

In three previous papers, I have set out my views on the location of the Zulu bivouac, the composition and deployment of the Zulu army and the area where I believe the discovery of the advancing Zulu forces took place. The principal features of the battle itself are now generally well known, although many details remain obscure. Not least of these unknown details is the approximate time at which the various events took place. Is it possible, for example, to determine at what time the battle began, how long the encounter lasted and when the camp finally fell? The authors of secondary narratives of the battle occasionally quote a time for some incidents and such times must have been based on a recorded account of some part of the disaster.

There are many accounts left by survivors, including those of a number of Zulu warriors. There are others by some who were not present at the battle, the best example of which is that by Captain Penn Symons, who was with Chelmsford some twenty kilometres away but who wrote his own account based upon interviews with many of the survivors shortly afterwards (1). Some of the survivors' accounts give specific times for various events that day but they vary widely for the same event. It is notable that most times quoted in the sources are to the nearest half-hour. There are some which mention a quarter-hour, but these are mostly in the Narrative (2).

This paper attempts, as far as possible, to follow a reconstruction of the key events of the encounter, at the same time trying to assign more specific times to them. The time at which these key events occurred may then be used to determine a 'critical path' from which other times may also be roughly estimated. Individual primary sources for the activities at Isandlwana itself, while valuable for reconstructing elements of what took place there, cannot tell the complete story from beginning to end because they describe only the events relating to the narrator. On the other hand, the activities of Colonel Anthony Durnford's force may be followed from the beginning almost to the end and therefore should provide a more reliable base from which to proceed. His progress also has the benefit of having two observers who gave detailed accounts of what occurred. The story may then be fleshed out by extrapolating times based upon the appropriate elements to complete the picture.

It might be best to begin by defining the day of 22 January, 1879 itself. The times of sunrise and sunset at Isandlwana differ little today from 1879, and we can say that the sun rose at 5.22 a.m. and set at 7.01 p.m. First light occurred approximately 25 minutes before sunrise and would thus be about 4.57 a.m., while last light occurred about 25 minutes after sunset, or about 7.26 p.m. (3) We also know that a partial eclipse occurred on that day, the maximum effect of which occurred about 2.30 p.m. (4)

The day began early with the departure of Lord Chelmsford and the 2/24th well before first light, at 4.00 a.m. Chelmsford's party was far to the east by sunrise and met Dartnell at the foot of Hlazakazi about 6.00 a.m. By that time the camp was already well astir, and piquets and vedettes were in place. This departure had not occurred without the knowledge of the Zulu leadership, however, who at this point probably decided that their best chance to attack the camp was when the British force was divided, despite the superstition about the moon being 'dead'. (5)

It now becomes necessary to determine a reasonable time for the first key event, based upon the available evidence; that event is the arrival of Colonel Anthony Durnford at the camp because everything that followed seems to flow from there. There are at least ten different times given in the sources for this event, which vary from 9.30 to 11.00 a.m., (6) but let us assume that Durnford and his mounted troops arrived at Isandlwana about 10.30.

Durnford's force came up to the camp at Isandlwana in three groups: first came Durnford himself with five troops of the Native Mounted Contingent. Lagging behind him came the rocket battery under Major F.B. Russell RA accompanied by two enlarged companies of 1/1st NNC: D Company under Captain C. Nourse and most of E Company under Captain W. H. Stafford. Finally, and bringing up the rear, came the baggage train, accompanied by Lieutenant W. Erskine and a few of Stafford's company left behind for the purpose. (7) Before reaching the camp, Stafford and the rest of his company were ordered back to provide additional support for the baggage train. (8)

Shortly after his arrival, perhaps about 10.45, and following a briefing from Colonel Pulleine, Durnford also sent Lieutenant Wyatt Vause with his No. 3 Troop, Zikhali's Horse, to provide further support for the baggage train which Lieutenant Davies says was four miles (6.5 kilometres) behind: (9)

After riding through the camp we halted a few minutes and gave the men their biscuits. Col. Durnford sent for me and ordered me to ride back and meet our wagons as the Zulus were seen in our rear, and he expected they would try and cut them off. (10)

About 11.15 am, after a quick meal taken while standing, Durnford also sent out the remaining two troops of Zikhali's Horse, under Captain William Barton, to reconnoitre the Nqutu plateau and clear away the bands of Zulu who were wandering about. (11) Lieutenant Charles Raw and Lieutenant J.A. Roberts commanded the individual troops. Durnford's Political Officer, Captain George Shepstone and his friend civilian storekeeper James Hamer accompanied Raw while Barton went with Roberts. (12) Raw says that Roberts was to pick up Captain A.J. Barry's NNC picquet company from the top of the spur and take them with him as support. (13) Another observer says that Raw himself was to take them. (14) In any event, Barry and his company certainly went with one of them. To replace Barry's men, Lieutenant Cavaye and his company were ordered to the top of the spur. (15) They must have left at much the same time as Barton's mounted troops, about 11.10. (16) It would have taken at least twenty minutes to march some 1,500 metres up to this position, arriving at the top of the spur about 20 minutes later, or 11.30. (17)

Also at about this time, Russell and the rocket battery arrived at the camp, accompanied by Nourse with his NNC Company. (18) The next key event was Durnford's departure across the plain:

Colonel Durnford ... took with him to the front the remaining two troops and Russell's Rocket Battery, with a company of the Natal Native Contingent, under Captain Nourse, as escort to the battery. (19)

The departure occurred between ten and twenty minutes after the rocket battery arrived at the camp, leaving them little time to recover their strength, and may therefore be determined as about 11.30 a.m. (20) The time of Durnford's departure is very important: from this, one may estimate quite accurately the time of the following events, particularly the time of the discovery of the Zulu army.

There next followed a series of conjunctions between bodies of men which must be timed so as to allow each meeting to occur correctly. The two components of Durnford's force left virtually simultaneously but they travelled at very different speeds:

[The mounted men] Going at a canter, the Rocket Battery and escort were soon left behind. (21) and departed the scene after a few hasty shots, leaving him and the remainder of the company to defend their lives in hand to hand combat with the Zulu.

