Bulu

The late Nineteenth Century Eruption of Mt. Victory.

Mount Victory (Keroro, Keraroa) is a dormant volcano on the Cape Nelson peninsula in the Northern District of Papua New Guinea. My interest in it springs mainly from its apparent similarity - in type, and mode of activity - to Mount Lamington (also in the Northern District).

This paper has been prepared because of my interest in the last major eruption by Victory, partly because I believe that the generally-accepted date of about 1880 is wrong. I shall endeavour to prove this, and offer my nomination, plus suggestions for further investigations which may provide a more certain date. It will be apparent that confusion is the order of the day.

In the attached APPENDIX are quotations, with some comments, from 10 publications; these have been typed out because of their importance to the story, or because of their interest, or because they might not otherwise be available to the reader (and it is essential that he/she comes to his/her own conclusions).

. . . . .

The APPENDIX should be read before proceeding with the text.

It is obvious that there are certain unfortunate omissions, from or strange inclusions in, all the early descriptions of Mount Victory (Moresby, Finsch, Forbes, the 1890 ones). I think it best to start back from the beginning - with Maitland's comments on Moresby's observations, in fact (APPENDIX 5.).

It seems quite reasonable to me that the reason Moresby did not notice any steam or smoke in 1874, which quite puzzled Maitland, was that there was none there then (i.e. Victory was still dormant). Moresby's description of Mounts Victory and Trafalgar as descending to the sea "in open grassy and wooded slopes, which have all the appearance of English parkland"(1876:271) is one I am not terribly happy with (unless he means that the grass areas were nearer the sea, leaving the mountains forested). I would have expected the pre-eruption Victory to be like today's Trafalgar - "almost completely covered /mountain spurs/ with rain forest merging into lower montane rain forest above 2500 ft." (CSIRO, 1964:12), and Finsch (APPENDIX 2.) does say they were covered with virgin forest. As Moresby had spent two days getting wood at the head of Collingwood Bay (1876:269), it is almost inconceivable that he would have failed to notice any activity there had there been any.

So we proceed on to 1884 &/or 1885, with Finsch and Forbes - see APPENDIX 2. & 3. Again no mention of anything unusual, though the reporting does leave something to be desired (e.g. Forbes' briefness and "Victoria").

Then late July 1890 (APPENDIX 4.). Here we have three reports. It is unfortunate that it is not MacGregor but Thomson who said "the first time" the volcanic activity had been observed, and also that MacGregor did not say "disturbed recently" (Maclaren did). However I assume that we can regard these two judgements as valid, and certainly representing the general view of those on the boat. MacGregor's "species of pine" and Maclaren's "fir-trees in parts" for Mount Victory vegetation are somewhat puzzling.

I therefore suggest a date for the eruption of Mount Victory as between Forbes' observations in November 1885 and MacGregor's July 1890 visit, probably nearer the latter.

. . . . .

This leaves the little problem of explaining away the 1880 date suggested by Fisher (see APPENDIX 7., including discussion), and Chignell's nomination of 1879-89 as the period (calculated from his writings - see APPENDIX 6.).

I happen to think this can be done, but to do so will need to assume a certain eruption date - say 1889. Then we have Chignell, writing 20 years later, out by 5 years (on averaging his period), and Fisher's 1916 observer (see assumption in APPENDIX 7.), writing 27 years later, out by 9 years. In each case the error is "too long", and also in each case the error is increasing with increasing period-elapsed being estimated.

And this, I think, is it - the eruption dates were only estimates. Chignell pretty well states as much, and I assume that the patrol report would say the same. A non-literate society has no calendar such as we are accustomed to, and only memory to record its "history"; there would be no "date" for the eruption in the native communities, or date of birth on birth certificates (or birth certificates) for Kukiaus.

So the whites (Chignell, & the author of the patrol report mentioned by Fisher) had to fall back on estimates, based on the growth and aging rates of native inhabitants of the area (who could say they were young men/boys/not yet born when the mountain erupted). In this, it seems that both fell into what has become the time-honoured European illusion that indigenes age very much faster than whites, because of the 'hard' climate, or the 'poor' food, or because of 'disease'.

. . . . .

