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## **DOCTOR OF PHILOSOPHY**

### **From history to heritage : using a company's past to guide its future**

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**FROM HISTORY TO HERITAGE: USING  
A COMPANY'S PAST TO GUIDE ITS  
FUTURE.**

THESIS SUBMITTED FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

By

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BANGOR UNIVERSITY

## Abstract

The journey from history to heritage is explored through the history of the Brunswick Ironworks of Caernarfon Gwynedd which is presented as an ethnographic case study. Brunswick Ironworks are a family business which has been located in the town of Caernarfon for over one hundred years. It has contributed significantly to the visual appearance of the town through its work as art metal blacksmiths. The ethnographic study is based on the history of the Brunswick Ironworks supported by the materials generated from Irish case studies which assisted in the creation of the Brunswick heritage trail (one of the outcomes of the research project). The history of the company was researched from 1906-2010 using documents held by the company charting their development as art metal blacksmiths. The company has worked on key commissions ranging from work in the Royal Palaces of (Hampton Court Palace and Windsor Castle) to the ironwork for the coffin of the Unknown Warrior in Westminster Abbey.

The heritage debate is discussed by charting the journey from history to heritage as illustrated through the history of the Brunswick Ironworks. The current debate on heritage was discussed revealing that heritage in the case of the Brunswick project was a process developed to suit the requirements of the research project. The project revealed that through the creative use of one specific aspect of the Brunswick Ironworks heritage (the Unknown Warrior) the profile of the company was used to guide its future development through the utilisation of their skills as art metal blacksmiths in the twenty first century.

The research project was a journey which revealed new aspects of the heritage of the Brunswick Ironworks as the project developed and evolved. The creation of the six objectives for the Brunswick Ironworks emerged following detailed discussions between the owner Mr Meurig Williams and the researcher. These objectives assisted in the identification of a structure for the project. As the project developed and evolved a transferable model emerged which could be utilised by other researchers providing a template from which to begin their journey.

The six objectives identified for the project were ambitious and required the acquisition of new skills for the researcher. These ranged from learning how to catalogue the Brunswick archive to improving and developing photographic skills which were used to record the work of the company resulting in the creation of a photographic archive.

The outcomes from the research project indicated that when heritage is viewed as a process it encourages connections to be made which in the case of the Brunswick project were enriched by the active sharing of their heritage. This supported other locations which were able to develop their link with the Unknown Warrior. This in turn raised the profile of the company on a national level which brought their skills as art metal blacksmiths to a wider market illustrating how the past heritage of the company was developed to guide its future development.

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# **Chapter One. Introduction to the project.**

## **1.1. Research question.**

The research question focused on how the journey from history to heritage was used to raise the profile of an established business. The Brunswick Ironworks of Caernarfon was founded in 1906 by David John Williams<sup>1</sup> a gifted art metal blacksmith. At the start of the research project the connection between the Unknown Warrior and the company was known but the researcher was unaware of the existence of the original photographs, documents and artefacts in the possession of the company. Once the layers of history were peeled back following the discovery of the extensive archive at the company's workshop it was evident that the history of the company was diverse connecting it to key events across the United Kingdom. This discovery revealed that through their various commissions as art metal blacksmiths<sup>2</sup> that the journey from history to heritage could be illustrated through the creation of a historical visual record of their work presented in the form of an ethnographic case study. By focusing on one specific aspect of their heritage the 'Unknown Warrior connection', the profile of the company was raised and developed bringing this aspect of their history to a national audience.<sup>3</sup>

## **1.2. What the study hopes to achieve.**

Following extensive discussions with Mr Meurig Williams (the grandson of DJ Williams) six objectives were identified for the research project which focused on different aspects of their history which when combined would raise the profile of the company. The first objective was the creation of a web site and e-mail address which would bring the company into the twenty first century and allow access to the internet thus bringing their heritage to the attention of a global audience.

The six objectives were:-

- The creation of a web site and an e-mail address for the company.
- Researching the history of the company with the long term aim being the production of a book on the Brunswick Ironworks.
- Creation of the Brunswick Archive for the Gwynedd County Archives using the documents and photographs discovered at the works.

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<sup>1</sup> Hereafter known as DJ Williams.

<sup>2</sup> The term art metal blacksmiths also refers to art metal worker the modern term for art metal blacksmiths. The art metal worker is used within the project as an interchangeable term.

<sup>3</sup> The development and impact of this aspect of the history of the company and how it was achieved is discussed in the findings chapter pages 163-179.

- The Unknown Warrior link providing the opportunity to raise the profile of the company through the development of this connection.
- The Welsh Highland Railway project creating the opportunity for the Brunswick Ironworks to extend its work into the Heritage Railway sector.
- Creation of the Brunswick Heritage Trail connecting key heritage attractions located within Caernarfon and the local area.

These were ambitious objectives but it was envisioned that their attainment would show how the heritage<sup>4</sup> of the Brunswick Ironworks was developed to raise the profile of the company.

The research project was a partnership with the Company and Bangor University funded through ESF funding acquired by Bangor University for doctoral research projects. The doctoral candidate had to find the partner.<sup>5</sup> The project would allow the researcher to utilise existing skills and develop new skills for instance receiving instruction from the staff at Gwynedd Archives relating to the creation of the Brunswick archive. The acquisition of that skill was essential for the completion of the one of the six objectives identified for the project. It was also necessary to develop and refine personal photographic skills in order to create a visual record of the company's work which would form the basis of the visual history of the company.