The distances claimed for Durnford's foray after he left the camp were from as little as 2½ miles (four kilometres) (29) up to six miles (ten kilometres). (30) Four kilometres would have taken them only as far as Ithusi Hill and we know that they went farther than this. The best description of the route is given by Davies:

We then proceeded round the pointed hill on the left front of the camp, and were about 2 miles beyond the ridge on the left front of the camp (we could not see the battery). The battery was mounted on horses, accompanied by mules carrying the tubes. It consisted of Major Russell himself, one acting bombardier and eight other ranks of the 1/24th. (22) Captain Nourse's company of NNC numbered 120 officers, NCOs and men. (23) The NCOs and men were on foot, had already marched 17 kilometres that morning and had probably not eaten during that time. The white NCOs in particular would have been very tired.

Some time earlier, Trooper Barker, Natal Carbineers, had been sent back to the camp with a report of Zulu activity and on his way back to his commanding officer, Lieutenant F.J.D. Scott, he came across the rocket battery. (24) The battery is reported to have travelled two miles (3.2 kilometres) before being overtaken by Barker and his mate. (25) The most likely point for this meeting, in view of what was to follow, is about 2.5 kilometres from the camp, placing them just south-east of the 'conical koppie' (amaTutshane). Barker told Russell about a Zulu advance on the plateau and, when asked, pointed out the best route up the escarpment, where Russell wanted to support the two troops of Native Horse. (26) Russell then turned the battery half-left to labour across a large donga on his way to the western slope of Ithusi Hill.

When they were part way up the escarpment, the rocket battery was attacked by skirmishers from the Zulu centre which then went on to engage Nourse and his NNC a short distance away. (Their attackers could not have been the main Zulu force because Nourse was able to hold them at bay until Durnford arrived to effect a rescue.) The battery had travelled no more than 4.5 kilometres when it was overwhelmed, (27) leaving only four men alive. The time calculated for this event is 12.15 p.m. (28) Nourse, his people being on foot, would have travelled more slowly. His engagement by

the Zulu would still have occurred only minutes later, say at 12.25 p.m. Most of Nourse's native troops did see the camp), and very near another ridge that you cannot see at all from the camp; this would make us about 3½ miles from the camp. (31)

The 'pointed hill' is amaTutshane, which is little more than two kilometres (1¼ miles) due east of the camp; the 'ridge on the left front of the camp' is Ithusi Hill, a further two kilometres east. The last ridge is almost certainly Nyezi, which is about nine kilometres (5.6 miles) east of the camp. (It could not have been Qwabe because that knoll is visible from the camp and is too far south from their line of march.)

In the period from his departure at 11.30 to his rescue of Nourse at 12.35, a total of 65 minutes, Durnford crossed the plain to a certain point, engaged the advancing Zulu and returned. The time, however, must be scaled back slightly for two reasons: one, a brief conversation between Durnford and two Carbineer messengers and, two, the time taken for the Zulu to advance about a kilometre from their first sighting until Durnford began his retreat. In total, these delays might have occupied about 10 minutes, bringing the elapsed travel time back to 55 minutes. The calculated furthest point of his outward journey brought him to within two kilometres of Nyezi Hill, or some 7.5 kilometres, from which point the Zulu could be seen advancing. (32) This distance accords very well with Davies's estimate of 1,500 yards.

The time now, according to our calculations, was 11.30 plus 16 minutes to pass his future meeting point with Nourse, then a further 14 minutes to reach his furthest point: very close to noon. (33) Here the two messengers caught up with him:

We were here overtaken by 2 Carbineers, who had been sent with a message from Lieutenant Scott, of the Native Contingent [sic], who was on picquet duty on the pointed hill to the left front of the camp. The message was to the effect that we had better return as the enemy were fast surrounding us. (34) Having proceeded between 5 and 6 miles, a mounted man came down from the hills on the left, and reported that there was an immense "Impi" behind the hills to our left; (35)

The Carbineers with Lieutenant Scott were probably somewhat to the east of amaTutshane, having been ordered to watch developments after reporting their activities earlier in the day. (36) Scott realised the impending danger because the vedettes on the Nyoni ridge would have seen the activity on the plateau and reported to their commanding officer. The messengers must have galloped about four kilometres before catching up with Durnford, taking about twelve minutes to do so. Raw's discovery of the Zulu army must, therefore, have occurred no more than a few minutes before the messenger's despatch, or about 11.45. Again, this accords well with the *Narrative*, which gives a time of noon. (37)

Now a brief digression. Some secondary accounts might lead the reader to suppose that, following their discovery, the Zulu charged the camp and overran it in short order. This was not so because of the long distances involved. There is also evidence that at least some units 'marched', rather than ran, towards the camp. (38) Smith-Dorrien described their gait as a 'very fast half walk, half run'. (39) The speed of their advance has, therefore, been calculated at 8 kilometres an hour, an easy jog. (40)

To return to Durnford and his confrontation with the advancing Zulu army:

It was during this conversation [with the Carbineers] that our scouts reported the enemy in sight. We looked up to the ridge on our front, and could see the enemy in great numbers about 1,500 yards [away], steadily advancing and firing at us. (41)

The fact that a Zulu force was to their front, on what must have been Nyezi ridge, clearly demonstrates that some Zulu units did not go up to the plateau at all, but moved around the southern shoulder of Mabaso, then west across the plain. There is further confirmation that the warriors were to Durnford's front, as well as on the edge of the escarpment:

[The messengers] had scarcely made the report when the Zulus appeared in force in front of us and to our left. (42)

It was clear to Durnford that he must turn back and he:

... retired some little way, taking up a position in a "donga" or watercourse, of which there are several across the plain in front of Sandlwana. (43)

This was not the final donga but one closer to the escarpment. This is described exactly by a Zulu warrior:

The engagement now became very hot between the Mangwane (mounted natives) and us, the Mangwane being supported by the infantry who were some distance in their rear. We were

now falling very fast. The Mangwane had put their horses in a donga, and were firing away at us on foot. (44)

Durnford shook his men into line and began to retire towards the camp:

[He] gave the order for us to extend our men, and wait for the enemy to come within 400 yards of us, then Henderson's and my Troop to retire and fire alternately towards the camp... When we had retired about 2½ miles, and very near the pointed hill [amaTutshane], the enemy opened fire from the ridge that we had just a short time previously passed [Ithusi];... We continued our firing, and retiring, and just as we got round the pointed hill, I came upon Captain Nourse ... (45)

The firing reported as being heard in the camp about noon caused the camp to stand-to again:

About 12 o'clock we were turned out, as heavy firing was heard in the direction of Colonel Durnford's force. (46)

The ambiguity as to which of two forces was meant must compel us to consider that the fire was either from Durnford's force on the plain, Barton's men on the plateau, or both. Durnford's two troops of horse retreated for a total of about 3.5 kilometres, at the same speed as the Zulu advance: about 8 kilometres an hour. As we have seen, it took him about 25 minutes to reach a point near amaTutshane, which, adding the further 10 minutes for the delays before retreating, makes the time of the rescue of Nourse about 12.35 p.m.