It may yet be possible to get a "recorded" or scientifically-proven date for the Mount Victory eruption, though it doesn't seem all that likely. The possibilities in this field are:-

1. That someone did see and record it. I regard this as very unlikely, especially as it hasn't come to light yet. MacGregor was scientifically trained (Doctor of Medicine), he was a good observer and a careful reporter. He did not actually state that July 1890 was the first observation of Victory's volcanic nature, but he mentions no prior observation at the time. Nor, to the best of my knowledge, did he ever correct that view (and if he knew of no previous sighting, we can be almost certain that there was none).

   As far as I am aware, Fisher (1951) is wrong in attributing a report by an early explorer of volcanic activity to this area - I understand all such refer to the north coast of New Guinea (not Papua).

   White interest in Papua was pretty slow to develope. D'Entrecasteaux sailed up the coast in 1793, though at some distance (on some of it, anyway, it seems - see Moresby, 1876: viii), and Moresby in 1874 was the first exploration and charting of the north-east coast. Even then (and today), I understand that the shipping lanes were outside the D'Entrecasteaux group, and observations from passing ships would have been the major hope for a report (I fear).

   A graphic illustration of lack of records is given by the Port Moresby Geophysical Observatory's Draft Report on Tsunami - it runs to pages on the 1888 explosion of Ritter Island in German New Guinea, but the March 1895 tidal wave - a disaster along the coastline of the present Northern District - is almost completely undocumented (seven years later, in British New Guinea).

2. Radiocarbon dating. There is organic matter in the latest ash - see APPENDIX 9. However I gather that this technique is not really applicable to such short time spans as here (say 86 years), and also lacks the necessary degree of accuracy for any improvement on our present 4½ year interval.

   While on radiocarbon dating, I am surprised that no attempt seems to have been made to date Victory's previous, and much

greater (apparently - judging by depth of material) eruption - see CSIRO 1964:60 on the Boa family's buried A_1 horizon.

This is particularly in view of Fisher's statement (see APPENDIX 7.) that Victory apparently erupted in the early part of the 19th century, too. Taylor (1958:97) has his reservations about the signifigance of the repose period of these volcanoes but any results could be of interest.

3. Earlier I mentioned (APPENDIX 6.) that it was Waiko's 1972 paper which brought Chignell's observations to my notice. Both in it, and his 1973 one (1972 is derived from 1973) he comments on the frequency of earthquakes, possibly originating from Mt. Victory, which were observed about 1895 and 1896.

Green's letters ("The Correspondence of John Green", Pacific Manuscripts Bureau PMB 420), plus MacGregor's observation (quoted by Waiko) give 6 earthquakes observed on the Mamba in 1895-96, and three "were rather violent" (Waiko, 1973:427, quoting Green). This is rather unusual, and it should also be noted that this was about the time of the tidal wave.

I gather that it is more common for seismic disturbances to trigger eruptions than the reverse (see Taylor, 1958:97); however eruptions do cause earthquakes. It may be that seismic records for the late 1880s could give a date for the Victory eruption (I admit it doesn't seem likely).

. . . . .

Leaving behind the realms of "hard" (scientific) fact, there are several other avenues that might be profitably investigated. These could lead to more background information, or even more accurate estimations of the eruption date.

1. It may be that Forbes made a full report on his visit to the north-east coast; this could help in determining if the eruption was really post-November 1885.

2. Goodness knows what else is in the published and unpublished official records and the published and unpublished works of the officers who have been in the area.

3. Nor should the Mission (published and unpublished works) be forgotten - to attempt to write the recorded history of the north-east coast of Papua without reference to these works would be very high on my list of futile enterprises.

In fact one should not have to wait till as late as Chignell (he only arrived in Papua in July 1907 - see Tomlin, 1951:226) for mission comment on Victory. Tomlinson, then a builder, arrived at Sinapa on Collingwood Bay in May 1897 (Chignell, 1913:100) and Rev. W.H. Abbot was to be in charge of the new mission to be set up there. Plans were changed, due to the site being unsuitable, and the Anglican Mission came to Wanigela in May 1898 (see Chignell, 1913:61-2). ~~After Abbot came~~ Mr. Money was at Uiaku in 1902, and so on (I believe the above to be correct, but persons should check before re-using). While my looking through mission material has not been complete of even the published material in the period of interest, I have not come across any comment other than Chignell's on the eruption date.

