

# The Welsh Village, near Castlemaine, Victoria: A study of people in the landscape

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*The presence of people within the landscape is a stimulus for change and the marks left by human activity can reveal the relationship that existed between people and their surroundings. This paper examines historical and archaeological evidence from The Welsh Village, an abandoned gold mining settlement in central Victoria, to gain an understanding of human perceptions of the landscape and the ways in which the landscape influenced and restricted its human occupants during the time of the Australian gold rush last century.*

The discovery of gold last century encouraged large numbers of European immigrants to occupy the Australian landscape. Many of these early gold seekers became part of a transient population that moved on when mineral resources dwindled, but in locations where gold deposits offered the potential for long-term exploitation, relatively permanent settlements were established (Blainey 1978:59-63).

The development of settlements was an intrusion that altered the intrinsic appearance of the land and, in an era that encouraged exploitative colonisation, the use of natural resources was condoned with little regard for the consequences of this use for the landscape (Sauer 1981:355). Thus the dramatic impression left by the exploitation of mineral resources and the associated

settlements during the nineteenth century is generally a reflection of the relationship that existed between people and their surroundings at this time. The signs of human intervention are encompassed within 'the cultural landscape'. From this evidence, important inferences can be drawn about the way in which people adapted to an unfamiliar landscape, the resources that they valued and the changes that took place within the landscape during their presence (McCann 1992:121).

The merit of studying the landscape as an archaeological artefact is widely acknowledged. Early archaeological landscape studies in Australia include Graham Connah's research into the landscape of Saumarez Station in the New England Tablelands, which records the way in which changes in Australia's early

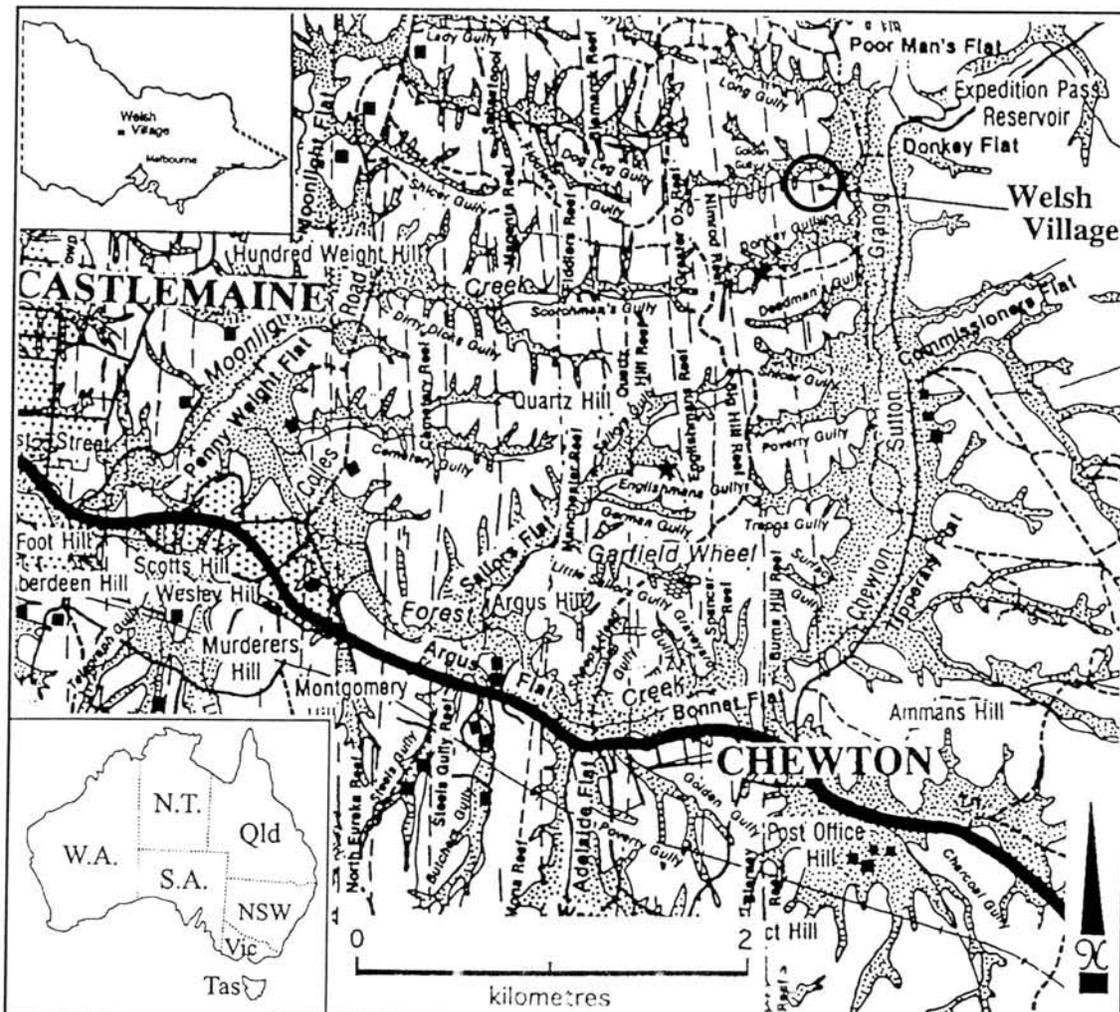


Fig. 1: Location of The Welsh Village (adapted from Geological Survey of Victoria Map Castlemaine-Chewton 1994).

wool industry are reflected in the relocation of activity centres within the landscape (Connah 1977). Dennis Jeans has made a considerable contribution through publications such as *Australian Historical Landscapes* (1984) demonstrating the knowledge to be gained through the study of historical ruins as part of the landscape. Expansive landscape research includes David Carment's study (1991) of a large area in Central Australia with evidence from both the Aboriginal and the European presence, as well as Winston-Gregson's study in the Riverina area (1984), which interprets a wider landscape of settlement that included pastoral and mining interests.

