

ACCORD collaboration with the Rock-Climbers at Dumbarton Rock

Introduction

The ACCORD team worked with a group of rock-climbers at the site of Dumbarton Rock, known as “Dumby” in climbing circles, from the 8th to 10th of July 2014. Together we recorded and modelled the cliff face in the north-west sector of the Rock, and some of the boulders, which lie beneath it”. The boulders were the “Eagle” and “Sea” boulders, a rock-climbing route known as “Pongo” on the “Home Rule” boulder, and some graffiti incised into the boulders. ““We used the technologies of photogrammetry, Reflectance Transformation Imaging (RTI) and terrestrial LiDar laser scanning. This document provides information about the context of this work. There is a brief discussion of the historical value of the site in the context of modern climbing heritage. The main focus of this document is to describe the social value of the monuments for the climbers who took part in this ACCORD project. Social value refers to a collective attachment to place that embodies meanings and values that are important to a community or communities (Jones and Leech 2015: paras 1.5 and 1.6; see also Johnston 1994 and Byrne et al. 2003). The role of 3D recording and modelling in expressing the value of the monuments, and in creating value, is also summarised. Quotes and opinions in this document were expressed during focus group meetings held at the beginning and end of the co-production process.

The group of climbers

The climbers who worked with the ACCORD team represent a community of interest and practice rather than a representative organisation or membership group. They included 3 people who have played a leading role in promoting the climbing scene at the site and representing the interests of the climbing fraternity. Jonathan Bean established the Dumby.info web site (<http://www.dumby.info/>) and participated briefly in one of the ACCORD recording sessions. John Hutchinson has made significant contributions to the Dumby.info pages and focused on the site for both his undergraduate and masters dissertations (Hutchinson 2009 and 2014). John Watson, owner of Stone Country publishing, has written a guidebook on the site (Watson 2013) and also writes regular entries on Dumby in his blog (stonecountry.blogspot.co.uk). The web site, blog and other social media, such as the Dumby Facebook pages, have created a more integrated community of interest surrounding climbing at Dunbarton Rock in the last decade. As a result, the climbing community at Dumby is considered to be very welcoming and cohesive; as John Hutchinson expressed it, “most people feel a duty to share and sell the place to people”. Furthermore, the significance of the site in terms of climbing heritage was reinforced in 2012 following controversy surrounding the removal of graffiti from the surface of the rocks in the north-west sector (see below). John Watson in particular emerged as a key spokesperson dealing with the press and communicating with Historic Scotland (BBC news online, 16th July 2012; and see below).

The ACCORD project had a pre-existing connection with the climbers through Alex Hale (RCAHMS), who had been in touch with them independently about Dumbarton Rock’s climbing heritage. Having discussed the prospect of working with the climbers to record their climbing heritage, the ACCORD team contacted Jonathan Bean, John Watson and John Hutchinson about collaborating. An open call for participants was published on John Watson’s blog (<http://stonecountry.blogspot.co.uk>, accessed September 2014), the Dumby.info (<http://www.dumby.info/>) webpage and the Dumby Facebook group. The 7 climbers who eventually worked with the ACCORD team included the above 3 individuals, along with others with varying degrees of familiarity with the “Dumby scene”. All had climbed on the famous routes on the north-west sector of Dunbarton Rock with one exception and

he was aware of the site's iconic status. All the climbers who participated were men ranging in age from their 20s to their 60s. They had equally varied climbing experience, ranging from less than a year to almost 50 years.

John Watson and John Hutchinson played leading roles in the ACCORD co-design and co-production, reflecting their wider profile in relation to the site. John Watson's climbing guides and blog site (<http://stonecountry.blogspot.co.uk>, accessed September 2014) mean that he is widely recognised as a source of knowledge about Dumby's climbing heritage. John Hutchinson's student dissertations (2013 and 2014) focusing on Dumby and its rock-climbing scene also place him in a prominent position and in part motivated his interest in the ACCORD work. The other climbers involved in the project come from a range of professional backgrounds; a PhD student, an industry worker and a graphic designer. All were located in the Glasgow area at the time of the ACCORD collaboration, although they originate from further afield, one as far as Germany. Only one of the climbers lived in Dumbarton itself, and interestingly, despite climbing since childhood in his native Derbyshire, he was unaware of Dumby, until he moved to Dumbarton in the 1970s. Others in the group were introduced to "the Dumby scene" through friends and expressed a feeling of ongoing initiation.