If it has to be Chignell, the following might be leads of interest:-

a) Item F92 on p.17 of "New Guinea: catalogue of books from the library of Evan R. Gill" (Evan Gill, Liverpool, 1957, roneo) is "Three holograph MSS of life on a Station in Papua" by Arthur Kent Chignell (one was from Wanigera dated September 17, 1907). This item was not accessioned when the Mitchell Library acquired the Gill Collection (it may have been incorporated into "An Outpost in Papua", anyway).

b) Chignell died at Hull, England, on 25th June 1951 - see obituary notice in "The Times" 3 July 1951 (a copy is pasted in the Gill Collection copy of "An Outpost in Papua" in the Mitchell Library).

4. I assume that the mention of Mount Trafalgar in the Encyclopaedia (see APPENDIX 10.) is an error.

5. The Bibliography to Stanley (1923) contains another Maitland paper, in addition to that in APPENDIX 5. I have not seen it, but the circumstances make it unlikely that it has anything more material to add on Victory.

6. In the light of the discussion at the top of p.2, it will be apparent that the earlier the indigenous verbal account of the eruption, the more accurate the dating of it is likely to be.

Unfortunately, this introduces communication problems - it will be noted (APPENDIX 4.) that MacGregor was unsuccessful in obtaining "from the natives any information regarding it." - the mountain and the eruption.

In BNG AR 1893-94 he explained why this should be so - see p.4. About half way up Collingwood Bay, the languages change from Melanesian to Papuan (Ray, 1907) or, as they are now called, Austronesian to Non-Austronesian (Dutton, 1973); this poses a substantial problem for the "early information" idea.

I would imagine that very early information, indeed, would be needed to give any information at all about any eruption early in the nineteenth century (Fisher, 1957) and that, by now, the stories of the two happenings would be completely confused.

7. Moresby wrote a couple of papers in addition to his book - these could contain more information.

. . . . .

Afterthoughts.

a) Moresby was sure that the people of Collingwood Bay had never seen white men before his party (1876:270)

b) I regard the suggestion of Fisher (1957) as to the date of eruption as wrong, and that of Chignell's right at his limits of possibility, if not actually wrong.

. . . . .

The story of Mount Victory seems to be one of confusion, from start to finish. In 1951 it was mistaken for Lamington (see Taylor, 1958:11) and, in fact, by this time it seems to have almost been forgotten that Papua did have a volcano - Mount Victory. I'll say no more, as it probably takes a geologist to track through the meanings of Fisher (1951) and Baker (1946).

To define "recorded" and "active", neither of which I have attempted to do, would seem to be first steps in cutting through the present situation (defining "active", for this class of volcano, should be an interesting task).

The distribution of this typescript will be as follows:- BMR and CSIRO in Canberra, PMGO and Chief Government Geologist in Port Moresby, and ~~three~~ four other people (1 in Moresby, 1 at Wanigela, 2 at Popondetta). Any recipient having more information bearing on the story is requested to advise:-

Bureau of Mineral Resources, P.O. Box 378, Canberra City, and/or

Chief Government Geologist, P.O. Box 778, Port Moresby.

John R. Horne

(John R. Horne)
25.8.74

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APPENDIX.

1. (a) "From Cape Vogel the land trends again W.N.W. for nearly fifty miles, and shows the usual aspects of the low wooded plain, with great mountains running behind, when another lofty promontory runs out for forty miles to the north-east, and forms the southern enclosure of another great bay. A double peaked mountain rises 4000 feet high from this promontory, and shows to its full height above the plain of the sea, and the low land from which it springs. Altogether the features were so striking that I resolved to honour them with great names. The Cape is therefore Cape Nelson; the two summits of the mountain are Mounts Victory and Trafalgar, and the great bay thus formed, is now Collingwood Bay."

(Moresby, 1876:269; the time is early May, 1874)

(b) "We left Collingwood Bay on April 5th, having found its western waters studded with dangerous reefs, through which we had to pick our way with great caution, and rounded Cape Nelson before nightfall, when we were much impressed by the fine picturesque appearance of Mounts Victory and Trafalgar. These mountains, which are joined by a saddle-shaped ridge, descend to the sea in open grassy and wooded slopes, which have all the appearance of English parkland."

(Moresby, 1876:270-1; for April, read May)

These two extracts are from John Moresby's "Discoveries and Surveys in NEW GUINEA and the D'Entrecasteaux Islands", Murray, London, 1876.