The cultural landscape resulting from mineral extraction last century has been a significant focus for archaeological research into the concept of people within the landscape. An example is a survey of mineral extraction in Tasmania's northeast, undertaken by Denise Gaughwin, in which the general character of an extensive region of transformed landscape is analysed (1992:59). Work conducted by Kate Holmes at Arltunga goldfields in Central Australia reveals the extent to which local resources, such as stone and the cooling properties of prevailing winds, were utilised and demonstrates the need for food storage to facilitate survival in a remote and arid landscape (1989:43-49). Susan Lawrence Cheney's analysis of the Dolly's Creek community in Victoria's central goldfields examines evidence for community ties that can be observed in the positioning of buildings and the utilisation of features within the landscape (1992:40), while Neville Ritchie's (1981) research at the Central Otago goldfield details a wide range of data provided by the interpretation of alluvial gold tailing patterns. An extensive study of the Shoalhaven and Mongarlowe Goldfields conducted by Barry McGowan (1996) described the exploitation of mineral resources, with an emphasis on the landscape degradation resulting from these activities. These and similar studies of the cultural landscape of mining can provide a diversity of information that contributes much to our understanding of the relationship between people and the landscape they inhabit.

## CASE STUDY: THE WELSH VILLAGE

The Welsh Village is an abandoned mining settlement located east of the city of Castlemaine, about 115 kilometres northwest of Melbourne (Fig. 1). The location is distinctive because of the high concentration of evidence of goldmining and settlement from the middle to late nineteenth century within a relatively compact geographical area. Factors such as the secluded location (the majority of the structural remains are on private property), the geomorphology and the use of stone in its structures have ensured a reasonable state of preservation for the remains at the site, thus providing tangible evidence of the relationship between people and the landscape during the time of the nineteenth-century gold rush in Australia.

### History of The Welsh Village

The Welsh Village is located in Golden Gully, which is one of a series of small gullies near Castlemaine that yielded large quantities of gold during the Australian gold rush. The region in which the settlement was established was originally known as the Mount Alexander Goldfields but from 1852 it was referred to as the Forest Creek Goldfields (Baragwanath 1903:8). The Welsh Village appears to be a recent title given to the settlement, although the Welsh nationality of its early inhabitants is supported by contemporary documentation (*Mount Alexander Mail* 1 October 1858).

The history of the settlement is inextricably linked to the nearby mining activities but, without conclusive documentary evidence, it is difficult to place a precise date on the origins of the settlement. Early maps give little indication of dwellings in the area. However, the 1864 rate book for the Borough of Chewton contains 17 entries for Golden Gully, indicating that the gully was inhabited at this time. The stone from which the

remains are made appears to have come from subterranean mining, so their construction would probably coincide with these operations. A relative date of 1850 to the mid-1880s was assigned to the structures in a survey conducted on behalf of the Department of Conservation and Natural Resources (Bannear 1993:34) and this is consistent with the documentary and physical evidence.

Mineral extraction was centred on the Nimrod anticline, from which very rich, shallow alluvial deposits and quartz reef gold were worked from 1854 (Dickinson 1941:225). An 1859 Department of Mines map shows that a number of claims were included within twenty acres held by the Nimrod Reef Mining Company in Golden Gully and the structural remains of the village are located within this area.

The early claim holders made a large open cut near the crest of Nimrod Hill to work the shallow bodies of quartz (Dickinson 1941:225-227). From 1861, when these deposits were thought to have been exhausted, a number of small companies formed by the claim holders began to work the deeper lodes on the reef but met with only moderate success. As deeper shafts were sunk, water became a major problem. Falling returns and expenditure on drainage machinery eventually took their toll and work on the main shaft became increasingly intermittent (Baragwanath 1903:8-9). In 1888, the Crown Nimrod, which had operated as a co-operative company since 1875, was purchased by a Melbourne syndicate (Crown Nimrod Quartz Mining Company Lease 23 February 1888; *Victorian Government Gazette* 24 February 1888). Torrential rains at the start of 1889 added to the sub-surface problems and mining virtually ceased (Mining Surveyors' Report 31 December 1889). Subsequent efforts to operate the mine were not economically viable and by 1896 all mining activity at the main shaft was abandoned (Dickinson 1941:225-227). Spasmodic mining along the reef continued into the twentieth century (Bannear and Annear 1989:13) but the boom era of mining at the Nimrod had ended.

### The Cultural Landscape

As a result of settlement and mining, most of the topsoil that once covered the location has given way to a bare, rocky surface that supports an open eucalypt woodland with a sparse undergrowth of native grasses and small shrubs, such as acacias. A small water course known as Golden Creek winds along the gully floor but the flow of water is negligible. The vestiges of the settlement are mainly located on the lower levels of the gully, although remnants of mining activities can be encountered along the tracks that descend into Golden Gully. Remnants of an earthen road passing through the northern end of the settlement allows access from the east and west, but the most common means of entry is a small track leading from the open-cut mining area.

### Archaeological Evidence of Settlement

The archaeological remains of the settlement are primarily stone footings and remnants of walls. The condition of the structures is deteriorating rapidly and some of the walls are in danger of collapsing, emphasising the urgency for a record to be made of the settlement. In 1997, as part of an Honours project at La Trobe University, the author conducted an archaeological survey of the settlement and mining remains. A compass, tape and a handheld GPS were used to produce a map showing the distribution of features and the use of space within the study area, as well as individual plans of the structures it contained. Few topographical features were available with which to determine the study boundaries, so arbitrary boundaries were set to encompass the greatest density of physical features (Fig. 2).