Heritage can provide a window on the past which can create connections to the present by identifying opportunities for the future development of the company. The study aimed to demonstrate the journey from history to heritage through the use of the Brunswick Ironworks visual heritage from 1906-2010, revealing how with the passage of time their history was transformed into heritage. This journey identified heritage as a fluid dynamic process which built a bridge between the past and present history of the company which was developed throughout the project to raise the profile of the Brunswick Ironworks.

### **1.3. The company as a case study.**

The Brunswick project is an ethnographic single case study<sup>6</sup> charting its development since 1906 showing how history was transformed into heritage with the passage of time; and how the past work of the company was utilised as a guide to identify and assist its future development. The researcher was allowed to work alongside the company from 2006-2010 gaining unique insights into the real life working environment of the modern day metal fabricator (the modern term for an art metal blacksmith). The case study showed how the active sharing of their heritage with other locations through its link with the Unknown Warrior not only connected locations across the United Kingdom<sup>7</sup> but that the development of this specific aspect of the history of the company aided in raising its profile on a national and international level.

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<sup>4</sup> The term heritage in the project refers to its fluidic evolving nature as revealed through the unique history of the company. The heritage debate is discussed in Literature review two pages 14-21.

<sup>5</sup> ESF funding dictated that working with a partner was a mandatory aspect of the funding package.

<sup>6</sup> Ethnographic research focuses on events within their natural settings. Ethnographic research is discussed as a research method on pages 129-135.

<sup>7</sup> These locations ranged from Westminster Abbey, Caernarfon, Imperial War Museum, Llangollen Railway and the Kent and East Sussex railway to France to a museum at Erquinghem –Lys France.



The creation of the six objectives for the case study enabled the study to develop and evolve highlighting the benefits of ethnographic research which allowed reflection and modifications based on information which emerged during the project to take place. The objectives necessitated detailed planning which was achieved through the creation of a series of phased targets for the project which when completed demonstrated how the past history of the company was developed to raise its profile, which in turn pointed the way to future businesses opportunities for the company.

The ethnographic case study was enriched and supported by the research undertaken on the history of the company and the creation of the Brunswick archive which together provided a visual documented record of the work of the company over the past one hundred years. The archived catalogue of the work of the company provided a reference document showing how the skills of the art metal blacksmith evolved to meet the changing needs of society. The archive created a visual record of their work for present and future generations to enjoy. The successful attainment of the six objectives identified for the research project showed that heritage within the context of the research project was a multilayered interconnected process. This fostered an appreciation of the skills of the company through the sharing of its heritage (Unknown Warrior) which connected people on a personal and emotional level.

The benefits of ethnographic research as cited by Yin (1994) far outweighed the negative aspects of this type of research. The Brunswick project allowed the researcher to become immersed in the daily working life of the Brunswick Ironworks. The resulting case study illustrates how different aspects of the history of the company identified by the creation of the six objectives were developed to raise the profile of the company. The case study contributed to understanding how the skills of an individual organisation (Brunswick Ironworks) were developed to link the past to the present.

#### **1.4. Transferable methodology.**

The journey from history to heritage aided in the identification of a transferable methodology based on the outcomes of the research project which facilitated insights into how the Brunswick Ironworks past (history) was utilised to guide its future development (heritage). The study revealed the changing nature of heritage (as per Smith 2006; Waterton 2011) as a process which evolves and develops to meet the needs of each individual location rather than applying an overall standardised vision of what heritage should be. The research project showed that heritage within the confines of the study was a multilayered process which acknowledged and encompassed all levels of heritage not bounded by preconceived views of heritage, but rather as a shared process which in this instance supported and complemented other heritage assets connected through the sharing of the heritage of the Unknown Warrior.

The transferable methodology which emerged from the research project is untested in terms of being applied to similar projects, but the methodology was successful for the Brunswick Ironworks and could therefore provide the basis for further study. The visual diagram created for the transferable methodology illustrated how it could be applied providing a template which could

be modified to suit the individuals needs of the heritage asset<sup>8</sup>. The transferable methodology is presented as a visual diagram showing how the Brunswick ethnographic study developed and evolved with each phase shown down the centre of the diagram with the methodologies and outcomes for each stage shown along the outside edge with arrows indicating where connections were made which resulted in the identification and creation of the model.

### **1.5. The Nature of Heritage.**

Heritage as a term is currently the subject of much debate; Waterton (2011) advocated that it is no longer the preserve of the upper/middle classes and its assumed association with sites, buildings and monuments, whilst Smith (2006) termed this “authorised heritage discourse” (AHD). Smith described heritage as a process focusing on a universal version of heritage, reflecting tangible aesthetically pleasing versions of the past. The Brunswick project supported the findings of Waterton (2011) and the research conducted at the Gladstone Pottery Museum, which identified that heritage is linked to local identity enabling the personal experiences of the visitors to connect with the heritage on display. The Brunswick case study supported the importance of the personal experience as seen through the work of three generations of the Williams family who through the creation of their visual heritage as art metal blacksmiths established a link with the local area, with examples of their work on display not only in Caernarfon but across the whole of the United Kingdom.

The Brunswick case study showed heritage as a process which in this instance was enriched by the people being able to touch the work created by the company forging connections on a personal level through an appreciation of the skills of the art metal blacksmith supported by the stories associated with the artefacts. When the artefacts from the Unknown Warrior were loaned to Westminster Abbey in 2006, Mr Williams and the researcher (Pam Smith) took the artefacts to the Abbey creating the opportunity for Mr Williams to stand by the grave of the Unknown Warrior. He commented that “my grandfather had touched history and that by bringing the artefacts home, the circle was complete”. The sharing of the Brunswick Ironworks heritage provided a personal and emotional connection for visitors to Westminster Abbey through the artefacts. Heritage is triggered by the senses which facilitate connections with artefacts fostering understanding and appreciation. This linked the past to the present- in this instance the personal connection of individuals and families touched by their own histories through the loss of family members during the Great War.