2. "After three hours, the Nelson Mountains were visible. Two peaks, Victory and Trafalgar, about 4000 feet high. Virgin forest. Waterfall on north-east side of Trafalgar. No sign of cultivation or people. We spent a quiet night in Porlock Bay, west of Cape Nelson, where Moresby had anchored with the "Basilisk".

(Finsch, 1888:248-9)

This is from Otto Finsch's "Samoafahrten, Reisen in Kaiser-Wilmelm-sland und Englisch-Neuguinea, in den Jahren 1884-1885 an Bord des deutschen Dampfers "Samaa""(F. Hirt & Sohn, Leipzig, 1888). The time has to be 1884 or 1885, from the title of the book, and I suspect it is about mid-1885. However I can't read German, and it would probably be necessary for someone fluent in German to read the book to find out exactly when Finsch made these observations (and also to check the accuracy of the translation, and improve the resulting English).

3. "The westernmost point of this bay /Collingwood Bay/ is very high, forming a promontory, built up by the abrupt Trafalgar and Victoria Mountains; and along the coast from Hardy Point to Porlock Bay a series of deep inlets occur, many of which have all the appearance of being fine harbours."

Henry O. Forbes, on a visit to the north-east coast in November 1885, on p.36 of "Report on British New Guinea" by G. Seymour Fort (Queensland, 1886).

4. (a) "At this time /July 1890/ the volcanic nature of Mount Victory was clearly established, great clouds of steam being seen to issue from several places on its summit."

(MacGregor, in British New Guinea Annual Report 1890-91:xiii)

(b) "From near Keppel Point we were able to make out the volcanic nature of Mount Victory. This mountain is very steep and rugged, presenting towards the top great masses of bare rock. Its altitude is probably from 3,500 to 4,000 feet. Its sides were scored and marked by brown lines from near the summit to its base; these at first looked as if caused by lava running down the mountain, but the closest inspection could detect no presence of lava, so that it was concluded that these lines had been caused by recent great earthslips. Some of the fishermen occupied near the Sydney Islands spoke of a smart shock of earthquake that had been felt about three weeks before in Collingwood Bay, so well marked that one man was thrown off a campstool on the ground. A shock was felt on the mainland about the same time, as far as Port Moresby. In all probability there is a close connection between these phenomena and the great earthslips on Mount Victory. The summit of the mountain was not visible from near Keppel Point, on account of a dense cloud which rested on it when the tops of Mount Suckling, 11,000 feet, and Mount Trafalgar, 4,000 feet, were quite unclouded. A column of steam could, however, be seen rising out of a ridge not far from the top of Mount Victory, and a few days later we had an opportunity in the early morning of seeing numerous columns of steam rising, some from the very tops of the two crests of Mount Victory, others from spots a considerable distance from the highest points, issuing from crevices and hollows all round the two peaks. By 7 or 8 o'clock this steam always formed a dense cumulus over and about the top of the mountain, which looked like a thundercloud, and completely hid it from view. On Mount Victory vegetation is very scant, a species of pine being most conspicuous. Mount Trafalgar, on the contrary, is covered over the summit with dense forest. Flame was not at any time seen by us on Mount Victory, nor could we obtain from the natives any information regarding it."

(MacGregor, in BNGAR 1890-91:14; the time is late July)

This is from Appendix D of that Report - "Despatch reporting visit of inspection to north-east coast of the possession" (No.100, Brisbane, 16th September ~~1890~~ 1890) - and, as such, should be available in the form of that Despatch as well as this report.

All or most of what has been quoted above has also been quoted in two other places of which I am aware - by Geologist A. Gibb Maitland in the following year's Annual Report (BNG AR 1891-92:74), and by Rev. A.A. Maclaren in his paper "A Visit to the N.E. Coast of British New Guinea" (see Royal Geographical Society of Australasia - Victorian Branch, Transactions, Vol.9 (1891), pp.30-1).

At the time Rev. Maclaren was acting as MacGregor's Private Secretary, and his own version of the observations appears in Synge (1908). Also on this voyage was a man named Thomson, and he recorded impressions. We shall now consider these.