The majority of the buildings are distanced to some degree from the more drastic effects of mining, which are mainly focused on the Nimrod reef on the western side of the settlement, and this has probably contributed to their preservation. Table 1 contains a summary of the structural remains, the locations of which are shown in Fig. 2.

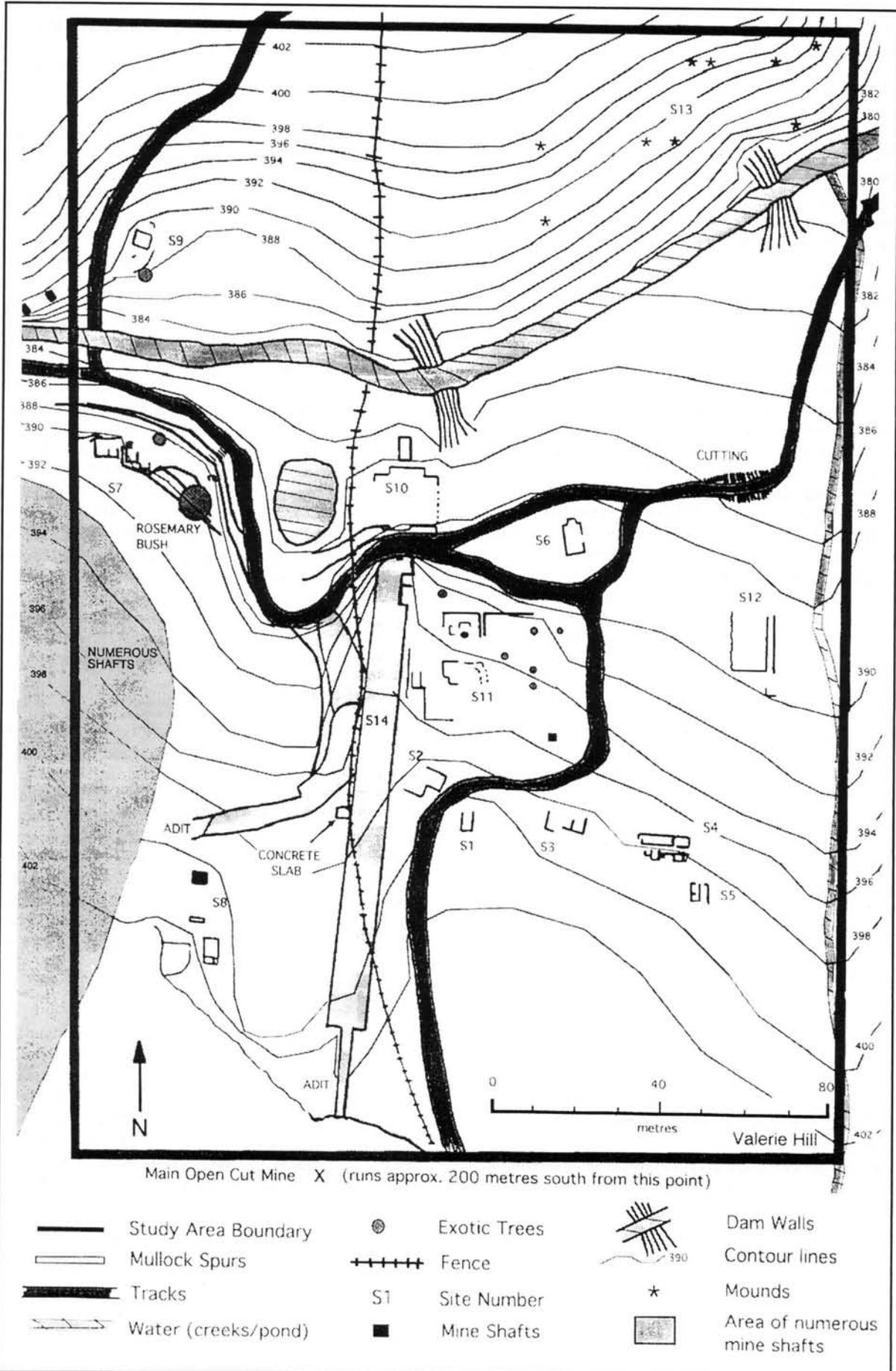


Fig. 2: Plan of The Welsh Village (taken from Hill 1997:33).

**Table 1: Summary of structural remains recorded at The Welsh Village**

Site	Material	Building method	Description	Highest wall	Wall thickness
1	Sandstone Mud mortar	Random rubble	Single cell	0.55 m	46 cm
2	Sandstone Mud mortar	1. Random rubble 2. Dry stone walling	Double cell	1.5 m	38 cm
3	Sandstone Mud mortar	Random rubble	Double cell	1.4 m	35-43 cm
4	Sandstone Some 'blue' stone Mud mortar	Random rubble	Multi-cell, large complex	1.27 m	30-43 cm
5	Sandstone Mud mortar	Random rubble	Two main cells One small cell	1.3 m	30-33 cm
6	Sandstone Mud mortar	Random rubble	Single cell	2.25 m	46 cm
7	Sandstone Mud mortar	Random rubble with areas of coursed rubble	Multi-cell, large complex	1.1 m	35 cm
8	Sandstone Brick (fireplace) Cement mortar Concrete floors	Random rubble	Two levels	1.4 m	43 cm
9	'Blue' stone Mud mortar	Random rubble	Two main cells, possible small cell on western side	1.0 m	46 cm
10	Sandstone Mud mortar	Random rubble Dry stone retaining walls	Three levels at the north end of mullock spur	1.0 m	35 cm
11	Sandstone Mud mortar	Random rubble	Multi-cell	1.6 m	38-48 cm Double wall
12	Sandstone Mud mortar	Random rubble Dry stone retaining walls	Excavated house pad	1.8 m	46 cm

The predominant material in the archaeological remains is a yellow sandstone, a rock that is not obvious on the land surface other than as a result of mining. A variation in rock colour can be seen in some of the structures, where a grey, or 'blue', coloured rock has been used. This is rock that has come from below the water table and has not been subjected to the same weathering effects that have influenced the oxidised character of the yellow sandstone (Cochrane et.al. 1995:10). Mining below the water table began on the Nimrod Reef about 1868 (Mining Surveyors' Report 30 June 1868), thus the 'blue' rock would not have been available prior to this time. It can, therefore, be assumed that structural elements where 'blue' rock has been used were built after this date. Support is given to this assumption by the use of 'blue' coloured rock in the footings associated with the Lady Turner mine, which is located on the northern side of Golden Creek and operated late last century (B. James undated manuscript). 'Blue' rock is also apparent in the structural elements of the northern section of Site 4 (Fig. 3) suggesting that these have been added at a later time to the yellow sandstone structure.