The Brunswick case study highlighted the importance of the visual aspect of heritage through the numerous photographs and artefacts unearthed during the project providing unique insights into the past as seen through the work of the company. The extensive visual archive created allowed the story of the company to be told using the original documents and photographs which charted the journey from history to heritage as experienced by the Brunswick Ironworks. The fact that the founder of the company DJ Williams made the decision to record and photograph key commissions indicated that he had made a personal choice that the work carried out was of

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<sup>8</sup> The diagram illustrating the transferable model is located in Chapter 5 Findings pages 206-207.

intrinsic value to him and the company. Developing and utilising the work created by the company enabled publication of a number of catalogues which were used as marketing tools, showcasing their skills as art metal blacksmiths. This decision aided in the transition from history to heritage as DJ Williams had taken the decision to preserve his work for posterity through the creation of his personal archive. The use of the visual documents and artefacts kept by the company allowed the journey to unfold which enriched the experience and which provided the opportunity to share the heritage of the company with the wider world.

The Brunswick case study is presented as an ethnographic study which fused the observations and experiences of the researcher following immersion into the real life daily workings of the company. This resulted in the attainment of the six objectives identified for the project which charted the journey from history to heritage which were developed as a tool through which the profile of the company was raised.

The case study identified the importance of a sense of place within the heritage debate grounding the work of the company in Caernarfon but also at locations across the United Kingdom as a result of the numerous commissions undertaken by the company during its existence. The research illustrated how a sense of place supports local identity. This was evident through its connection to the Roman Catholic Cathedral in Liverpool. The Crown of Thorns created and installed by Harold Williams is now a distinctive feature of the city forming part of the iconic skyline of Liverpool.

### **1.6 Heritage as a tool utilised to raise the profile of the Brunswick Ironworks.**

The Brunswick case study showed how one specific aspect of their heritage was developed throughout the duration of the project as a tool for raising its profile on both a local and national level. The creative use of the heritage of the Unknown Warrior enabled the untold story to be brought to the attention of a global audience through the programmes filmed by the BBC's Antiques Road show in 2008 and 2009. The study took place from 2006-2010 during which time a series of 90<sup>th</sup> Anniversary Commemorative events linked to the Great War 1914-1918 took place. This provided a unique opportunity to raise the profile of the company through the active sharing of the heritage linked to the Unknown Warrior.

The artefacts were loaned to Westminster Abbey in 2006, the 90<sup>th</sup> Anniversary of the Somme Offensive (1916-2006). They were displayed at the foot of the tomb of the Unknown Warrior in Westminster Abbey over the Remembrance weekend. 2008 marked the 90<sup>th</sup> Anniversary of the end of the Great War (1918-2008) and the artefacts appeared on the Antiques Road show programme, were photographed and documented by Oxford University as part of the Great War Archive, before going on display for the year long exhibition at the Imperial War Museum London. These events were marked in Caernarfon by the creation of two plaques recording the link between the company and these national events.<sup>9</sup>

The Unknown Warrior artefacts linked the past to the present through the active sharing of their heritage with other heritage groups across the United Kingdom. The Llangollen Heritage Steam Railway is constructing a replica Patriot Class Steam locomotive named Unknown Warrior which

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<sup>9</sup> The utilisation of the link with the Unknown Warrior and the creation of the plaques for Caernarfon are located in Chapter 5 Findings pages 163-179.

will be completed in 2020 the centenary of the burial of the Unknown Warrior. Brunswick Ironworks commissioned the creation of a replica slate plaque and allowed them to use their photographs and documents in order to allow people to make connections with their new steam locomotive.

This aspect of the Brunswick heritage was brought to the attention of the Kent and East Sussex heritage steam railway that restored the Cavell Luggage van in 2010. This was the van that had carried the Unknown Warrior from Dover to London in November 1920. Kent and East Sussex railway wished to place a replica coffin inside the restored Cavell van to mark the 90<sup>th</sup> Anniversary of the burial on the Unknown Warrior (1920-2010). The Brunswick Ironworks were commissioned to recreate the ironwork for the replica coffin created by DJ Williams. The grandson of DJ Williams, Meurig Williams reproduced the replica ironwork for the coffin consisting of eight handles and iron bands which bound the coffin using the same tools used by his grandfather.

The active development of this little known connection between the Unknown Warrior and the Brunswick Ironworks greatly assisted in raising their profile, however this work was supported by the objectives created for the project which when completed combined to bring their skills as metal fabricators to a global audience.<sup>10</sup>

### **1.7. How the study was carried out.**

The study was conducted over a four year period from 2006-2010<sup>11</sup> and was supported through funding obtained by Bangor University from the European Social Fund. The funding was secured with the aim of fostering links with local companies who would benefit from the skills of a PhD research student. The researcher needed to find a local company that would be willing to work with the University, Brunswick Ironworks were approached and following initial discussions Mr Meurig Williams the present owner of the company agreed to support the project.

The researcher was granted unlimited access to the extensive archive belonging to the company which charted their work as art metal blacksmiths over the past century. This allowed the researcher to become immersed within the daily working life of the company allowing a deep understanding of the skills of the art metal blacksmith to develop which was enriched by the discovery of the existence of original photographs and documents recounting their little known link to the Unknown Warrior and their connection to events within Caernarfon over the past century.

The case study developed as an ethnographic study which charted the journey of the researcher and the company as the research question:-

#### ***From History to Heritage: Using A Company's Past to Guide its Future***

Heritage was developed as a tool through which the profile of the company was raised resulting in the identification of new business opportunities for the company. The researcher spent four years working alongside the company which allowed unique insights into the daily working life of the

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<sup>10</sup> The objectives identified for the project are located on pages 145-147.

