vol. 6, p. 81. The characterisation is given with regard to kite-fishing with spider-web lure as practised in Kaibobo, West Seram. His earlier remark (p. 79) on Ambonese kite-fishing with a hook consists of a straight description.

⁹⁴ W. T. Wawn, *The South Sea Islanders and the Queensland Labour Trade: A Record of Voyages and Experiences in the Western Pacific, from 1875 to 1891*, London, 1893; illustration on p. 327.

are largely imagined. The depiction in the Ternate panorama may well be regarded as more instructive, and not surprisingly it clearly reflects the first modern depiction of Moluccan kite-fishing (Banda) (Figs 4.1 & 4.2). And with regard to 'firsts', the first modern depiction of a kite-fishing scene in the Indonesian archipelago (Fig. 14) combines two different fishing techniques in one drawing. It shows harpooning from a platform at the bow (the boat belongs to this technique). The kite-fisherman sitting in the boat is simply an addition, although the depiction of the sail is adapted to the wind direction required for kite flying. For harpooning, the opposite direction would have been more apposite.⁹⁵



Fig. 17. The first nineteenth-century depiction of a kite-fishing scene, published 1893. After Wawn, South Sea Islanders (n. 94), p. 327.

By 1900 kite-fishing was perceived as a technique typical of the eastern Indonesian islands, and in particular of the Moluccas.⁹⁶ It is a welcome coincidence that such a special characteristic was present within the ethnographic detail recorded in the context of the first Dutch contact with that region in 1599, not the least because during the following centuries it remained largely unnoticed. In its association with the island of Ternate the early record is unique. There are no further descriptions dating from recent times, except that of Max Weber who recorded that he saw kite-fishing at Ternate during his stay in 1899, but he gives no further details.⁹⁷ However, there is, from the 1880s onwards, comparative evidence from the Moluccas, and, among others, from Halmaheran waters in the close vicinity of Ternate. In those nearby regions physical kite-fishing gear was collected in 1979, including the long bamboo pole (289 cm) with two 'loops of steel wire through which nylon line passes' (the 'hoale' of the early description), a single-leaf kite (25.5 × 13 cm), and the line ending in a

⁹⁵ A. Jacobsen, *Reise in die Inselwelt des Banda-Meeres*, Berlin, 1896, pp. 76 ff.; R. H. Barnes, 'Lamakera, Solor: Ethnographic Notes on a Muslim Whaling Village of Eastern Indonesia', *Anthropos* 91, 1996, p. 79. Jacobsen, a collector for the Berlin ethnographic museum, properly describes each of the two techniques in the text, while the foreword indicates that the drawings are not 'from life'.

⁹⁶ H. Ten Hage, 'De zeevisscherij in Nederlandsch-Indië', *Tijdschrift voor Economische Geographie*, 1, 1910, p. 113, writing on the Moluccas: 'vischvangst met vliegers [... komt] bijna uitsluitend hier voor'. In another source, the technique is said to be practised 'vooral in het Oostelijk deel van den archipel'; *Encyclopædie van Nederlandsch-Indië*, 2^{de} druk, vol. 4, 1921, s.v. 'visscherij' (p. 583).

⁹⁷ Weber, Introduction et description (n. 38), p. 60.

running noose (not a 'hooke').⁹⁸ For Banda, some distance from Ternate, Max Weber published both a description and an illustration in 1902 (Fig. 4.2), marking explicitly the 'hoale' and depicting clearly the baited noose at the end of the line.⁹⁹ These modern data serve perfectly to elucidate the account of 1600, or, conversely, the latter ties in nicely with the former. Kite-fishing in the Moluccas clearly has a long history; an artisanal fishing technique which is, as we can understand from the recent sources, highly functional and dependent on skill. It could hardly have changed in the course of time, but only be maintained, or, under pressure from industrial fisheries, abandoned.

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⁹⁸ The object is kept in the Anthropology Collections of the Peabody Museum of Natural History, Yale University, New Haven, no. YPM ANT 248813 (entry to be found at http://peabody.research.yale.edu, 'Yale Peabody Museum – Catalog Service', last accessed 13 Sept. 2010). The measures of the fishing kite were taken by Dr R. Barnes and kindly communicated to me (pers. comm., 30 Sept. 2010).

⁹⁹ Weber, Introduction et description (n. 38), pp. 60 f.