Other building materials from the surrounding landscape would also have been utilised, although these are not obvious within the archaeological remains. Entries in the 1864 Borough of Chewton Rate Book list timber, bark and canvas structures in the gully and, in fact, 53 per cent of the structures shown to be in Golden Gully at this time utilised timber in some form (Table 2). Some of this timber, particularly bark and slabs, would also have been obtained from the surrounding area.

The discrepancy between the rate book entries and the archaeological evidence would, in some instances, be a result of

the less durable qualities of wood but it is also probable that as the settlement became established, some of the rudimentary structures were replaced with buildings made of a more substantial material. The availability of sandstone increased as mining progressed and its use was a practical way to utilise a plentiful, and perhaps familiar, resource from the surrounding landscape. A further possibility is that in some of the structures, rock was used primarily for foundations and for storage areas where weather- and pest-resistant material was needed. The stone footings that make up the multi-cell complexes in the study area may be representative of these features. Site 4 demonstrates the manner in which building materials were combined, as the stone remains of the northern section of the complex appear to have acted as a foundation for walls of another material (Fig. 3).

Random rubble is the most common construction method, although there are minor occurrences of coursed rubble work. The rubble is bonded with mud mortar that has been strengthened by the addition of small stones, and this further demonstrates the extent to which local landscape resources were recognised and utilised. Dry stone walling has also been used extensively but this technique is confined to retaining walls, which were an expeditious and economical method to control the spread of mullock.

Instances of the introduction of building materials into the landscape are few and appear to be mainly associated with a later period in the settlement's development. The use of brick was not extensive, for example, but a small number of coarsely textured, hand-made bricks scattered on the surface of Sites 7 and 11 indicate that they were utilised. This material may

possibly have been added at a more recent time, as these structures were inhabited for a longer period than the other buildings at the site (James n.d.). The only *in situ* example of brickwork is the inner wall of a fireplace associated with the engine housing at Site 8. The use of cement mortar and a concrete floor in this structure suggest a construction date some time after 1880 (Bannear 1993:33). This later use of introduced materials would seem to indicate that local building resources became less important with the passing of time, due to the increased availability of outside resources. A further consideration is that as the interests of the original gold-seekers diminished within the gully, people with different values and perceptions exerted influence upon the landscape.

Other introduced materials, which could be the remnants of roofing, include a small number of sheets of corrugated iron and fragments of slate scattered on the land surface, although the latter may derive from later slate-mining near the settlement. A combination of rubble and vegetation limits the visibility within the structures. These mainly appear to have earthen floors, but materials such as wooden boards may not have survived.

Although topography has been a factor in the placement of the structures, the majority of which are located on the less steeply sloping ground, there has been no submissive acceptance of the natural terrain. Modification of the landscape has occurred in the form of flat areas that have been excavated for buildings and terracing for gardens, thereby controlling erosion and increasing the amount of useable land within the gully (Fig. 4). Remnants of introduced vegetation still survive in some of these garden areas, where stone borders and dry stone walling have been used to segregate them from the surrounding landscape.

#### Archaeological Evidence of Mining

The location of the settlement indicates that mining has provided

**Table 2: Building materials used in the study area as shown in 1864 Chewton Rate Book**

Material used in construction	Number	Percentage
Stone	3	17.6
Weatherboard	5	29.4 *
Slab	1	5.9 *
Paling	2	11.8 *
Bark and calico	1	5.9 *
Tent	3	17.6
Unspecified	2	11.8
Total number of structures	17	

\* Denotes the use of timber in structures

the focus for its establishment. As was typical of mining settlements of this era, living and working were intertwined both spatially and temporally in order to minimise access time and the cost of transporting materials (Aston 1985:94). The intense mining activity incorporated a range of techniques and these have left a marked impression both on the surface and beneath the ground. Mining features on the surface of the landscape are