<sup>11</sup> The research period spanned four years due to the ill health of the researcher during 2007.

company which enriched both the researcher and the company. Noy (2007) termed this type of research as revealing moments of self; assisting in the creation of knowledge which seeks to unpack the felt, touched and embodied aspects of knowledge contained within the material under study. The body of knowledge which emerged from the Brunswick case study (history of the company and the Brunswick archive) allowed a unique insight into the work of the company which created bridges between past and the present, but also pointing the way to future development by the active promotion of their heritage as tool through which the profile of the company was raised.

The case study was based on the six objectives which emerged following lengthy discussions with Mr Williams relating to what the project hoped to achieve. The creation of the working partnership between Mr Williams and the researcher allowed the research to develop and evolve benefitting both parties through the raising of the company's profile and hopefully the award of a PhD for the researcher following the completion of the project.

The six objectives were ambitious and in order to ensure their successful completion a phased approach was developed for the project based on a timeline which broke the research down into small achievable targets which when combined resulted in the Brunswick case study. The resulting case study charted the journey from history to heritage which assisted in guiding its future development as metal fabricators in the twenty first century.

### **1.8. The Brunswick Ironworks. A key to Caernarfon's heritage.**

In order to identify where the heritage of the Brunswick Ironworks "fitted into" Caernarfon's heritage a detailed heritage assessment was conducted as per the methodology advocated by (Veverka 1994)<sup>12</sup>. The assessment charted the origins of Caernarfon from its development as a Celtic settlement to its role as a World Heritage Site (Caernarfon Castle). This was supported by research into the numerous plaques located within the town which recorded people and events linked to its history. This allowed the researcher to understand how the heritage of the Brunswick Ironworks contributed to the story of Caernarfon. Research into the history of the company identified its connection to events that occurred within the town most notably the Investitures of the Princes' of Wales at Caernarfon Castle (1909 and 1969). The work created by the company for these events is still visible within the Castle providing a lasting visual record of their contribution to these important events which are an integral part of the heritage of Caernarfon<sup>13</sup>.

The work created by the Brunswick Ironworks in Caernarfon are a visual reminder of the past industrial heritage of the town which in the past was a centre for the Slate Trade, engineering industry, ship building and a centre for commerce.. The company has helped to shape the visual appearance of Caernarfon through their skills as art metal blacksmiths with numerous examples of their work on display within the town. The Celtic Royal Hotel, Caernarfon contacted the Brunswick Ironworks to restore their decorative ironwork unaware that it had been created by DJ Williams. The commission was a result of the numerous articles which had appeared in the local

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<sup>12</sup> The project was discussed with John Veverka whilst attending a course at Plas Tan y Bwlch in 2006.

<sup>13</sup> Research into the heritage of Caernarfon conducted as part of the project is contained in Appendix 2 pages 250-277.

press as a result of the research project. The ironwork was restored by the company in 2009 preserving an important part of the visual heritage of the hotel and the town.<sup>14</sup>

The Brunswick heritage trail was one of the six objectives identified for the research project, with the resulting trail illustrating how the Ironworks functions as a visual representation of the heritage of the town. The trail connects key aspects of the heritage of the town and the local area with each location linked through the work of the company linking Caernarfon Castle, the Welsh Highland Railway and the David Lloyd George Museum at Llanystumdwy. The Brunswick Ironworks are an essential part of the heritage of Caernarfon their work bringing together different aspects of the past history of the area and with the proposed development of the Brunswick heritage trail creating opportunities for the future development of Caernarfon and the local area<sup>15</sup>.

### **1.9. Signposting the structure of the research project.**

The Brunswick project is presented as an ethnographic case study which charts the journey from history to heritage demonstrating how the past history of the company was developed to raise its profile and guide its future development.

#### **Chapter One. Introduction**

Introduction places the research into context providing an outline of the structure and content of the study.

#### **Chapter Two. Literature Review One.**

The heritage debate is discussed within this chapter showing the connections between history, heritage and interpretation. The chapter focuses on the philosophical aspects of the heritage debate and the emerging view of heritage as a process.

#### **Chapter Three. Case Studies.**

This chapter contains three sub sections presented as case studies which relate to:-

- The development of Caernarfon charting its early origins placing the research into the context of the town the home of the Brunswick Ironworks for the past 104 years.
- An overview of the history of the skills of the art metal blacksmith providing essential information aiding in an appreciation and understanding of the skills of the Brunswick Ironworks.
- The history of the company was broken down into specific sections relating to work undertaken by the company since its formation.

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<sup>14</sup> The ironwork created by DJ Williams for the Celtic Royal hotel was photographed for the project and appears on page 79 the history of the company.

<sup>15</sup> The Brunswick heritage trail is located in appendices 6 pages 305-319.

#### **Chapter Four. Methodology.**

The ethnographic methodology selected for the research project is discussed in terms of the strengths and weaknesses of this type of research focusing on the role of case studies within ethnographic research and how the method was used. The selection and use of supporting methodologies to enrich and support the case study (Delphi and the Systems Methodology Approach) used for the heritage inventory of Caernarfon. The Irish case studies provided supporting material which assisted in understanding heritage as a process; the Irish case studies illustrating how each location adapted its history, creating a heritage attraction which focused on the people and stories associated with each location.

#### **Chapter Five. Findings.**

This section discusses the findings of the research project in terms of the results and outcomes from the six research objectives set for the project. This is supported by the creation of the timeline and phased approach methodology used for the project. The outcomes from the research demonstrated the journey from history to heritage as experienced in the project and shows how sharing the heritage of the company has actively supported and complimented other locations enhancing their heritage experience.