We retired steadily in skirmishing order, keeping up a steady fire for about two miles, when we came upon the remains of the Rocket Battery, which had been cut off and broken up. There was a hand to hand engagement going on with those that remained. (47)

When Durnford had gathered up Nourse and his few surviving men:

The retreat was continued until we arrived at a "donga" about half a mile in front of the camp. Here a few mounted men - Carbineers, Natal Mounted Police, &c. - reinforced our right. (48)

We continued firing and retiring till we got to the watercourse, about 300 yards in front of the camp; (49)

Jabez Molife described how they then proceeded:

After this we remounted & retreated 20 yds, always in a long thin line, then dismounted & fired, up again for another ten yards, dismounted & fired again, & so on ten yards at a time, firing always, slowly back towards the Camp. (50)

The figure of 10 yards is almost certainly incorrect but even so, the rescue and then the retirement to the large donga, about 1,500 metres from where Nourse was found, would have taken another 15 or 20 minutes, bringing the time close to 1.00 p.m. Shortly afterwards, they were joined there by other mounted men led by Captain Bradstreet of the Newcastle Mounted Rifles: (51)

...we were here joined by some mounted men, [I] supposed they were the Mounted Infantry, Mounted Volunteers and Police; (52)

We have now established a coherent range of times for Colonel Durnford's activities, arriving about 10.30 a.m., departing about an hour later and taking up his position in the donga about 1.00 p.m. Furthermore, we have been able to estimate the time of the discovery of the Zulu army as about 11.45 a.m., not in the Ngwebeni ravine at Mabaso, but much closer to the camp, to the north-west of Ithusi. It is time to turn to the remainder of the camp.

Just before he left the camp, Durnford had seconded Lieutenant Higginson of the NNC from Pulleine and sent him up to the plateau to order Captain Shepstone to support his march by riding parallel with him along the escarpment. (53) Before he was able to deliver the message, Higginson found that the discovery of the Zulu army had already taken place. (54) Barry's men had fled at the first sight of them and Barry himself, and Lieutenant Vereker, were alone and on foot:

...shortly afterwards Serjeant Major Williams came up, having brought Captain Barry and Lieutenant Vereker into camp; he let them ride turn about on his horse. (55)

David Jackson estimates that Higginson would have taken about 20 minutes to reach Shepstone, riding at 10 miles (16 kilometres) an hour, close enough to our own 15 kilometres an hour. (56) We

thus have an opportunity to determine where Jackson thought Shepstone was at that time, because the distance Higginson travelled could not have been more than 5 kilometres and places his furthest point of travel near the ridge of Ithusi Hill at about 11.50 a.m., almost immediately after the discovery of the Zulu army. This provides ample proof that the time of the discovery, as calculated, is about right and, more importantly, that the discovery could not have occurred on the lip of the Mabaso Hill ravine, which is five kilometres further to the north-east.

George Shepstone had acted quickly. He first gave orders to Barton that the mounted men, who had by now joined up, were to engage the Zulu at a distance, keeping pace with their advance, (57) while Shepstone himself, together with his friend Hamer, raced back to the camp with the news. (58) His ride must have taken about the same time as Higginson's, some 20 minutes, timing his arrival in the camp about 12.10 p.m., and coinciding with the arrival of Captain Alan Gardner. (59)

In the meantime, Barton and his Zikhali's Horse must surely have waited until the Zulu came within rifle range.

... they had seen the Zulu army about a mile off advancing in line. (60)

The distance was more likely to have been about two kilometres and taken 15 minutes to cover. They then withdrew slowly towards the spur in accordance with their orders. The distance from Ithusi to the spur is about 3.5 kilometres and it would have taken them a further 30 minutes to cover this distance, staying in touch with the Zulu van, bringing the time to about 12.30. At this point, the Natal Mounted Contingent tucked themselves to the right of Cavaye and began to hold the line.

We noted earlier that Lieutenant Cavaye and his company had arrived at the top of the spur about 11.30. The Zulu right horn was already beginning to deploy from the upper part of the ravine when the discovery took place shortly afterwards and was unimpeded in its advance. Six kilometres would have brought them within the stated 800 metres of Cavaye's company on the spur, a distance that would have taken them about 45 minutes to cover and bringing the time to 12.30.

At about 12 o'clock, hearing firing on the hill where the company, 1 24th Regiment, was stationed, I proceeded in that direction. On my way I passed [No.] 4 company of the 1 24th, under command of Captain Mostyn, who requested me, being mounted, to direct Lieutenant Cavaye to take special care not to endanger the right of his company, and to inform that officer that he himself was moving up to the left. (61)

This is too early; Mostyn would not have been despatched to the spur without additional good reason and the impetus for the order was surely the news that Shepstone brought of the discovery of the Zulu army. Pulleine was bound by his promise to Durnford to support his mounted men, and he also wanted to support Cavaye. If Mostyn left at 12.15, he could not have arrived to reinforce Cavaye until about 12.35. We might speculate that Essex passed him about 12.25.