Dumbarton Rock or "Dumby" (NS 39988 74485)

Dumbarton Rock is a volcanic plug positioned where the River Leven meets the River Clyde in West Dumbartonshire, a 20 minute drive north-west from Glasgow. The rock has a rich history extending back to at least the 6th Century AD, when it was reputedly the centre of the ancient Kingdom of Strathclyde. Another name associated with this place is *Alt Clut*, or Clyde Rock. Dumbarton Castle has an individual record in Canmore – the national monuments record (Canmore ID 43376). The buildings that stand here today mainly date to the 17th/18th Century, although numerous excavations conducted at the site have uncovered earlier medieval and early historic fortified structural remains and artefacts, along with some Roman pottery. The buildings, and the volcanic plug on which they sit, are currently in the guardianship of Historic Scotland. Many of the buildings on the rock are Listed and the entire rock, including part of the area that incorporates some, but not all, of the climbing boulders is a designated Scheduled Ancient Monument.

Dumbarton Rock's north-west sector is exceptionally popular with climbers, especially boulderers. This is not a recent phenomenon. Dumby "has been at the forefront of Scottish rock climbing since the 1960s and has recently commanded much attention from the world climbing media." It has played a large part in the history and development of the sport in and beyond Scotland and thus has great cultural and heritage significance to the climbing community. The seven main boulders are known as Eagle, Home Rule, Pongo, Suckers, B.N.I., Sea and Warm Up. There are also sport and traditional climbing routes up the main rock on three faces known as the Headwall, the Main Wall and the Back Corner. These boulders and faces, on the north-west side of The Rock, are often patterned with chalk marks indicating the various routes or "problems".

The significance of Dumby to the climbing community is linked to the volcanic geology and the styles of climbing it necessitates. In particular the way it fractures requires the use of lots of pressure holds. It offers many difficult and challenging routes and climbers regard it as a "yardstick", "a place to push your limits". These "use values" contribute to its social significance amongst the climbing fraternity. It has an intimidating reputation and a mystique surrounding it. Common words used to describe Dumby were "intimidating", "hard/difficult/challenging". One member, recalled the "horror" and "shivering, shaking" he felt coming here when he started climbing in his 20s - it "made my blood run cold"!

Its significance is also rooted in the unique character and atmosphere that define its sense of place. It is seen as having a gritty character linked to the industrial heritage of Dumbarton. The hard graft of industry offers an analogy for climbing which also “requires a graft and an industry”. The graffiti that marks the rocks and the detritus left by local revellers (see below) add to this grittiness. The “post-industrial” landscape is an integral part of the character of the place for some, one climber describing it as a kind of “edgeland”. In contrast for Frank, who lives locally, it’s not “post-anything, it’s on the up”, and “a beautiful place to be”. Despite these apparently diverse meanings, all the climbers involved in the ACCORD project felt that Dumby is a captivating place of raw beauty informed by the changing the unpredictable weather and changing tides.

There is a strong sense of community amongst the climbers who frequent Dumbarton Rock. This is founded on shared practice and appreciation of place. The Dumby web site and social media have reinforced the connections between those who climb there in recent years. The web site and the Stone Country blog have also promoted certain impressions of the place and its significance. Social memory also plays a role in defining a sense of community. Guidebooks highlight its significance and there is a strong sense of generations of climbers coming through, including leading figures in Scottish and world climbing (Hutchinson 2014). There is also a rich tradition of oral history associated with climbing at Dumby and the ACCORD work was peppered with stories, about routes and events, but in particular in relation to colourful climbing characters.

The graffiti adds a further dimension in regard to the character and continuity of place. Ranging in date from at least the nineteenth century to the present day, it intersects with climbing routes becoming part of their characterisation and even naming (as in the case of Eagle). There were mixed feelings expressed regarding the graffiti. One member told us that the general climbing community would rather that most of the graffiti was cleaned off, because in their view it lacks message and style. Furthermore, the shiny paint ruins the friction of the rock, impacting on the experience of climbing. At the same time, the graffiti is seen as part of Dumby’s “grittiness” and its iconic status as a climbing site. It has been used in many of the rock-climbing publications about Dumbarton Rock and in guidebooks even use the tags on the rock for spatial orientation. The “Eagle Boulder” is named after the large painted depiction of an eagle (possibly originally a Lion Rampant) that adorned its sloped slab top (now very faded). The nationalist graffiti was not singled out as being of special personal significance for the climbers who worked with ACCORD. However, it too has contributed to the character of place, with the “Home Rule” boulder being named for one strident piece of graffiti. It is also seen by some as part of the broader counter-cultural heritage of the place, the latest “Saor Alba” inscription undoubtedly referring to the 2014 Referendum on Independence.