The history of the project and what happened along the way is supported by lessons learnt from the research project in terms of understanding research and heritage and how the experience has impacted on the researcher on a personal level.

#### **Chapter Six. Discussion.**

This chapter discusses the significance of the findings and how they relate to the literature discussed in chapter two, literature review one. It contains the explanatory transferable model which emerged from the research based on the experiences of the researcher during the project. The chapter discusses how history has become heritage and the contribution of the research project to the heritage debate. Illustrating how one specific piece of the Brunswick Ironworks heritage opened a window of opportunity through which the profile of the company was raised as a result of the research project.

#### **Chapter Seven. Conclusions.**

The outcomes of the research project are discussed through the contribution of the ethnographic case study to the heritage debate pin pointing the strengths and weaknesses of the study. The role of the transferable model as a tool which might assist other researchers when conducting similar research based on the lessons learnt from the Brunswick Ironworks project. The case study closes with a reflective postscript from Mr Meurig Williams and the researcher (Pam Smith) describing on a personal level the impact of the research.

#### **Appendices.**

The appendices contain additional information that was generated throughout the project, the material is included as it provides a valuable insight into how the project developed and evolved and could be used as a guide to the development and implementation of the transferable methodology by other researchers:-

**Appendix 1.** (230-249). Data collected from the site visits to Ireland that illustrated their approach to the development and utilisation of Irish history and heritage.

**Appendix 2.** (250-277). The heritage assessment which took place as part of the project relating to the plaques and memorials located in Caernarfon which assisted in identifying where the heritage of the company fitted into the current heritage provision within the town.

**Appendix 3.** (278-287). The detailed replies received from the respondents to the Delphi questionnaire which was used to support the methodology for the research project.

**Appendix 4.** (288-297). The presentations and publications created during the project used to identify and support the role of the Brunswick Project in terms of raising its profile through the recounting of its history

**Appendix 5.** (298-304). The resulting Brunswick Archive created during the project is illustrated through pages taken from the catalogue. The complete catalogue is available at Gwynedd Archives, Doc Victoria Caernarfon Gwynedd. <http://www.gwynedd.gov.uk/archives>. The archive is closed until the research project is completed.

**Appendix 6.** (305-319). Brunswick Heritage Trail which emerged from the research project

**Appendix 7.** (320-332). Examples of the marketing material generated for the project which assisted in bringing the skills of the company to the attention of Heritage Steam Railways across the country, thus raising the profile of the company amongst the heritage railways sector.

**Appendix 8.** (333-348). Letters received from various organisations contacted during the project relating to their work.

**Appendix 9.** (349-390). This section contains additional supporting material relating to the utilisation of the story of the Unknown Warrior and recounting the events leading up to the creation of the Unknown Warrior. Illustrating how it was developed as a tool to raise the profile of the company charting the journey from history to heritage as experienced during the project.

The Brunswick project provided a unique research opportunity for the researcher to experience the daily working life of the company but it was much more than that; it was a shared journey which enriched both the life of the company and the researcher. The following case study charts the journey providing insights into how heritage was transformed to raise the profile of the company which identified new business opportunities for the company through which to showcase their skills as art metal blacksmiths.



# **Chapter Two. Literature**

## **Review One.**

### **2.1. Introduction.**

The heritage debate is explored through discussions focusing on how history impacts on heritage, and the conflict that occurs in heritage due to its influences on society and the values attributed to heritage. The active selling of heritage as a mechanism for economic gain as a tool that creates income for the location, supporting the local community and creating employment. However, these top down versions of heritage have led to certain social groups feeling alienated from their heritage. This chapter will discuss and explore the journey from history to heritage as illustrated through the Brunswick Ironworks research project.

The use of artefacts and visual images within heritage was a key component of the Brunswick case study and this chapter focuses on how visual heritage relating to the photographic and artefactual archive of the Brunswick Ironworks was developed within the research project as a mechanism through which the profile of the company was raised.<sup>16</sup>

The role of heritage is discussed with the project focusing on heritage as a tool which was utilised to assist in raising the profile of a location or company. Thus illustrating that heritage when viewed as a process engages all sections of society by celebrating a shared heritage, open to all and fostering a sense of place and belonging.

The role of interpretation within heritage traces its development through the ground breaking work of Freeman Tilden (1957) onto modern day interpreters such as Ham (1992) and Veverka (1997) who have embraced the theories of Tilden but who have updated them to meet the demands of the 21<sup>st</sup> century visitor. The role of interpretation in the twenty first century is illustrated through the creative and thought provoking work of Irish interpreters, who have taken their history and transformed it into a heritage product which was used to raise the profile and marketing of the area. The evidence which emerged following the visits to Southern Ireland supports and illustrates the role of interpretation within heritage, (the material is contained in appendix one). The Irish case studies are included within the study as the experience gained from the visits to Southern Ireland assisted in the creation of the Brunswick Trail, one of the objectives set for the case study.

### **2.2. History.**

The role of history within the broader context of the heritage debate is discussed. Ashworth and Tunbridge (1996) acknowledged that history focuses on events from the past based on evidence and decisions made in the past by historians. The selection of the material necessitated value judgements to be made by the historian which resulted in the production of a historical record of

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<sup>16</sup> The use of the visual heritage of the Brunswick Ironworks within the research project is illustrated through the case study on the history of the company on pages 75-127

the events. However, the decisions made by the historian to select the material was based on individual choices possibly allowing for personal bias to influence the selection of material preserved alongside how the material was interpreted. This could possibly cause conflict if the material presented was not a true unbiased account of events or that the material recorded by historians from the past is developed in the present to illustrate a view of the past created to meet the needs of the present.