The Zulu right horn ignored the ineffective fire Cavaye brought to bear and carried on their enveloping movement. They continued westwards until they opened up the headwaters of the Manzimnyana stream then turned south to follow its course until they were astride the Rorke's Drift track. This movement required them to travel a further seven kilometres, taking another 50 minutes. The time when the track was closed to any fugitives was thus about 1.20 p.m. This stroke was effected without the knowledge of anyone in the camp: the position was at least half a mile away, on the far side of Isandlwana and at the bottom of the hill running down from the *nek*. (The small NNC picquet at the rear had been withdrawn earlier, Anstey's road party had returned to the camp (62) and there were no vedettes behind the camp.) The Zulus then began to move up the hill towards the camp.

Meanwhile, after delivering his message Shepstone had met Lieutenant Vause, who had heard the firing from the camp and hurried forward with his troop. This must have been about 12.20. Shepstone took Vause and his dismounted men up the spur, where they joined their comrades some 20 minutes later:

On arriving at the top of the hill we perceived the enemy in overwhelming force coming up from behind and fearing our ammunition would be expended before we could reach the camp Capt. Shepstone gave the order to retire back to our horses. (63)

Mostyn's company had been there only a short time when they were also ordered to retire, being threatened with encirclement on their left. (64) The retirement was not a simple matter:

... being mounted [I] had great difficulty in descending the hill, the ground being very rocky and precipitous. (65)

In addition to the state of the ground, the retirement to the foot of the spur was effected under fire and would not have taken less than twenty minutes and perhaps a little longer. The retirement was thus completed close to 1.00 p.m.

The Zulu chest continued along the crest of the plateau after passing Ithusi Hill. These warriors, lead by the umCijo, began to spill down from the escarpment onto the plain to the left front of the camp. Again assuming an advance at eight kilometres an hour, they would have been engaged by the British artillery at long distance about 40 minutes after their discovery, or about 12.25.

Major Smith arrived as we were turning out and took command of the guns. We trotted up to a position about 400 yards beyond the left front of the Natal Contingent Camp and came into action at once on a large body of the enemy about 3,400 yards off. (66)

Smith returned to the camp with Gardner and we have already determined that they arrived about 12.10, so our time accords well with that of Curling. (67) It was probably shortly after this that Lieutenant Roberts and some of his Zikhali Horse, having sought shelter in a Zulu homestead, were killed by 'friendly' artillery fire. (68)

The slower Zulu approach from 3,200 metres to within 400 metres of the infantry line, under increasingly heavy fire, must have taken a further 30 minutes, taking the time to 12.55 p.m., close enough to 1.00 p.m. Here the Zulu advance on the whole front faltered under the withering fire from the defenders. George Hamilton-Browne, commanding the 1/3rd NNC, had been sent back to camp by Lord Chelmsford, and observed much of the attack from a low hill about five kilometres (three miles) from the camp. The British, he observed, were holding their own at 1.00. (69) The events which followed were extremely confused so that the determination of accurate times becomes, not surprisingly, more difficult. Nevertheless, sufficient clues are provided to enable our re-construction to continue.

According to Curling, the guns were firing for at least 15 minutes before Smith took one away for a short time to assist the right flank, which might have taken the time to about 12.45. (70) However, Hamilton-Browne also noted this movement from the plain:

At about 1.30 p.m., I saw one of the guns alter its position. (71)

It is entirely possible that Curling was confused by the heat of battle but it is likely that Hamilton-Browne's time is also reasonably accurate, because he probably observed the movement of the gun *back to its original position* near Curling. Thus a compromise time of about 1.15 p.m. is likely for the second movement. Curling noted that shortly after Major Smith's return, 'we began firing case; but almost immediately the Infantry were ordered to retire', at which point the guns stopped firing. Hamilton-Browne also noted that the guns ceased firing shortly after the movement of the guns, perhaps about 1.40. (72) Thus the guns were firing for about one hour and fifteen minutes. Can we possibly determine how likely this was? The guns had fired about 40 rounds each, of which the last two had been case. (73) If this was so, and allowing about two minutes for each round, the firing time was about 80 minutes, so our time of 75 minutes is not unreasonable. There are also several reports of people in Lord Chelmsford's column hearing guns firing from the camp. Among these was Colonel Harness (74) and Mr. Drummond, Chelmsford's interpreter and intelligence chief. The latter was reported by Lieutenant Colonel Crealock as occurring about 1.15, again a perfectly credible time. (75) A native also reported hearing them about a half-hour later. (76)

It is time now to return to Durnford, still fighting in the donga. The Zulu left horn, meeting heavy resistance from the mounted men, extended still further south, attempting to out-flank them. (77) The resistance could not last for long.

[Durnford's force] made a stand for some time in a sluit which crossed the front of the Camp, but were driven out of it after a quarter of an hour or 20 minutes. (78)

The stand was perhaps for a little longer than this, perhaps as long as 30 minutes because during this time Durnford had time to go up to the camp and return, as indeed did Davies, who found the men leaving when he returned. The two elements which drove them back towards the camp were the threat of encirclement by the Zulu and a shortage of ammunition.

After firing one or two volleys on the flank of the enemy on our left, my men called out they were short of ammunition. I took 15 with me to get ammunition; I managed to get some 200 rounds from the Carbineer's Camp, out of a box I found open in one of the tents. I tried to get back again to the sluit, but found everybody leaving it, and the Zulus very close on us. (79)

A simultaneous forward movement was now made by all the Zulus, and many of our mounted men who had ridden in for ammunition were closely followed in by them. (80)

It is clear from the evidence that the Zulu began to enter the camp behind Durnford's withdrawal, and this was about 1.30 p.m. At about the same time, the right horn came over the *nek* and entered from the rear. This advance was almost certainly that observed by Hamilton-Browne:

...when about half-past one I happened to glance to the right of the camp. ...by the road that runs between the hill and the kopje, came a huge mob of maddened cattle, followed by a dense swarm of Zulus. These poured into the undefended right and rear of the camp, and at the same time the left horn of the enemy and the chest of the army rushed in. (81)

Gardner went to Durnford to seek an explanation for this unfortunate movement, which opened up the British right flank and enabled the Zulu to turn it. Durnford replied that 'he considered our position too extended and wished to collect all the troops together.' (82) The mounted men continued their withdrawal. Another account stated:

One company of soldiers under a one armed man, he seemed to me to only have one arm (who shot four Zulus with his revolver) I saw as I neared the nek, march in good order up to the side of Isandhlwana among the rocks under the corner facing the tents on the right of the road leading into Zululand, taking the wounded as they were struck along with them and stood at bay there until the afternoon was far spent. (83)

From our time-table, one must wonder at Mhoti's words 'until the afternoon was far spent.' There is, however, a reasonable explanation. The Zulu had no sense of recorded time as we understand it. If, therefore, the final stand by Durnford lasted perhaps another half-hour, the time would have been about 2.00 p.m. or even later. By that time, the eclipse, which began shortly after 1.00 p.m., would have been well advanced, within 30 minutes of its maximum, and to Mhoti, the dimmed light might have made the afternoon seem 'far spent'.