(c) "We now also for the first time know that Mount Victory possesses great internal activity, ..." (p.33)

"It was when in the neighbourhood of Keppel Point that Sir William MacGregor first discovered the seismic character of Mount Victory. Steam was first observed in the early morning issuing from the summit of its two crests, and from a ridge of lower altitude; as the morning advanced the whole top of the mountain was completely obscured by the dense exhalations, which resembled a thundercloud. The altitude of Mount Victory is probably 3,500 feet above sea level, and that of Mount Trafalgar about 4,000 feet. The latter is forested to its summit; upon the former vegetation is not luxuriant, it being very precipitous, its top occupied by bare, rocky masses, and its rugged faces contorted by what appeared to be

enormous landslips. Sharp shocks of earthquakes were reported to have been experienced some weeks previously by fishermen in the neighbourhood of Sydney Islands, while on the mainland similar phenomena were also observed at Port Moresby, but on no visible part of the mountain could lava streams be detected." (p.37)

(From J.P. Thomson, "On the North-East Coast of British New Guinea, and some of the adjacent Islands", in Proceedings & Transactions of the Royal Geographical Society of Australasia, Queensland Branch, Vol.VI, Part I (1891))

9d) "Mount Victory is lofty and seems to have been disturbed recently. It is volcanic, and smoke and steam were clearly seen rising out of it some distance from the top. It is covered with fir-trees in parts, and in other places is bare and of a dark brown tint. A large plain covered with grass slopes down from the bottom of the mountain to the sea. It looks as if it had been made by water rushing down from the mountain on to it. Mount Trafalgar is separated from Mount Victory by a slight valley. It is about the same height as Mount Victory, but longer, and not so abrupt in its rise."

(From F.M. Synge, "Albert Maclaren, Pioneer Missionary in New Guinea", S.P.G., London, 1908, p.100. Synge is apparently quoting from Maclaren's Diary for 30th July 1890)

5. As mentioned on the previous page, Maitland also quoted MacGregor's Despatch reports. I think ill-health dogged his visit to BNG in May-October 1891, and he really only saw Mount Victory from the flanks of Mount Suckling (and/or Collingwood Bay). After quoting MacGregor, his comments went on:-

"This district was visited by Captain Moresby and his officers, who, after rounding Cape Nelson before nightfall, on 5th April, 1874, "were much impressed by the fine picturesque appearance of Mounts Victory and Trafalgar." They do not appear to have noticed the emanation of either steam or smoke. At several places and at different times during our Mount Suckling journey, volumes of steam and smoke could be seen issuing from both the sides and summit of the mountain.

The Mount Victory mass was separated from the Main Range by a large area of flat, comparatively timberless, country.

The earth-slips described by the Administrator are probably the narrow gullies excavated out of a mass of fragmental volcanic material. Such gullies I found to be characteristic of those tuff cones which I examined in the D'Entrecasteaux Group."

("Geological Observations in British New Guinea in 1891" by A. Gibb Maitland, Appendix M in BNG AR 1891-92. This quote from p.74)

6. "I begin to write on Thursday, December 9, 1909, soon after sunrise. I am sitting on the very top of Maneao, a mountain range in Papua, nine thousand feet and more above the opalescent waters of Collingwood Bay. Although this lofty spot is well within the bounds of my own parish, and not more than thirty miles, as a bird might fly, from the place where I live, I had not known of Maneao's existence, nor so much as heard the name, until a week ago. And even now, it seems to be the merest chance that I am enjoying this wide and splendid prospect, sunning myself far above the clouds, upon a soft carpet of grass and yellow buttercups and pink and white daisies, instead of going about my ordinary business in

Wanigera /i.e. Wanigela/, away there at the foot of Mount Victory, which the natives call Keroro.

It is not every man who can boast of an active volcano in his backyard, but there it is, eight or ten miles behind my station, red and gold in the early morning, and purple or grey towards evening, always with white steam, or spirals of darker smoke ascending from a dozen fissures in its rugged crown. The elder men in Wanigera will tell you of a time when the "burning mountain" burst asunder, and sent flaming streams of lava flowing down to the sea, and they remember how the people dwelling on the higher ground made haste to build new and safer homes more near to the shore, and how from that time onwards travellers and huntsmen have been careful to keep away from the slopes of Keroro. This all happened when Nonis and Mr. Tomlinson were young men, and when Kukiaus was a little boy, and that was anything between twenty and thirty years ago."