In 2012, the significance of the graffiti for the climbing community was brought to a head and linked to issues of ownership and the recognition. As guardian of Dumbarton Castle, Historic Scotland, with the support of the Local Community Councillor, took a decision to remove much of the graffiti that adorned the boulders and parts of the main crag. One of the ACCORD group members, John Watson, representing the climbers, voiced his concerns about this proposed clean up (article published by BBC news online, 16th July 2012). Following the initial cleaning controversy, a number of consultative meetings were held with climbers, heritage bodies, local people and other parties and a consensus reached. However, the incident (jokingly referred to as “graffiti gate”) highlighted the significance of what is considered “historical graffiti”, in contrast to the more recent brightly coloured tagging, which in places had been painted over earlier graffiti. The historical graffiti’s value is informed by its association with particular personalities (the mark of climbers and characters such as Robert De Bruce and Bam Bam) and events (such as the referendums of 1979 and 2014. Its presence in Dumby

climbing guidebooks (online and in print), and its place in the personal and collective memories of climbers, is also significant.

Strong expressions of attachment, loyalty and ownership are evident amongst the Dumbarton Rock climbing community. These are linked to the sense of community, memory and place associated with Dumby, further reinforced by the graffiti cleaning incident described above. However, it is evident that there is still an ongoing desire to assert the rights of climbers and what they see as their fluid “marginal” heritage in contrast to the “official” heritage of the castle. A number of the climbers feel that the climbing heritage is underappreciated and this in part fuelled their enthusiasm for collaborating with ACCORD. The 3D recording and modelling was seen as a means to communicate their pride in Dumby and build the profile of its modern climbing heritage, which currently sits in the shadow of the castle. The group were motivated to create an archive of the site, which they hope will “legitimise” or “make official” its heritage. As one of the climbers put it “we need to stamp our rights to the place”. The group expressed how the heritage here is predominantly “an unwritten history...there is a mythology to the place”- perhaps the only tangible expression being the “historical graffiti”. More generally, the climbers were keen to explore how the models might capture the three-dimensional sculptural and tactile qualities of Dumby to enhance the sport of climbing. The climbers’ emotional and corporeal attachment to the site framed the co-design and co-production to the 3D models.

The ACCORD modelling

The following individual rock faces and boulders were recorded during the ACCORD project:

The Eagle Boulder

This boulder is named after a large piece of graffiti that adorns the flat slab top of the boulder, now much faded. It is believed this piece of graffiti was originally an eagle, but was later changed to a Lion Rampant and dates back to around 1979 when the Scottish referendum was held to assess the support for a Scottish Assembly. It was decided that this boulder should be recorded as it dominates the landscape and many of Dumby’s most challenging bouldering problems are on it. It was recorded using the technique of photogrammetry.

Sea Boulder

This is an iconic Dumby boulder, which was also felt to be a good example for trialling the technique of photogrammetry. It was also thought to be suitable for 3D printing. The graffiti on this boulder includes the political slogan, “FREE SCOTLAND, SAOR ALBA”, in white paint, along with other undecipherable words and an image of a ship’s prow. In addition, evidence of quarrying on part of this stone was identified during the fieldwork, in the form of “jumper holes”.

“Saor Alba” Graffiti

This incised graffiti, on a small rock near to the Pongo Boulder, was recorded using RTI as it had not been recognised before and was thought by one of the climbers to be newly carved. It was also felt it would be appropriate to record as it relates to the sentiment in the older political graffiti on Eagle and Sea Boulders. The relationship was seen to be significant in terms of continuity of place; that it continues to be a place where people come to make that sort of statement.

The Pongo Face

This was recorded by one of the climbers, John Hutchinson, as it was one of his favourite climbs. It was also deemed important by the group to record the highly visible “historical graffiti” written across its face. Photogrammetry was used to create a record. Two pieces of original graffiti remain, one now obscured by a tag, but which originally read:

IT WOULD
BE AS EASY TO STOP
THE ATLANTIC OCEAN AS TO
STOP THE PRESENT AGITATION
UNTIL JUSTICE HAS BEEN
DONE TO THE PEOPLE
BAM-BAM

The poem appears to be a quote from the Glendale Martyrs, whom in the 1880’s were taken from their land on Skye and imprisoned in Edinburgh because they had demanded the return of their common grazing lands. It appears that Bam Bam was using the historical reference to land rights from the 19th century, in the context of the 1979 Scottish referendum.

Etched Graffiti on the Pongo

On some of the other faces of the Pongo Boulder, there is a concentration of etched and carved graffiti. It was hoped that RTI would illuminate names and possible dates. Indeed, one of the oldest pieces of graffiti, it is so thought, is here dating to 1809.

Adjacent to Pongo is Suckers Boulder, and one of the problems is called the “shield”, as the result of a roughly triangular shaped protrusion. This feature is painted and has the words ROBERT DE BRUCE painted on it.