Some of the early escapees from the camp were able to use the track to Rorke's Drift before it was cut off. Among these were Lieutenant Adendorff of the NNC, and his comrade Lieutenant Vaines, who are reported to have arrived at Rorke's Drift to warn Chard at about 3.15. (84) The 17 kilometre ride to the post could not have been carried out at a gallop, nor yet a walk but probably a mixture of gaits, fast at first to escape the horror, then slower as they approached the Mzinyathi. Let us assume that they rode at nine kilometres an hour, thus taking perhaps two hours. In this case, they must have been two of the first officers to leave, departing about 1.15 p.m.; we should note that this was before the left wing was able to cut the Rorke's Drift road. The problem of who left first, Adendorff and Vaines, or their men, will never be resolved. Perhaps one might just add that Captain Krohn, commanding the company to which Adendorff belonged, fell on the battlefield.

As we have already seen, the Zulu right horn was established across the Rorke's Drift track about 1.20. p.m. It would not have taken them more than a few minutes to reach the *nek* from there. In the meantime, those elements which had attacked Cavaye and Mostyn had reached the bottom of the spur. They were joined by the uNokenkhe regiment, driven back earlier, which now came across the northern, much wider, *nek* of Isandhlwana, taking Captain Younghusband's company in flank. All of this pressure, at every point, precipitated the final lunge into the camp.

It was about this time that the general retreat from the camp began, as evidenced by Private Westwood, Mounted Infantry:

About 1.30 pm we found the Zulus were surrounding us, and I and my comrades thought we could do no more, and we had better get away. (85)

This was also the time when the guns began to retire through the camp. (86) One cannot presume that the camp fell immediately. The close-quarter and brutal fighting which followed must have continued for some time, but it was to no avail. Slowly, each group was overcome by sheer weight of numbers. One further action remained before the Zulu triumph was complete:

At one o'clock the Union Jack in front of the General's tent was pulled down and torn to pieces; (87)

Foley may not be quite correct with his time, but he cannot be too far out – he gave the time of Durnford's arrival as 11 a.m., thirty minutes later than we have already determined, so this act might have taken place not long after 1.30.

By 2 p.m. the only survivors of the force which had occupied the camp were those who were endeavouring to make good their escape to the Buffalo. (88)

Hamilton-Browne's statement may not be entirely correct. We should not ignore another searching enquiry, that made by Durnford's brother Edward, which was published in 1882. (89) While this, like the work of Francis Colenso, was a panegyric to Colonel Durnford, it still contains valuable information. For example:

Lieut. Colonel Pulleine, with about forty men of the 24th, was seen about 800 yards on the

Natal side of the Nek, and near this spot were “afterwards found about forty men in the bed of the stream, and no doubt it was those very men. They had been killed close together, and one body was very like Pulleine’s, but nobody could recognise it for certain. (90)

From this, one must assume that the right horn either did not move from the Manzimnyama stream, or Pulleine and his men fought their way there. If this were so, then Edward Durnford is correct to assume that battle lasted longer than is generally believed because:

The troops were broken, as we have seen, about 1.30 p.m. or between that hour and two o’clock; and as the distance from where the main action was fought, to where these bodies of the 24th won their way, is a mile, some considerable time must have elapsed before they stood in square, back to back, surrounded by the Zulu host. (91)

A mile is perhaps too far, but if we assume that Pulleine was able to gather some of his men as they streamed into the camp, and then fought his way to the spot described, then he must have gone about a kilometre, taking about twenty to thirty minutes to do so. This might place his stand at the Manzimnyama, if indeed it occurred at all, between 2.00 and 2.25 p.m.

There was also a rather bizarre occurrence at about this time. Rupert Lonsdale, commanding the 3rd regiment NNC, had suffered concussion after falling from his horse some time before and had only recently returned to duty two days before. He and his 2nd battalion were with Lord Chelmsford when he was taken ill and, giving as his reason the need to arrange supplies for his men, returned to the camp about 2.00 p.m. The statement as to the hour of this occurrence is supported by the facts that Commandant Lonsdale ...met Lord Chelmsford about 5 miles from the camp not later than 3.30 P.M. As, after leaving the camp, his pony was so tired that he had to lead it most of the way, it must have taken him an hour and a quarter to get over these 5 miles. (92) The time is also confirmed by Charles Norris-Newman:

On arriving within 300 yards of it, at about 2 p.m., he [Lonsdale] found large masses of the enemy surrounding it, and in conflict with our troops. He had but just time, on discovering the state of matters, to turn and fly for his life: several shots were fired after him, and he was chased by many Zulus. (93)

Lonsdale later reported that he had actually entered the camp but one might wonder if this was perhaps a little window-dressing

As I rode into Camp, I was in an absent state of mind for want of sleep and overwork. I don’t know of what I was thinking, my thoughts were perhaps chiefly directed on getting something to eat, I had been a long time without food. I saw the movement of the Camp all around me and red coats surrounding me, suddenly I was brought to myself with a shock. A figure came out of a tent with a dripping assegai and looking all round, to my horror, I saw that every red coat had a black face above it! (94)

From these statements, it is likely that some resistance was still being offered by the British, even at this late hour, and that the Zulu were already looting the camp. The final testimony is an observation made by Hamilton-Browne:

At this time, about 2.30 p.m., I could see that the resistance was over in Camp, and I retired as quickly as possible. (95)

A further method of determining the time of the fall of the camp is by using the evidence of the fugitives. We have already examined the peculiar case of Adendorff and Vaines. There is, however, more that can be done. By 1.00 p.m., many of the ‘idlers’ (96) had already begun to cross the southern *nek* to flee the camp; those men departing later would find their escape blocked by the Zulu right horn, forcing them off the track and down the hillside to the right of Mahlabamkhosi and on towards what is now known as Fugitives’ Drift.