(A.K. Chignell, "AN Outpost in Papua", Smith, Elder and Co., London, 1911; pages 1-2)

It was Waiko's 1972 paper which first brought Chignell to my attention, and I still haven't read the full book. The other references to Mount Victory I have noted are:-

"..... to look at the smoke over Mount Victory, ..."
(p.171)

and "....., and there are little white puffs of steam round the top of Mount Victory; ....."
(p.255)

7. "Reports exist of volcanic eruption from Mt. Victory in the early part of the 19th century. Natives of the area state that an eruption took place possibly about 1880 and that casualties occurred. No more recent activity is known."

(N.H. Fisher, "Catalogue of the Active Volcanoes of the World including Solfatara Fields Part V MELANESIA", 1957, p.55)

Of particular interest is the inclusion in his Bibliography of a Territory of Papua (Administration) Patrol Report of April 1916. I assume it is this that is the basis of the above quotation, and discussion in the text will be based on this assumption.

In all fairness to Fisher, it must be noted that he says "Reports exist ....." and "Natives ..... state .....". Earlier (pp. VIII - IX) he had commented on the "short period of recorded history" "limited to about the last eighty years" in much of Melanesia. Given the date at which Fisher was writing (for a 1957 publication date), the recorded history of Mount Victory, at least with regard to the matter in which we are interested, was less than 70 years (and I find this quite incredible, and will have more to say about it in the text).

8. "The Cape Nelson peninsula is made up of two large volcanic cones, Mount Trafalgar and Mount Victory. Mount Trafalgar is deeply dissected and has obviously been inactive for a long time. Mount Victory rises more than 6,000 feet above sea level and the summit of the well-defined cone is a rugged area covered with vegetation."

"History records eruption from this volcano /Victory/ during the last century, and that eruption has occurred within the living memory of the local natives is certain as they tell vivid stories of an outburst which was possibly of the glowing cloud type."

(Both Taylor, 1958:14)

"Perret (1937) observed that certain long-dormant volcanoes of the closed conduit type produced eruptions which had three consecutive but overlapping phases, namely: a phase of violent explosive activity, a phase of moderate activity, and a phase of quiet extrusive activity."

This is Taylor, 1958:27. I assume that Mount Victory is the same type of volcano as Lamington, being described above, though I am not aware of any geologist having explicitly stated this to be the case.

"Mount Lamington belongs to a category of relatively acid volcanoes which have a characteristically discontinuous pattern of activity. Long periods of dormancy have led to periodic paroxysmal eruptions."

(Taylor, 1958:95)

9. "The northern part of the area is occupied by the extinct volcano Mt. Trafalgar and the dormant volcano Mt. Victory."

"In contrast to Mt. Trafalgar, Mt. Victory has generally well-preserved young volcanic land forms. The summit area ..... and upper slopes consist of rocky lava domes and more or less dissected lava flows."

"Much of the forest in these /lower slope/ areas is relatively poor in species and is in a successional stage, having developed after the destruction of the original rain forest during an eruption in the last century."

(all from CSIRO, 1964:12)

"Although still recognizable in outline and by its radial drainage as a volcano ....., Mt. Trafalgar-Topographers Range has long been extinct and is maturely dissected into steep mountain spurs with plateau-like northern and eastern foot slopes dissected by U-shaped gorges ...."

"Mt. Trafalgar-Topographers Range is separated from the dormant volcano Mt. Victory by a saddle only 1000 ft high. The very rugged summit area of Mt. Victory with a number of large lava domes has been the most recent major eruption centre ..... . Unconfirmed reports of a devastating eruption about 1880 (Fisher 1957*) are supported by evidence of the successional stage of much of the forest on the higher slopes."

(both CSIRO, 1964:18)

The asterisk referred to a footnote, giving the proper reference - see item 7.

Dealing with the Boa Family of moderately weathered Brown Ash soils:-

"These soils are more than 4 ft deep and have polygenetic profiles. The upper profile consists of loam to sandy clay loam, with a very dark to black A_1 horizon overlying a dark brown B horizon. This profile is underlain at a depth of 27 to 38 in. by a very dark brown to black buried A_1 horizon. A sample of the buried A_1 horizon yielded 6% organic carbon and the very high C/N ratio of 28, indicative of strong carbonization of the original organic matter."

(CSIRO, 1964:60)

"The Boa family with its buried A_1 horizon is most frequently found in the higher parts of the land system, where the more rapid rate of organic accumulation increases the chance

of well-developed organic horizons being preserved below younger ash deposits. Also, such sequences of ash showers are likely to be better developed in areas near the crater zone. Soils of Boa and Penari families are locally covered by up to 15 in. of rather fresh ash, enriched with organic matter and of sandy loam to fine sandy loam texture. Such spots are within the area covered by Mt. Victory blast succession forest. This suggests that this ash was deposited during the last eruption of Mt. Victory about 1880.