Laser Scan of the Dumby cliff-face

There are two famous climbs up the main Dumby cliff face: “Requiem” and “Rhapsody”. Requiem is a climb which extends 2/3rds of the way up an obvious crack on the face of Dumbarton Rock, whereas “Rhapsody” completes this climb beyond the crack to top-out at the headwall. Requiem was a route established by the well-known and well-respected climber Dave Cuthbertson in 1983- at this time this was one of the hardest climbs in the world. Climbing the headwall above Requiem was an ambition of the climber Dave MacLeod. His ambition was successfully fulfilled in 2004. There was much media speculation on the outcome (<http://www.climbing.com/climber/dumby-dave/>; <http://www.ukclimbing.com/articles/page.php?id=198>; <http://www.telegraph.co.uk/health/dietandfitness/3343966/The-10-minute-climb-that-took-two-years.html>, accessed January 2015) in the climbing community and beyond, and as a result he is now affectionately referred to as “Dumby Dave” by many. Rhapsody is currently widely regarded as one of the hardest traditional rock climbs in the world, it was the first climb ever to be graded E11, and as one climber expressed Dave MacLeod’s feat “put Dumby on the map”. A film called *E11*, produced by Hot Aches and starring Dave MacLeod was released in 2006.

In order to capture these routes and the cliff-face laser scanning was chosen as the best technique by the ACCORD team in agreement with the climbers. Alastair Rawlinson, Head of Data Acquisition at the Digital Design Studio, GSA, came along one evening to undertake the scanning with a Leica C10 laser scanner. Another equally important aim of the group was to capture in 3D the angular geology and character of Dumbarton Rock as accurately as possible. Capturing Dumbarton Rock’s 3D sculptural materiality virtually was voiced as an exciting potential of the technologies, since visualising the routes before attempting to climb is part of the training regime for climbers.

Therefore obtaining high quality visualisations and enhanced detail was something that the participants saw as a significant output from the project. These maps are known in the climbing community as “topos”, which describe the climbs in both 2-D illustrative and descriptive terms, in paper guides and more recently on websites, for example see:

<http://www.dumby.info/eagleBoulder.htm>, accessed January 2015.

The Impact of 3D Modelling and Recording

Results were met with exclamations of: “invigorating”, “energising”, has “made the site more special than before”, “brings it to life” and allowed them to “experience the place differently”. The climbers involved in ACCORD had not engaged practically with the digital techniques used as part of ACCORD previously, but in general were curious about the creative potential it offered to create an accessible archive of modern climbing heritage for Dumby. It was strongly felt that all data produced should be freely accessible, in accordance to the strong sense of community expressed by the climbers as highlighted above. Already John Watson has uploaded screenshots of the models onto his blog.

The results of photogrammetry were felt to be “almost real”, although one climber said that the models would always be “different”. Indeed the whole group agreed that the photogrammetric 3D models did not replace the original since the texture and actual bodily physicality of climbing the rocks cannot be incorporated into the models. There was a concern that 3D models and visualisations often do not tie into their surrounding landscape; most agreed that the results created with ACCORD did not successfully evoke the setting, which as discussed above is an important part of the social significance of Dumby. “Grounding” the models was more successfully addressed by including the immediate ground/vegetation at the base of boulders in the photogrammetry recording. The models were also regarded to be too “vivid in colours” and “plastic-y”, and 3D prints were thus not immediately valued for similar reasons. The materiality of the rock was therefore very important and lacking to a degree in the 3D representations. The laser scan results, in contrast, were received very enthusiastically; “the angles and molten texture, draws you in... seeing this you want to go climb!” Additionally, the totality of the whole Dumbarton crag and boulders below in the laser scan visualisation made you feel “intimidated...as the towering overhanging Dumby main crag does when standing beneath”.

Photogrammetry was valued as a technique that can represent “the 3D imagination” which climbers all have, and as having technical applications “which will enhance the climb”. The opportunity to make “fictional ascents” by engaging with the 3D digital models was also suggested, i.e. to communicate which holds and moves are permitted or not in a particular route and to help in climbing training regimes. John Watson, who publishes many guides himself, even went so far as to say that “3D topos were the future of climbing guide publications”.

Further, the process of recording and modelling Dumby has had an impact on how it is valued as a contemporary sporting heritage site by both climbers and heritage professionals, enabled through the co-creation and co-production of digital records and working in partnership with heritage specialists on the ACCORD project. The climbers voiced how taking part has made them feel “proud”. The highly detailed and accurate representations achieved were considered by the group to be a valuable archive solidifying the status of the climbing heritage. To this end the climbers are contributing to the Historic Scotland Statement of Significance, which is written for each property in their care.

In addition, taking part in ACCORD is helping to enhance its value as a world famous venue, by using the results to communicate Dumbby's climbs to "inspire" the climbing world. The ACCORD project with John Watson and John Hutchinson plan to co-write an article for Climber magazine.

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