History is by its nature objective and descriptive with historical records and accounts of the past based on incomplete traces and partial records which are sprinkled with prejudices and interpretations made by historians. Historical accounts of the past are snapshots of the past, an account of the past based upon the evidence selected by past historians which in turn was selected by the person who created the record in the first place. History benefits from hindsight it is updated and amended to reflect the values of the present generations (Lowenthal1998:128). History according to Lowenthal (1998) contains three tiers;

- Memories
- Historical records
- Artefacts

Translating this analysis to the Brunswick Ironworks revealed that all three tiers were evident within the documented evidence relating to the history of the company Memories were provided by Meurig Williams, historical analysis was evident through the documented evidence preserved by DJ and Harold Williams and the surviving artefacts relating to the Unknown Warrior and other key commissions provided the visual artefactual evidence.

Marwick (1989) explained history as an interpretation of the past which was dependant on knowledge which was selected by people from the past. Marwick believed that the “past exists in memories, traditions and ceremonies” (1989:2) which are passed down from one generation to the next. The resulting evidence is only one version of the past based on the evidence accrued hence the conflict as it is only one recorded version of the past. Lowenthal (1985) stated that history is based on empirical sources which are selected and rejected as accepted versions of the past by successive generations. Historical knowledge is shared knowledge, whereas memories which are an important aspect of social history tend to be more private and personal. Lowenthal mentions that memories are time limited they perish with the passing of the generations, whereas history due to its empirical inferences is potentially immortal. One of the main aims of history is to preserve the knowledge of the past through the creation of oral and archival sources which are reviewed and updated by successive generations. These sources of information are supported and authenticated by the cross referencing of material pertaining to the event generating verifiable empirical sources of evidence which assist in creating a better understanding of the past.

Conflict occurs when the accuracy of the records are challenged. History focuses on making forgotten pasts understandable Dicks (2000) through the use of journals, artefacts, photographs, oral histories and historic buildings which present a vision of the past as experienced by the individuals who created the records. The selection of this material necessitated value judgements to be made by the historian relating to what aspects of the past were worthy of preservation.

Therefore the preservation of the past through history necessitates decisions to be taken by the person undertaking the selection process which could be seen as inferring prejudice as this is only a snapshot in time, a partial record of events.

Lowenthal termed this the “foreign country” (1985:412) with assumptions about the past based on human nature which was “changeless” with events explained in the same terms as those of today, when in reality no one can grasp or understand what it was like to live in the past. History is limited in terms of what can be known the vastness of the past and the distinction between events and accounts of those events will inevitably contain bias in terms of presenting a selected version of the past Lowenthal (1985). Conflict emerged when the past (history) was developed as a mechanism by which people used it to relate to a less stressful imagined past. The past cannot be changed, it exists in the past but conflict exists when the past is altered to meet the expectations of the present. However history does provide links with the past, as historical knowledge can be checked against similar accounts of the past supported by additional historical evidence thus presenting a more open version of the past.

History depicts a definitive and ordered past that is supported by hindsight supplied by the historian who attempts to understand and interpret the consequences and impact of historical events which in turn help to make sense of the present. History is revised in order for it to be comprehensible to new generations with the past updated through research and preserved for the future through historical books and records preserving the material and creating a lasting legacy for future generations to appreciate and enjoy. In the case of the Brunswick project the revision and updating of the history of the company undertaken during the research project has resulted in the creation of an archive and a documented history of the company supported and verified through the use of the documents and photographs unearthed during the project.

History is perceived as a window on the past when in reality it is a window through which daily events can be viewed and it is the active decisions taken by people that preserve these events creating a history based not only in the past but also the present. This aspect of making history was illustrated through the link with the Unknown Warrior when the heritage of the Brunswick Ironworks was shared with the Llangollen Patriot project through the building of a replica Patriot Steam Locomotive and also the restoration of the Cavell Van, resulting in the creation of replica ironwork by the company which linked the past to the present making history in the present.

The history of the Brunswick Ironworks was based on actual facts verified through the documentation discovered at the works and supported by the extensive use of photographs, and letters relating to their work which facilitated connections to be made encouraging connections with people and events from the past. Samuel (1994) <sup>17</sup> stated that “heritage outshines history due to its use of visual media encouraging people to make connections with past events” providing the opportunity for people to develop a sense of place. Marwick (1989) concluded that without history an understanding of the problems of the present and their possible solutions would not occur and that the resolution of these identified problems affects the future. History is the bridge that connects the past to the present and the future based on what choices are made when selecting

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<sup>17</sup> Samuel cited in Lowenthal 1998:130.

and preserving history. The past exists and cannot be altered however the effects of the past affect the present and the future. History reflects the past it is updated and reviewed through successive generations who select what they wish to preserve.

Lowenthal (1998:128) wrote that "history is for all" as it aims to reduce bias by focusing on truth based on actual recorded facts. Lowenthal (1998) mentioned that history is descriptive but it is important to remember that historical records and accounts of the past are based on incomplete partial records of the past which are sprinkled with prejudices and the historians own interpretation of the past. Therefore historical records provide insights into the past but do not necessarily tell the whole story.

History and heritage are interconnected both contributing to knowledge and understanding of the past. History provides the cold hard facts which can be authenticated through documented evidence whereas heritage aims to encourage connections with the past through interpretation placing the facts within a social framework which encourages people to connect to the past.