(CSIRO, 1964:66-7)

"Burning /~of grasslands, now regenerating~/ was probably discontinued after the 1880 eruption, when the population fled from the mountain slopes."

(CSIRO, 1964:72)

10. "..... Mt Victory which was last active in the 1890s."

(p.599)

"In the second volcanic area in the east of the /~Northern~/ District, eruptions have been recorded in the Goropu Mountains and of Mt Victory. There are also unconfirmed reports of a pre-contact eruption of Mt Trafalgar on Cape Nelson."

(p.863)

Both these are from the "Encyclopaedia of Papua and New Guinea", Melbourne University Press, 1972.

VICTORY - II.

This is a sequel to my 25.8.74 typescript "The late Nineteenth Century Eruption of Mt. Victory.". It has mainly been made necessary because of my omission of Strong (1916) from it.

There will be a bibliography, and there is an APPENDIX - to look at the confusion surrounding Fisher (mainly), and Taylor. The text will be a series of points, not a narrative.

a) The correct name for Mount Victory is Keroroa, while Mount Trafalgar is Jamewa (or Jamewar).

b) i. I have not been able to determine if any seismograph records actually exist for the period of interest (see p.3 of the original), but my inquiries indicate that it is most unlikely. This makes us dependent on observations, unfortunately.

ii. Radiocarbon dating should be of application, at least for previous eruptions (see this APPENDIX), and may also be of use for the shorter time interval (I think I've recently heard of the technique being used to date periods of less than 100 years).

c) i. "In Collingwood Bay we cut a large quantity of firewood from the tall, fir-like trees which generally ornamented the points of land. The land now runs north-east for 45 miles till it forms a noble promontory, and terminates in Mounts Victory and Trafalgar, 5000 feet high, and Cape Nelson--names which I rejoiced to write for perhaps the last time on the map of the world. The natives here fled at our approach; and we observed that, although belonging to the light-coloured race, they differed in appearance from the natives of East Cape, and wore their hair in long, thin, ugly ringlets."

(Moresby, 1875:253)

Again (see original APPENDIX. L. items) nothing unusual.

ii. There was no doubt in Moresby's mind that he was the first along the north-east coast of Papua. On pp. viii-ix of his 1876 book, he described how Bougainville had been about 40 miles south of Heath Island in 1768, and D'Urville 16 miles south of it in 1840; also that DEntrecasteaux had been around the islands now named after him in 1793, and had then sailed up the coast but about 25 miles out at sea from Cape Sud Est and Richie Island (latter being approx. Ambasi/Mitre Rock area).

iii. Probably the best chance of deciding whether Moresby was correct or not (above) lies in Petherick's unpublished bibliography of New Guinea navigators (as held by the National Library of Australia) - see "Sources for History" in the Encyclopaedia of Papua and New Guinea, 1972:1082.

d) i. "In parts of the D'Entrecasteaux Islands, and the north-east coast, near Collingwood Bay, modified forms of volcanic activity prevail at the present day. In the former locality, large areas of solfataras were encountered, and at Mount Victory--a cone of 4,000 feet in height--volumes of steam and smoke still issue."

BNG AR 1891-92:64

As with the original APPENDIX. 5., this is from "Geological Observations in British New Guinea in 1891." by A. Gibb Maitland.

ii. It was in Maitland's Bibliography that two references to volcanic activity (which I could not locate last time) appear.

Meyer, ~~PRI~~ Dr A.B. "Earthquake in New Guinea" Nature ix p.263 (this was June 1873, West New Guinea - Geelvinks Bay/Arfak Mts./MacCluer Gulf)

Mikluoho-Maclay, M. de "Volcanic Activity in the Islands near the North-east Coast of New Guinea", Proc. Linn. Soc. NSW, 1885, IX., pt.4 p.965.
(This was earthquakes/tidal waves on the Maclay Coast, Madang District; also volcanoes, but all N.G. The reference given by Maitland may not be quite correct - Vol.9A, 1884)

I doubt that Fisher would have taken this as (British) New Guinea; anyway neither is early in the 19th century (it was these assumptions which led to my comment on the middle of p.2 last time).

e) "The Cape Nelson promontory is remarkable. It consists of a mass of hills ranging up to 5000 feet high. One of these is a still active volcano. I visited the upper slopes of it in 1911, and could quite clearly see steam rising from vents near the top. Reliable native accounts show that some forty years ago there was an extensive eruption--one or more villages were overwhelmed--and the Awanabairia people, who them lived on its slopes, fled to their present home at Lakwa."
(Strong, 1916:409)

This appeared in The Geographical Journal in November 1916.