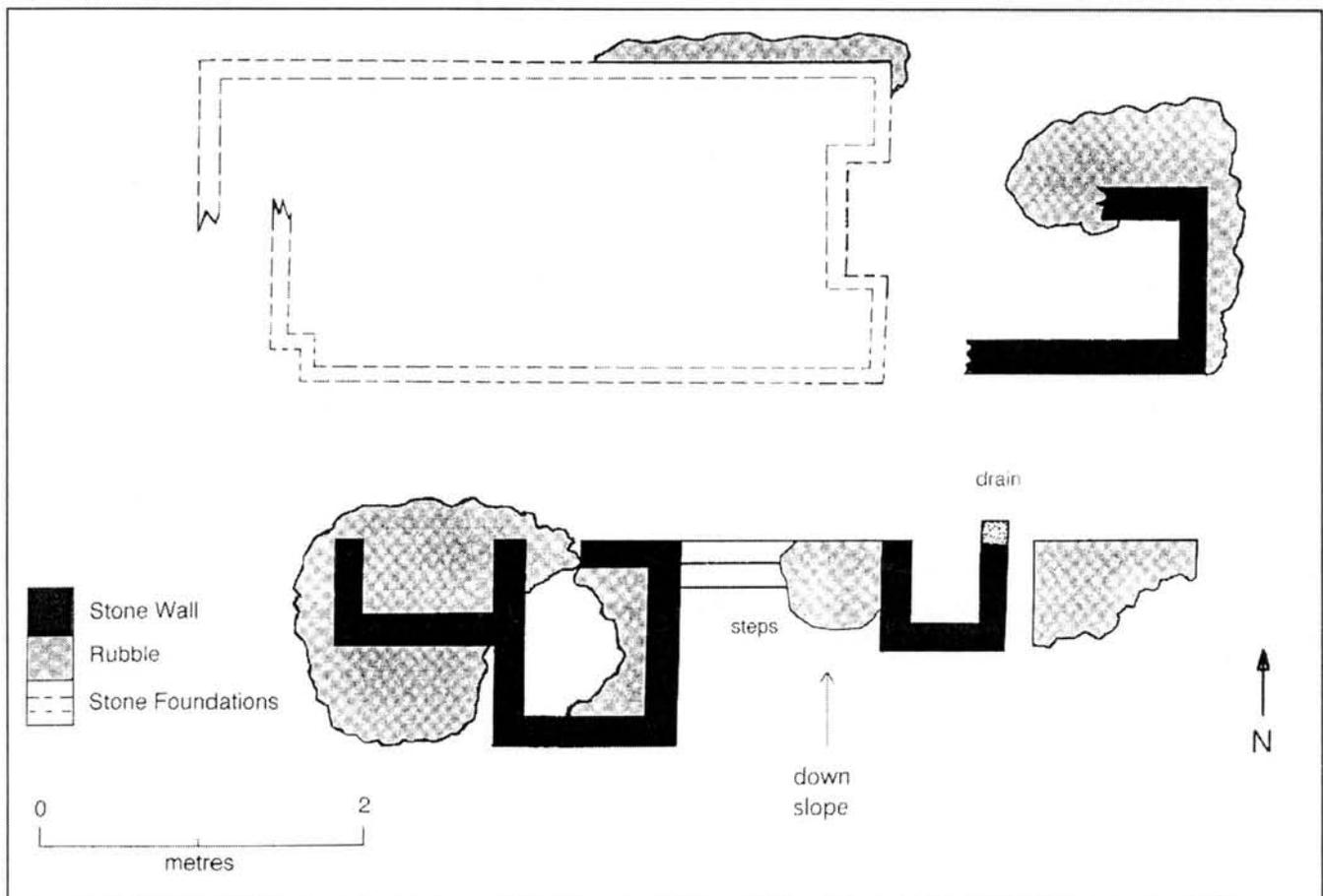


Fig. 3: Site 4, located in southeastern section of study area (taken from Hill 1997:ix).

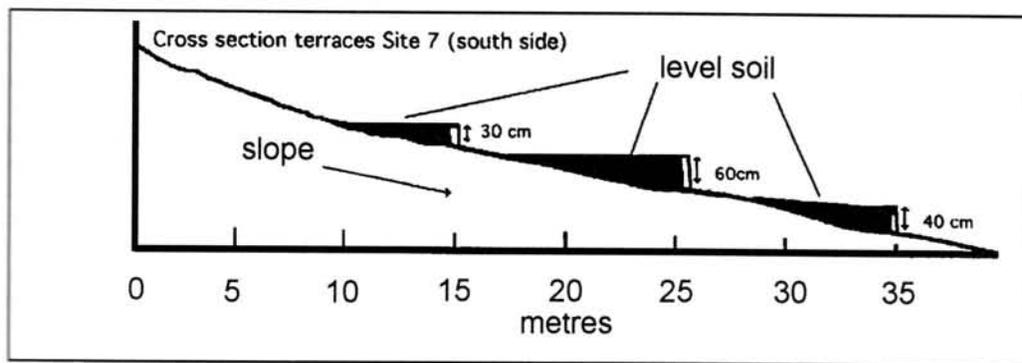


Fig. 4: Cross section of terraced hill Site 7, northwest section of study area (taken from Hill 1997:44).

mainly confined to earthworks, as other structural elements and machinery are no longer present.

A series of open-cut mines located immediately south of The Welsh Village (Fig. 2) are the most dominant features in the wider landscape. Open-cutting (or surface mining) was the most efficient method for working shallow bodies of ore. These are some of the earliest mining ventures associated with the settlement. The main open-cut on the Nimrod Reef was successfully worked for a prolonged period (Dickinson 1941:225-227) while spasmodic exploitation has continued until the present time (Hill 1997:47-49). The composite nature of the landscape has evolved from these episodes of human intervention and is reflected in the detrital character of the modified land surface and the scarred quarry walls resulting from a combination of gold and slate mining over many years.

The human intrusion has extended below the land surface so that the landscape of the study area is pitted with mine shafts, the majority of which are confined to the line of the Nimrod Reef west of the main settlement area (Fig. 2). These include shafts for hard rock mining, which are generally located on the gentle slopes in proximity to the reef, and shafts near the floor of the gully that have been sunk to extract alluvial deposits. The shafts are mainly devoid of structural features and in many cases the displacement of overburden and subsequent mining activity has altered their context and form. Wooden framework, concrete, and dry stone walling have been used in a few instances to stabilise the openings but there is an absence of reinforcement at most shaft entrances and their preservation testifies to the sub-surface stability of the landscape. Many of the shafts are in clusters including ventilation shafts that supplied air to the underground workings. Evidence of surface structures is limited to the stone, brick and concrete machinery foundations located at Site 8, which appears to be a more recent mining venture (Hill 1997:39).