The time of departure from the camp of those who eventually reached Helpmakaar also provides evidence as to when order in the camp began to disintegrate. This calculation consists of three elements: the distance from the camp to the Mzinyathi, estimated at about seven kilometres (4.3 miles), (97) the actual crossing of the river, then the ride from the river to Helpmakaar, a distance of about 24 kilometres (nearly 15 miles). (98)

The time for this has been calculated as follows: perhaps 40 minutes to reach the Mzinyathi River. (David Jackson has estimated some 35 minutes, for a distance of four miles at seven miles an hour, (99)) then another fifteen minutes to cross the river, with all of the problems which that entailed. Some confirmation of this is provided by Wally Erskine:

Immediately after this the Zulus rushed into the camp, and Captain Shepstone must have been killed then (about 4). I forgot to mention that just as I crossed the river a Zulu shot at

me, the bullet passing within an inch of my ear. I felt my head to see if I was hit; it killed a conductor by the name of Dubois who was walking up the hill in front of me; this was about 5 o'clock. (100)

His times are wildly inaccurate, but the relative time of one hour between his 4.00 and 5.00 p.m., during which he must have departed the camp and crossed the river, is perfectly reasonable.

Lastly, the journey to Helpmakaar would have been covered at a slower pace – there is a steep climb up the Biggarsberg, as Erskine says – and allowing a speed of seven kilometres an hour, (101) this would have taken a further three and a half hours. In total, this allows 40 minutes to reach the river, 15 minutes to cross and then three and a half hours to Helpmakaar, a total of nearly four and a half hours. Essex estimated his arrival at between 5.00 and 6.00 p.m. while others reported 5.00, 6.00, 6.30, 7.00 and 7.30. (102) The mean time of arrival was thus about 6.00 p.m. and suggests a departure time of about 1.30 p.m. We have already seen that this was the time when the Zulu began to enter the camp.

While on the subject of the fugitives, a number of people reported seeing Adjutant Melvill at the river crossing and his watch is said to have stopped at 2.10 p.m. (103) The forty minute ride down to the Mzinyathi meant that he left the camp about 1.30, which fits well with the time established above. It therefore seems quite likely that the action of the watch was stopped by immersion in the river. The same cannot be said of the time at which Colonel Durnford's watch had stopped:

Another evidence of the duration of the struggle is Colonel Durnford's watch (taken from his body on the morning of the 23rd). He was amongst those who formed the last group that fought it out; his death wound caused the stoppage of his watch – the time, 3.40. (104)

It is more likely that Durnford's watch simply ran down and it may well have stopped at 3.40 a.m. on the morning of 23rd January.

We may sum up the results of this analysis by indicating that the discovery of the Zulu army by two troops of Zikhali's Horse occurred about 11.45 a.m. and that the battle was essentially over by 2.30 p.m. It has been said that the last British soldier to die, who had taken shelter in a shallow cave towards the summit of the east slope of Isandlwana, was shot after a determined defence "when the shadows were long on the hills" (105). David Jackson has ventured the opinion that this might have been "about 5 p.m." (106) but one might equally suggest that this too was the result of the pall cast over the battle field at the height of the eclipse, occurring about 2.30 pm. That the sun should hide its face at this moment seems a fitting tribute.

Appendix of Time Calculations

The following notes are included in an appendix, rather than cluttering the main narrative with such detail. They describe in detail how the various times were derived.

1. Bearing in mind the fatigue of both men and animals in the Rocket Battery, it would at best have travelled away from the camp at about 6 kilometres an hour, making the elapsed time from their departure about 45 minutes. The attack on the battery therefore must have occurred at about 12.15 p.m. Nourse's company would have travelled more slowly, being on foot, say at 5 km/h, lagging behind the battery by about 500 metres, and their confrontation with the Zulu would have occurred only minutes later, say at 12.25 p.m.

2. Assuming that Durnford's mounted men left the camp, 'at a canter', at about 15 kilometres an hour (107), then returned at about eight kilometres an hour (108), it is relatively simple to find the approximate distance he travelled. It consisted of two components: one, the distance from the camp to the approximate position where he would eventually find Nourse, and two, the furthest point whose advance and return allowed him to cover the same distance at the two speeds mentioned earlier, in the time available.

3. Nourse travelled about 4 kilometres (to the rocket battery's 4.5) and Durnford would have covered the same distance in only (60 min. / 15 km x 4 km), or 16 minutes. That leaves 39 of the 55 minutes for the journey to his furthest point and back, which must be approximately the same distance. The single case which meets this requirement is a distance of about 3.5 kilometres: at 15 kilometres an hour, the time is (60 min. / 15 km x 3.5 km), or 14 minutes. In the remaining (39 min. – 14 min.) 25 minutes, and travelling at 8 kilometres an hour, he must have travelled about (8 km / 60 min. x 25 min.) or 3.3 kilometres. This is sufficiently close to the outward distance to suggest quite firmly that Durnford would have travelled an additional 3.5 kilometres, making a total of 7.5 kilometres (4.6 miles) from the camp before meeting the Zulu. (109)

4. The speed at which the Zulu advanced is not difficult to determine: Morris, in describing the Isandlwana camp site, says:

The view of the approaches was as good as could be expected in a hilly country, and there was no cover for an attacking force within a mile and a half of the camp. An impi charging the camp would be visible for fifteen or twenty minutes in every direction save one ... (110)

Over Morris's distance of one and a half miles, or nearly two and a half kilometres, the Zulu would have to travel at nearly ten kilometres an hour to cover the distance in fifteen minutes, or nearly eight kilometres an hour to do so in twenty minutes. With the words of the Mbonambi warrior and Smith-Dorrien in mind, I have estimated that the Zulu advance came on at about eight kilometres per hour, which I believe to be the pace of an easy jog. (111)