Forty years back from 1916 gives an 1876 eruption date. Assuming he made the estimate of 35 years back from 1911, he was 13 years out 22 years after an assumed 1889 date; this doesn't do much for my "age" theory (top p.2, last time).

I think one would really have to see the April 1916 Patrol Report (see APPENDIX. 7. discussion) to be able to offer more comment.

f) Regarding the relative degrees of vegetation of Keroroa and Jamewa (see p.1 and APPENDIX. 4. (b) and (c) last time).

I am informed that the boot is now on the other foot - as a result of Cyclone Hannah (May 1972?), Jamewa is now only sparsely covered with big trees; it did not affect Keroroa as much.

. . . . .

My thanks to my informant who supplied the native names for the mountains; also the information on the effects of Hannah. As I do not have his permission to quote him he shall remain nameless.

John R Horne.

(John R. Horne)
1.3.75

Bibliography. (Only items not given in text or not previously given)

Moresby, John (1875) "Discoveries in eastern New Guinea by Capt. Moresby and the officers of H.M.S. Basilisk." Proceedings, Royal geographical society, London, Vol.19:225-44.

Strong, W.M. (1916) "Notes on the North-eastern Division of Papua (British New Guinea)." The Geographical Journal, 48:407-411.

APPENDIX.

This Appendix will be devoted to a consideration of just what Fisher and, to a lesser extent, Taylor meant in their comments on Victory. Confusion in my mind over this in the original paper resulted in some confusion, to say the least.

1. From N.H. Fisher's "Volcanic centres of New Guinea", in Walkabout, Vol.17, No.6 (June 1951).

   a. "The Tufi Peninsula, which is about sixty miles east of Mount Lamington, is built up by Mount Victory, Mount Trafalgar and associated volcanic peaks. Mount Victory is a rugged, partly eroded and heavily timbered cone, with a small irregular crater at the top, from which steam is being given off very quietly in three or four places. There are no recorded eruptions, although one of the early explorers noted volcanic activity whilst passing by this coast. It is not certain, however, that this activity was actually from Mount Victory. It may have been from the Goropu mountains, or even possibly from Mount Lamington itself, although this is not very likely."

   (pp.38 & 40)

   b. The "Summary of Volcanic Centres of New Guinea" table on p.40, under the "Type of eruption as far as is known or can be estimated" column, says for Mt Victory "Probably mild explosive.
   No recorded eruptions."

2. From "Catalogue of the Active Volcanoes of the World including Solfatara Fields Part V MELANESIA" by N.H. Fisher (International Volcanological Association, Naples, 1957).

   a. On p.XIII Victory is shown as a volcano with a recorded eruption.

   b. "Reports exist of volcanic eruption from Mt. Victory in the early part of the 19th century. Natives of the area state that an eruption took place possibly about 1880 and that casualties occurred. No more recent activity is known."

   (p. 5,3 - 3)

   This was also quoted as APPENDIX 7. in the original paper, and you are referred to the comments which followed it there.

3. From G.A. Taylor's "The 1951 Eruption of Mount Lamington, Papua" (Bureau of Mineral Resources, Bulletin No.38, 1958).

   "History records eruption from this volcano /~Mount Victory~/ during the last century, and that eruption has occurred within the living memory of the local natives is certain as they tell vivid stories of an outburst which was possibly of the glowing cloud type."

   (p.14)

. . . . .

A lot depends on what we define "history" as, and which version we choose to follow.

It seems we are left to assume that there were probably two eruptions in the 19th century, the second one being the concern of the first paper.

As for the first one, recorded/reported, it apparently was noted by an early explorer "in the early part of the 19th century". As we shall see, I am sceptical that there was any such animal; in any event, radiocarbon dating (see pp.2-3 of the original) should be confirmation here.

I have not been able to obtain any information on the basis for Fisher's views.