Other subterranean modifications include a network of underground workings excavated along the Nimrod Reef, evidenced on the surface by adits or tunnels excavated into the hillside. 'Tunnel' and 'adit' are often interchanged in documentation relating to the study area, although an adit commonly includes a trench at the entrance, while a tunnel

usually refers to an access passage excavated entirely underground (Idriess 1931:292). Two main adits are evident near The Welsh Village, but both have been sealed by eroding soil and mullock. These workings provided reliable returns throughout the late nineteenth century, even when nearby mining ventures were in a depressed state (*Mining Surveyors' Report* 30 September 1881).

Dumping of mullock is responsible for extensive modification of the land surface, particularly on the western verge of the settlement. Although the mullock appears to be predominantly the 'blue' coloured rock that has resulted from later mining operations below the water table (Hill 1997:34), it is probable that this has been dumped over the debris from early mining episodes.

Mullock has also been dumped to form a large, flat-topped, elongated spur (Site 14) that dominates the settlement-landscape. The spur runs from the entrance of the southern adit to the battery (Site 10) on the south side of the water course. Quartz appears to have been brought from the adit to the battery in ore skips running on a self-acting incline along the spur crest. A tramway on which the skips travelled has not survived but the remnants of a substantial wooden structure, probably involved in the transfer of the quartz from the tramway to the battery, still protrude from the northern end of the spur.

In 1861, two quartz-crushing machines were located in Golden Gully (Bannear & Annear 1989:11) and the site of a crushing battery (Site 10) is evident at the northern end of the large mullock spur (Fig. 2). Modification of the landscape has produced three levels at this site (Fig. 5), which were constructed to enhance the efficiency of the battery by using gravity to move the ore between each process.

Further change has been introduced into the landscape in the form of two dam walls that once spanned the water course along the northern boundary of the study area. The walls were breached earlier this century by a local resident (B. James pers.com.), resulting in the draining away of the accumulated water. The dams would have been a source of water for the settlement, the battery and most probably, in later years, for sluicing operations. The most westerly dam wall is a substantial earthen structure 5.2 metres high, with a crest 4.0 metres wide.

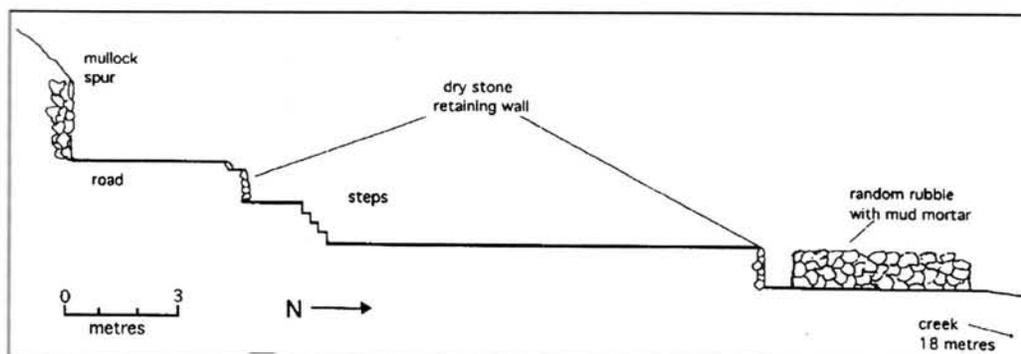


Fig. 5: Cross section of battery site, Site 10 (taken from Hill 1997:xxii).

Another wall, located to the east along the water course, has a height of about 2.4 metres and a crest width of 1.6 metres. A rock core has been exposed in this second wall, although no evidence of rock is visible in the westerly dam wall. Refuse from the crushing process was often emptied into adjacent watercourses (Bolton 1992:69) and this practice has probably contributed to a substantial build-up of sediment against the larger dam wall. The reduced current velocities within a dam encourage the settling of suspended particles (Allan 1996:310). The ridges of sediment evident on the wall represent sedimentary pulses that may be related to episodes of battery waste disposal and erosion as vegetation was cleared from the surrounding landscape.

Mining activity has also altered the land surface on the northeastern slopes of Golden Gully about 80 metres from the settlement (Site 13). The rocky surface here is consistent with the removal of overburden as a result of either 'ground sluicing' or 'surfacing'. Ground sluicing involved the directing of water over a section of ground to assist in breaking down the overburden and gold bearing gravels (Idriess 1931:26). At the beginning of this century, sluicing was carried out along the creek bed (Bannear pers.com.) and this may have incorporated ground sluicing on the gully slopes, although the water races generally associated with ground sluicing are not apparent. Surfacing, or the removal and washing of the auriferous surface soil, was often used to work deposits that were too elevated for ground sluicing. Loose stones were usually cleared in preparation for this work (Idriess 1931:137), which would also explain the presence of stone mounds or vertical packings at this site. The extensive use of this technique was recorded by Brough Smyth last century at Dirty Dick's Gully (1869:104), about two kilometres west of the Welsh Village, thus its use in Golden Gully is probable.

Gold mining created an insatiable demand for timber for use in building, as well as for power, and the vast forests encountered by European settlers within the Australian landscape must have given the impression of an inexhaustible supply of timber to meet these needs (Bolton 1992:69). The devastation of vegetation near mining operations in the Castlemaine area is obvious from a 1903 Department of Mines report on the region:

Of the original forest growth very few trees remain to show what species formerly covered the ranges. At present, however, a vigorous growth of saplings, protected by the Forestry Branch of the Lands Department, covers the greater portion of the field, and will in a short time suffice for timber and fuel requirement of a large mining centre (Baragwanath 1903:7).

Knowledge of natural material resources generally develops as people assimilate within the landscape. By the time of the gold rush, the stringy-bark eucalypt, a species that grows naturally in the landscape associated with The Welsh Village, had been adopted in Australia as a major source of timber (Walker 1978:34). Much of this vegetation was cleared during the gold rush period (Hill 1987:72-73) and the coppice forest obvious today has resulted from the influence of this clearing (Leonard and Hammond 1984:28). In addition, exotic species, including pines, briar roses and cypress, have become established within the landscape.