### **2.3 Heritage.**

Prior to the commencement of the research project heritage was viewed as the mechanism through which the past was represented for present generations to appreciate and understand through sites, monuments, artefacts and buildings that reflected the history of the location. However, once the project was underway it was evident that the transition from history to heritage as demonstrated within the research project required a different view of the role of heritage. In order to illustrate how this definition was arrived at the history of heritage was researched creating a definition of heritage that related directly to the research project.

The heritage of the Brunswick Ironworks demonstrated that it is a valued reminder of the past passed down from generation to generation through the work of the Williams family as art metal blacksmiths.

*"A National heritage that equates to national identity where family heritage includes photographs and artefacts".*

*(Howard 2003:1).*

Howard terms this family heritage as "unofficial heritage" whereas national heritage was referred to as "official heritage" this definition implying that national heritage is more valuable than family heritage. However this definition did not "fit" the Brunswick heritage, as it encompassed both a family heritage and a national heritage both of which were equally valued and both of which were contained within the history of the company. The decision to classify specific types of heritage as more valuable implies that a value judgement is necessary in order to appreciate the heritage asset.

Ashworth and Tunbridge (1996) defined heritage as:-

*"Having a simple meaning it was a collective generalisation derived from the idea of an individual's inheritance from a deceased ancestor. Today it has extended to include objects, buildings, places, sites, and cultural landscapes. Heritage is used not just to refer*

*to objects or artefacts from the past but extends to all accumulated cultural and artistic productivity whether produced in the past or currently”*

*(Ashworth and Tunbridge 1996:1).*

According to this definition heritage is a much broader concept focusing on both the past and present involving value judgement in terms of identifying heritage assets produced both in the present and the past. Ashworth and Tunbridge (1996) probably included the cultural and artistic significance of heritage in an attempt to encourage people to focus on the present. This can be achieved through the creation of festivals, craft fairs and concerts which contribute to a cultural and artistic heritage for present and future generations to appreciate. The Brunswick Ironworks through its work with heritage railways has created heritage artefacts which are valued in the present. Showing how the skills of the modern art metal blacksmith are contributing to the creation of new heritage assets in which due to the longevity of the artefacts produced will still be appreciated in the future.

Heritage can be viewed as both tangible and intangible. Tangible heritage focuses on the preservation and conservation of collections, whereas intangible heritage refers to the importance of oral traditions such as stories and myths, festivals and crafts which are part of a community an integral part of their cultural identity. The intangible aspect of heritage is what gives each location its spirit its own unique sense of identity which has emerged as a result the groups response to nature, history and the environment which have shaped their communities over the generations.

Corsane (2005) refers to the past as being beneficial as it provides familiarity and identity fostering a sense of belonging which encompasses language, religion, ethnicity and nationalism. These have emerged from the shared interpretations of the past which can be used to guide and develop the present. The intangible aspect of heritage is difficult to portray it is the essence of the location without which the heritage portrayed is cold and lifeless. Tangible heritage can be seen and touched the artefacts and buildings left behind allowing people to see the past but not necessarily make an emotional connection to it.

Heritage is perceived as tangible as it focuses on the preservation and conservation of collections and buildings. However, according to Corsane (2005) this view of heritage is expanding to include the intangible aspects of heritage. The UNESCO Conference of 2003<sup>18</sup> supports this view stating that heritage encompasses:-

- Practices, representations, expressions knowledge and skills.
- This includes objects, artefacts and cultural spaces.
- As well as communities, groups and individuals as part of their cultural heritage. These points relating to tangible heritage.
- With the inclusion of intangible heritage as a process that evolves and develops from one generation to the next which is recreated by communities and groups in response to their environment, history and nature. Resulting in the creation of a sense of identity through

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<sup>18</sup> UNESCO General Conference 2003. Convention for the Safe Guarding of the Intangible Heritage.

oral traditions (stories) language, arts, festivals and events which are part of the intangible aspect of heritage associated with each location.

Perceiving heritage as both tangible and intangible acknowledges the connection between the “seen” and felt heritage of a location. It allows heritage to make connections on a personal level which enrich the location, this was experienced during the Brunswick project. The objects created by the company were no longer seen as merely artefacts from the past but as connections to the past which conveyed an understanding of the skills of the art metal blacksmith who created the object.

#### **2.4. Contested Heritage.**

Smith (2006) introduced the concept of a dominant narrative within heritage, terming it “authorised heritage discourse” (AHD) which focuses on heritage in terms of it acting for and stewarding a universal past that is made up of made up of grand, tangible and aesthetically pleasing sites, monuments and buildings that represent heritage. The problem according to Waterton (2011) is that viewing heritage as AHD limits it by restricting the inheritance belonging to future generations which in turn then limits the development of heritage in the present. Heritage applying the AHD model constructs heritage as being grounded in the past and providing no opportunity for visitors to participate and engage with heritage in the present. An over emphasis on the values and attributes of the upper/middle classes associated with AHD means that in most cases, the working classes and ethnic minorities feel alienated from their heritage.

The contribution of the working classes to heritage as perceived using the ADH model relegates their contribution to the past, when in reality the working class heritage is imbued with meanings and can be used to trigger and guide visitors to make connections between personal and collective memories. Heritage is intangible; it is triggered by the senses which assist the visitor in making connections with the site. Heritage unless carefully managed can blur the relationship between the past and the present. The creation of heritage sites which focus on specific time lines from the past can in some instances create a false impression in terms of what life was really like for the people who lived during that period creating a view of heritage that does not recount the whole story. This can result in top down versions of the past which have resulted in a heritage represented through the cultural aspirations of the upper and middle white classes with heritage packaged to suit their expectations leading to the exclusion of the working classes.