References

- 1) W. Penn Symons, *The Battle of Isandlwana and the Defence of Rorke's Drift 1879*, unpublished manuscript in the South Wales Borderers' Museum, Brecon.
- 2) War Office (Intelligence Branch), *Narrative of the Field Operations Connected with the Zulu War of 1879*, Captain J.S. Rothwell, (comp.), London, 1881.
- 3) *The Natal Almanac, Directory and Yearly Register, 1879*, Pietermaritzburg, 1878, p. 13. Data for first and last light provided on Internet site www.fliteguide.co.za/Forum.Useful_Information/, accessed on Friday, 5th June, 2002.
- 4) I am indebted to Dr Steve Bell of HM Nautical Almanac Office, Didcot, UK, for information about the eclipse. See also *Natal Almanac*, p. 5, which gives the time of the eclipse at Pietermaritzburg as 2.29 p.m.
- 5) This is mentioned in many of the Zulu accounts including Mehlokazulu: *Natal Witness*, 2nd October 1879; Nzuzi: *Natal Mercury*, January 22nd 1929; Umtegolalo: British Parliamentary Papers (hereafter BPP) C. 2260 p. 102; the Zulu deserter: The National Archive (Public Record Office), Kew, (hereafter TNA (PRO)), WO 33/34, Inclosure 2 in No. 80. The superstition did not prevent the attack on Pearson's Right Column at Nyezane on the same day.
- 6) Captain Henry Hallam Parr, *A Sketch of the Kafir and Zulu Wars: Guadana to Isandhlwana*, London, 1880, p. 202 says 9.30. For 10.00 a.m., see Captain E. Essex, evidence to Court of Enquiry, TNA (PRO) WO 33/34, Inclosure in No. 69; (also in BPP C. 2260, Inclosure 2 in No. 13); Captain W. Cochrane says 10.00 to 10.30, (WO 33/34, Inclosure 1 in No. 80.; supplementary report); for 11.00 a.m., see Lieutenant H.D. Davies: WO 33/34, Inclosure 2 in No. 96. Lieutenant W. Erskine: *Times of Natal*, 26 February, 1879, says between 10.30 and 11.00 (also in British Parliamentary Papers (hereafter BPP), C. 2260; 10.45 is offered by the Penn Symons manuscript.
- 7) Erskine.
- 8) TNA (PRO), WO 33/34, Inclosure 3 in No. 101: statement of Captain C. Nourse. See also BPP C. 2260, Enclosure 2 in No. 13.
- 9) Davies.
- 10) Killie Campbell Africana Library (hereafter KCAL), Durban: Diary of Wyatt Vause.
- 11) The times for this event vary widely, even as impossibly early as 9.00 a.m. (Private Bickley, TNA (PRO), WO 33/34, Inclosure 4 in No. 96). Brickhill, quoted in Alan F. Hattersley, (ed.), *The Later Annals of Natal*, London, 1958, p. 150ff, taken from *The Natal Magazine*, September, 1879, says 11.00. Cf. Davies, who says they left a half-hour before Durnford.
- 12) National Army Museum, London, reference 6807-386-8-14: account of James Hamer.
- 13) TNA (PRO) WO 33/34, Inclosure 1 in No. 91: account of Lieutenant C. Raw.
- 14) Davies.
- 15) Who ordered Cavaye out has been argued by a number of writers. Gerald French, *Lord Chelmsford and the Zulu War*, London, 1939, p. 148: "[Cavaye's deployment] was done at Col Durnford's order." This merely echoes Lord Chelmsford's own words in his undated notes on the findings of the Court of Enquiry, quoted in J. Laband, *Lord Chelmsford's Zululand Campaigns*, Stroud, 1994, pp. 92ff. The contrary view may be given by Captain Alan Gardner, evidence to the Court of Enquiry: TNA (PRO), WO 33/34, Inclosure in No. 69 (also BPP C. 2260, Enclosure 2 in No. 13). See also Gardner, supplementary report: TNA (PRO), WO 33/34, Inclosure 2 in No. 7 (BPP C. 2260, Enclosure 2 in No. 12). These both state that Pulleine sent Cavaye, but it might still have been at Durnford's behest.
- 16) TNA (PRO), WO 33/34, Inclosure 4 in No. 96: statement of Private E. Wilson (named incorrectly as Dillon).
- 17) Philip Gon, in *The Road to Isandlwana: The Years of an Imperial Battalion*, London, 1979, p. 227, says it was "an easy climb", and estimates 15 minutes, but this seems too fast for a steep uphill march of nearly a mile.
- 18) Times of 10.30 am (Private Trainer) to 11.00 am (Privates Grant and Johnson) are given: TNA (PRO), WO 33/34, Inclosure 4 in No. 96.
- 19) Lieutenant Cochrane, Transport Officer to Colonel Durnford, supplementary report, TNA (PRO), WO 33/34, Inclosure 1 in No. 80. The troops were the Edendale troop under Lieutenant H.D. (Harry) Davies and Hlubi's baSotho under Lieutenant Alfred F. Henderson.
- 20) Times for the departure are given as 11.00: *Narrative*, p. 33; 11.15: Grant and Johnson. Davies says "About half an hour after Raw and Barton [left], Colonel Durnford rode up, telling us to mount our men and follow him".