### Cultural Identity and the Landscape

The Welsh settlers who established this settlement arrived in Australia from southern Wales in the early years of the gold rush (Hill 1987:74-76). Glorified reports of 'easily gained earnings' were featured in the Welsh press and these encouraged significant numbers of Welsh people to come to Australia last century (Lloyd 1988:159). The Welsh-born population of Victoria, which in 1851 was 377, peaked by 1871 at 6614. Many were escaping the hardships of upland farming, or the degradation of industrial life, and gold seemed to offer sudden wealth and a quick return home (Jupp 1988:842).

These people entered the landscape with preconceived concepts and ethics derived from long established cultural traditions that influenced their attitude towards their surroundings. Defining the influence of culturally rooted preconceptions is difficult, due to the restraints imposed by the landscape and available resources. The complexity of this issue limits its full consideration within the confines of this paper and the capacity for accurately assigning cultural indicators within the landscape has been discussed elsewhere (Hill 1997:74-81). The following aspects are briefly presented because of their possible influence upon the cultural landscape of The Welsh Village.

The inhabitants of the settlement came from a country with a heritage steeped in mining. Coal had been mined in southern Wales since the thirteenth century and during the nineteenth century a major expansion of mining operations began (Williams & Jones 1990:11). There is, however, no evidence to suggest that the gold seekers of The Welsh Village were experienced in large-scale mining and, in fact, most appeared to have come from a farming background (V. Thomas pers. comm.). In their homeland, the mineral wealth lay just below the surface and this encouraged small-scale extraction of coal and stone by Welsh farmers, either for their own use or as a profit-making venture (Tucker 1991:229). There are similarities in the methods used to extract coal and gold (Davey 1996:60), so that even though these settlers may have lacked experience in large-scale mining, it is possible that some fundamental knowledge gained from these domestic operations may have assisted in this new mining environment.

The Welsh landscape in the middle of last century was still relatively unaffected by industrialisation, as large-scale mining was confined to valleys, such as the Taff and the Rhondda Fawr. In 1850, noted British topographer, Charles Cliffe, extolled the beauty of 'the emerald greenness of the meadows' of southern Wales (Williams and Jones 1990:8) in a similar manner to the favourable description of the Victorian region given by Major Thomas Mitchell, when his party passed close to the site in 1836 (Mitchell 1839:280). Small villages dotted the rural landscape of Wales, encouraging a close-knit spirit of community (Tucker 1991:16). This way of life was echoed in the separate ethnic enclaves, such as The Welsh Village, which were common on the goldfields of Australia (McCann 1992:130) and provided countrymen with a link to their homeland.

The use of stone for building was also a prevalent feature of the nineteenth-century Welsh landscape. Dry stone walls were conventionally built by Welsh farmers for retaining walls and field boundaries. Traditional stonework patterns were often used but random rubble construction was common when quantities of large stones were available (Dry Stone Walling Association of Britain, n.d.). The assignment of this building technique as a definite indicator of Welsh culture is restricted, however, because of its wide use throughout the British Isles. Similarly, the cottages of Welsh rural workers (Fig. 6) were often single and double cell rubble structures (Lowe 1993:5-6), a description that could fit a number of the buildings represented by footings at The Welsh Village (Fig. 7), but this type of building is also not dissimilar to cottages built by other nationalities throughout the Australian goldfields (Boyd 1952:4).

In addition, it is possible that geological similarities in this new landscape and that of their homeland may have encouraged the first inhabitants of The Welsh Village to establish their mining operations in Golden Gully. Parallels in the geology of the region and that of Wales are quite marked and were noted by government geologist Alfred Selwyn last century (Selwyn 1854:9). Both Wales and central Victoria are mainly composed of Palaeozoic rocks that originated from sediments deposited in a major basin. These Lower Palaeozoic rocks have been folded into anticlines and synclines, and broken by faulting. Many of the fossils in the Lower Palaeozoic rocks of Wales are similar to those found in the same rocks in the study region, for example trilobites,

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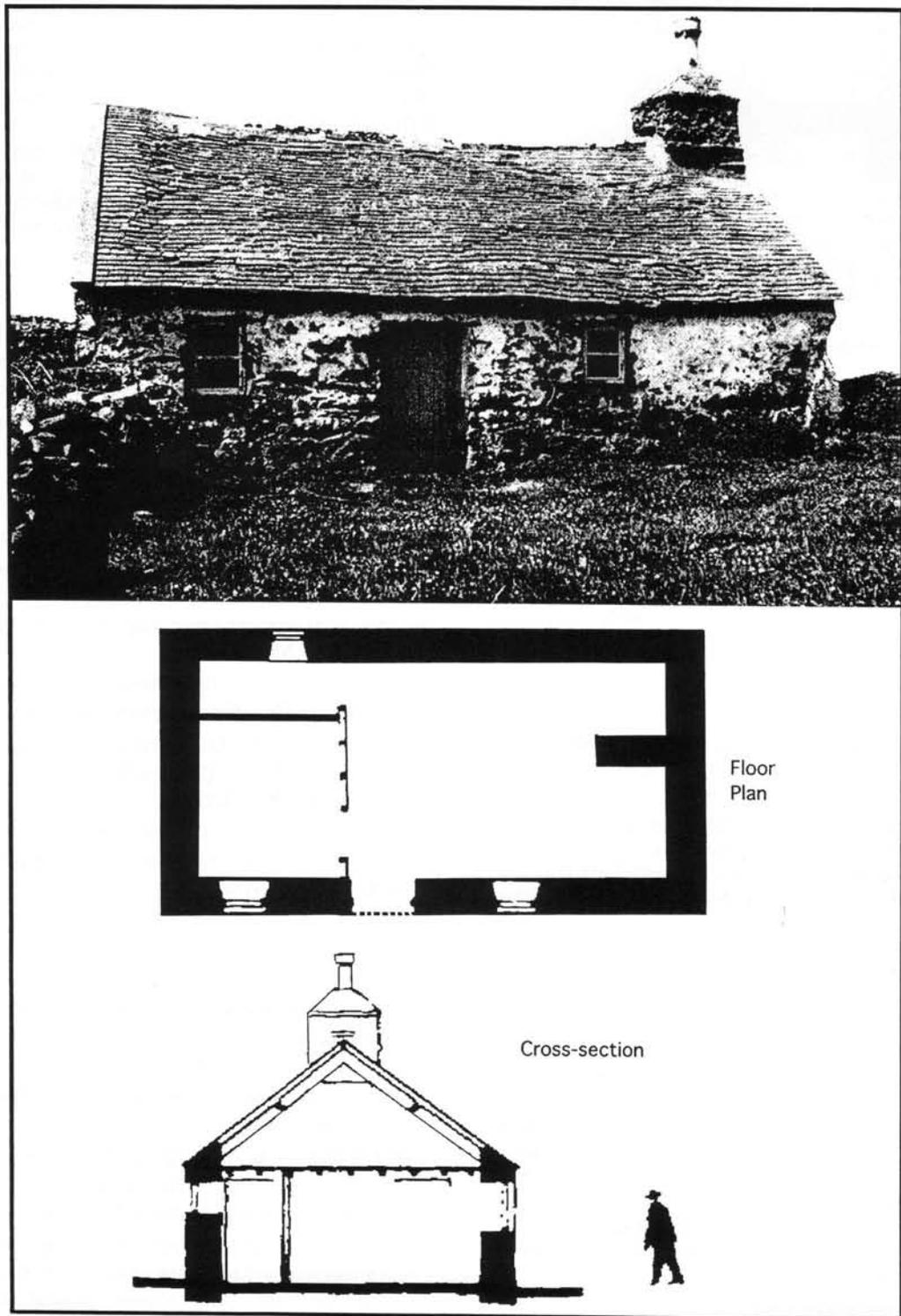


Fig. 6: An example of a Welsh country worker's cottage built in the early nineteenth century (taken with permission from Lowe 1993:6).

brachiopods and graptolites. Graptolites, in particular, have been important for the understanding of the stratigraphy of rocks in the Castlemaine area and with some geological knowledge, the Welsh miners would have been able to use the fossils to correlate and place rock units in a stratigraphic order. This correlation was well-known in the British Isles by at least the end of the eighteenth century, due to the foundation work of geologist William Smith (George 1970:152). The topography in both regions reflects this geological structure and lithology and the recognition of this fact would signify the transfer of knowledge from one landscape to another.

## CONCLUSIONS

This study of the cultural landscape has provided an opportunity to examine the physical remains of mining and associated settlement at the time of the nineteenth-century Australian gold rush. Changes occurred within the landscape as a result of these activities and from their analysis an understanding can be gained of the effect that the presence of people can have upon the landscape's form. The history of The Welsh Village is one of fluctuating mining interests and transitions in the character of the settlement. Change, both underground and on the surface,

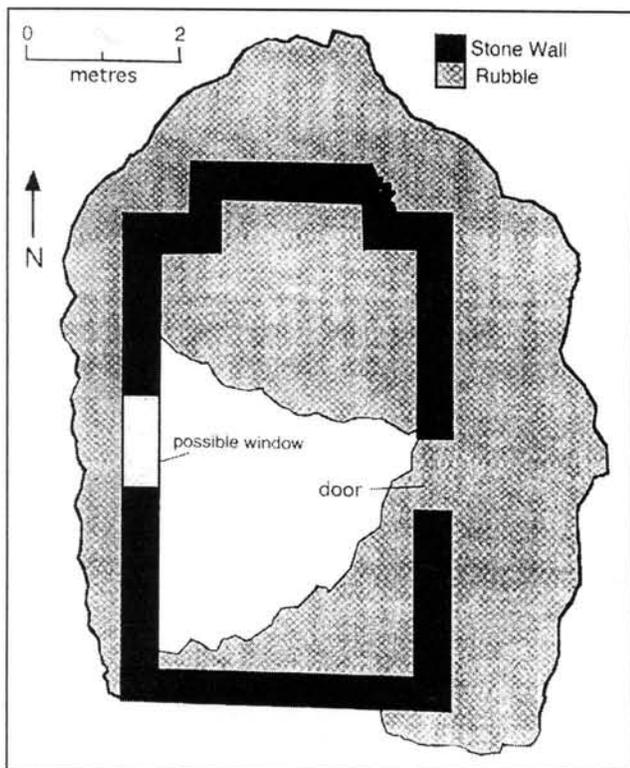


Fig. 7: Floor plan of structure at Site 6, The Welsh Village (taken from Hill 1997:xiii).

was on-going and this provides a clear view of the evolutionary nature of the cultural landscape as subsequent episodes of human activity are superimposed upon each other.

From the marks left on the landscape, insight can also be gained into the way in which these people lived and the possible motives for their actions. The location of the settlement indicates that resource exploitation was the most significant focus within the landscape. A perception of local geology may have influenced the selection of the mining site, but mineral exploitation can only take place where the commodity is available and, as the settlement was established as an adjunct to mining, its location was determined by this factor.

The ideals held by the inhabitants of The Welsh Village had been shaped in a distant homeland and these perceptions would have been a major influence on their regard for the landscape and the use of its resources. It is also imperative to view their actions within an historical context, as this was an era of exploitative colonisation, when the use of landscape resources were seen to be an inherent human right. However, although these people selected the resources they utilised, it was the landscape, as the provider, that possessed the ultimate authority to temper their choices and actions.

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