- 21) Cochrane.
- 22) John Young, *They Fell Like Stones: Battles and Casualties of the Zulu War*, 1879, London, 1991, p. 49.
- 23) Nourse. Davies gives a figure of 120 men; Nourse said that he had 248 men, but was almost certainly in error. John Young estimates 240 men for both of the companies of NNC in Durnford's command.
- 24) Rev. John Stalker, *The Natal Carbineers*, Pietermaritzburg, 1912, p. 99: account of Trooper W. Barker.
- 25) Johnson.
- 26) Johnson and Trainer.
- 27) Grant says six kilometres (or four miles).
- 28) To maintain a cohesive narrative, details of calculations have been placed in an appendix; see item 1 therein.
- 29) Davies.
- 30) Cochrane.
- 31) Davies.
- 32) See Appendix, item 2.
- 33) See Appendix, item 3.
- 34) Davies.
- 35) Cochrane.
- 36) Barker.
- 37) *Narrative*, p. 33. Cf. TNA (PRO), WO 33/33.
- 38) Bertram Mitford, *Through the Zulu Country, Its Battlefields and People*, London 1883, p. 26: account of an Mbonambi warrior.
- 39) Lieutenant H.L. Smith Dorrien, letter to his father dated 25th January, 1879 in French, *Lord Chelmsford and the Zulu War*, p. 98ff.
- 40) Appendix, item 4.
- 41) Davies.
- 42) Cochrane.
- 43) Cochrane.
- 44) F.E. Colenso, *The Zulu War and its Origin*, London, 1880, p. 410: account of Uguku of the uMciyo regiment.
- 45) Davies.
- 46) TNA (PRO), WO 33/34, Inclosure in No. 69: Lieutenant Curling R.A.: evidence to the Court of Enquiry.
- 47) Cochrane.
- 48) *Ibid.*
- 49) Davies.
- 50) *Natal Colonist*, 28 February, 1879: account of Jabez Molife. See also the Durnford Papers, Royal Engineers Museum, Chatham, reference 4901.44.2.
- 51) Gardner, supplementary report.
- 52) Davies. See also Cochrane.
- 53) TNA (PRO), WO 33/34, Inclosure 3 in No. 96: account of Lieutenant W.R. Higginson.
- 54) *Ibid.*
- 55) *Ibid.*
- 56) F.W.D Jackson, *Hill of the Sphinx: The Battle of Isandlwana*, London, 2002, p. 28.
- 57) Raw.
- 58) Hamer.
- 59) Gardner, report, in which he gives the time as between 1.00 and 2.00.
- 60) *Narrative*, p. 33.
- 61) Essex.
- 62) Private Bickley witnessed both incidents.
- 63) Vause diary.
- 64) Essex says five minutes but it may have been longer.
- 65) Essex.
- 66) *Ibid.*
- 67) Curling.
- 68) *Natal Mercury*, 22nd January, 1929: account of Captain W.H. Stafford.
- 69) Colonel G. Hamilton-Browne, *A Lost Legionary in South Africa*, London, 1912(?), p. 131.
- 70) Curling.
- 71) TNA (PRO), WO 33/34, Inclosure 1 in No. 96: report of Commandant G. Hamilton-Browne.
- 72) *Ibid.*
- 73) Penn Symons.
- 74) BPP, C. 2454, sub-enclosure p. 182: statement of Lt. A. Milne, R.N.
- 75) BPP, C. 2260, Enclosure 2 in No. 12: Colonel J.N. Crealock.
- 76) *Ibid.*
- 77) Brickhill.
- 78) Private Wilson.
- 79) Davies.
- 80) Brickhill.
- 81) Hamilton-Browne, *Lost Legionary*, p. 131. The use of cattle by the Zulu, presumably the column's own oxen, to screen their advance is not mentioned in any other account and may be the result of Hamilton-Browne's propensity to add "local colour".

- 82) Gardner.
- 83) Symons papers, KCAL, MS 1072: statement of Mhoti of the inGobamakhosi regiment.
- 84) TNA (PRO) WO 33/34, Inclosure in No. 70: report of Lieutenant Chard.
- 85) TNA (PRO) WO 32/7387: account of Private Westwood, 80th Regiment, serving with the Mounted Infantry.
- 86) Essex.
- 87) *Times of Natal*, 3rd February, 1879: account of Conductor Foley.
- 88) *Narrative*, p. 38.
- 89) E. Durnford, (ed.), *A Soldier's Life and Work in South Africa*, London, 1882.
- 90) Durnford, *A Soldier's Life*, p. 234. The location of Pulleine is attributed to Inspector Mansel and the quotation to Captain Nourse. The information is not found in the Mansel letters, nor the official statements of Nourse, so one must assume other private correspondence was involved.
- 91) *Ibid.*, p. 236.
- 92) *Narrative*, note on p. 43.
- 93) As related to Charles Norris-Newman, *In Zululand with the British Throughout the War of 1879*, London, 1880, p. 59.
- 94) Statement of Commandant Lonsdale, in an account by H.G. Mainwaring written 22nd January, 1895 in Cairo and quoted in N. Holme, *The Noble 24th*, London, 1999, p. 199.
- 95) Hamilton-Browne, report.
- 96) The word does not imply indolence. It was originally a Royal Navy expression used to identify the men who worked normal "daylight" hours, as opposed to the majority of the crew who worked four hour watches. In this context, it meant non-military men such as wagon-drivers, conductors etc.
- 97) Higginson gives a distance of four miles, Cochrane says five, and also says the Zulu attacking the horsemen were easily able to keep up with them, suggesting quite a low speed over very difficult ground.
- 98) Davies says 15 miles.
- 99) Jackson, *Sphinx*, p. 47.
- 100) Erskine.
- 101) This distance would have been completed mostly at a walk, since the horses would have had hard use by this time.
- 102) Gardner, Hamer, Erskine, Higginson and Wilson respectively. Higginson spent some in the river assisting Melvill; Wilson spent at least part of his journey on foot and so would have travelled more slowly.
- 103) *Narrative*, p. 48, footnote. As Adjutant, one might expect Melvill's watch to be reliable and accurate.
- 104) Lt.-Col. Edward Durnford, *Isandhlwana: Lord Chelmsford's statements compared with evidence*, a pamphlet published in London, 1880.
- 105) A warrior of the uVe, quoted in Colenso, *History of the Zulu War*, p. 344.
- 106) Jackson, *Sphinx*, p. 47.
- 107) Estimate for a mix of canter and a slower gait. General Wolseley, in his *Soldiers Pocket Book*, said that a horse could trot easily at about 8½ miles an hour.
- 108) Estimated speed of Zulu advance with which Durnford's men would have kept pace.
- 109) Cochrane: "between 5 and 6 miles."; Davies: "about 3½ miles".
- 110) Donald R. Morris, *The Washing of the Spears: The Rise and Fall of the Zulu Nation*, London, 1965, revised edition 1994, p. 329.
- 111) A brisk walking pace is nearly 5 kilometres (3 miles) an hour.