This top down version of the past can result in conflict when the material selected for the site results in the creation of false images, painting the past as a golden age free from the stresses of unemployment and poverty when in reality they had their own problems to overcome. These top down versions of history do not in most instances identify the skills and contributions of the working classes. These men, women and children were engaged in dirty dangerous work which carried with it health risks and poor living conditions. The working classes were the “engines” of the industrial past providing the “man power” which established Britain as a manufacturing centre which exported its skills and products across the globe. The heritage of the working classes is the link to the past that can actively engage visitors in the present but the representation of working class life needs to be truthful, even if these are painful for visitors to experience and understand.

Heritage needs to focus on the whole plethora of experiences and needs to present a balanced view of life which illustrates that past generations had problems to face and that an essential aspect of heritage is how they resolved their problems. Heritage should reflect the challenges from the past but also provide hope for the future. The creation of the British Empire and the subsequent establishment of the Commonwealth viewed by some as the “Golden Age of Britain” in reality was a period in British history when mass exterminations of the indigenous peoples of Australia New Zealand and Canada occurred. Heritage should not be viewed through “rose tinted spectacles” For Dicks (2000) the truth is paramount if future generations are going to learn from the past:-

*“The past remains integral to us all, individually and collectively. We must concede the ancients their place. But their place is not simply back there in a separate and foreign country. It is assimilated in ourselves and resurrected into an ever changing present”*

*(Lowenthal 85:412)*

Lowenthal advocates that the past impacts on the present but it should not dictate outcomes; the lessons learnt from the past should be used to shape the future in terms of trying not to repeat the same mistakes. Heritage is valued by many nations, some using it as a mechanism to ensure the survival of its natural and cultural heritage so that it is protected for future generations to appreciate. However in some instances heritage can be used as a weapon, a tool utilised to destroy a nation’s sense of identity, for example Poland during the German occupation of Warsaw in World War Two. Germany believed that in order to subjugate the Polish people the destruction of the iconic buildings of Warsaw would demoralise the Polish people and force them to accept that they were now living under German occupation. The buildings were destroyed during the War but following the end of hostilities the Polish people rebuilt the buildings illustrating that heritage is more than just “bricks and mortar” it is an inherent appreciation and understanding of what it means to be Polish. A national identity that had its roots firmly in the past and which proved difficult to destroy and following reconstruction assisted in re-establishing a national identity for the Polish people.

### **2.5. Heritage as Process.**

Heritage according to (Smith (2006) is not about objects, it is about the processes involved in constructing meanings from heritage. Smith proposed that heritage was essentially a cultural process no longer tied down to object orientation with its inherent values instead heritage has the power to communicate and construct meaning through images. Crouch (2010)<sup>19</sup> stated that the problem is not with heritage but the way in which it is perceived, heritage is too frequently seen as elite which makes it distanced and detached from its roots and the influence that it had on people’s lives. Heritage is perceived as a consumable product associated with portraying a sense of belonging resulting in a “world heritage” which is transferable from country to country. Crouch argued that heritage should be taken out of its pre-packaged form and should be viewed as a process linked to the past but a celebration of the present through the creation of festivals and events which in turn assist in the creation of a heritage for future generations to appreciate. The

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<sup>19</sup> Crouch in. Waterton and. Watson (2010): Culture, Heritage and Representation: Perspectives on Visuality and the Past. Aldershot: Ashgate, 57-71.

assumption that heritage was a much broader concept than just the built heritage was proposed by Ashworth and Tunbridge (1996) who listed five categories for heritage:-

- Heritage is a synonym for any relevant physical survival of the past.
- Heritage contains/reflects individual and collective memories.
- Heritage is the accumulated cultural and artistic productivity of a nation.
- Heritage is the natural environment.
- Heritage is an industry focused on the commercial aspect of heritage.

These categories acknowledged a broader view of heritage but one that is still entrenched in a preconceived view of heritage. Taking this concept of heritage it was applied to the Brunswick project revealing that it was possible to demonstrate how the five categories could be applied.

- The Brunswick Ironworks heritage is a physical survival of the past in terms of the metal work it created.
- It reflects individual and collective memories through the designs of the work created by the company.
- It is an example of the cultural and artistic productivity of a nation as demonstrated through their skills as art metal blacksmiths.
- The Brunswick heritage reflects the natural environment in terms of the work they designed “sits” within the locations for which it was created.
- The Brunswick heritage is commercially focused in terms of the company receiving payment for their work from clients, which in turn secured the employment of the skilled craftsmen.

Smith and Waterton (2006) proposed that heritage interacts with everyday experiences and that it should not be taken for granted. Heritage is limiting and elitist heritage and is not fixed in time but is “constructed, created, constituted and reflected by discourses” (Smith and Waterton2006:4).<sup>20</sup> Discourse forms an active part of social interaction of which heritage is a component part, no longer is heritage “set” there are multiple ways of viewing heritage. They suggest that heritage is more aptly described as a process an active attempt to use heritage rather than it being viewed as a concrete entity. Heritage has the capacity to transform into a process that is constructed in and about the present and through this process individuals and institutions are able to make connections to the past fostering understanding though active involvement in the process of ‘doing heritage’.

But as the research project developed and evolved it became evident that the transition from history to heritage was more akin to a process as advocated by Smith and Waterton. Taking the work of Ashworth and Tunbridge(1996) and updating it with the work of Smith and Waterton (2009) revealed a definition of heritage that illustrated the interconnectivity between the past, present and future as revealed through the research project:-

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<sup>20</sup> Discourse in heritage relates to the construction of meaning which assists in group identity, historical narrative and individual and collective memories which in turn influence class, culture and ethnicity.



*“Heritage encompassing individual and collective memories based on cultural and artistic activity, incorporating the natural environment and artefacts from the past. Utilising heritage as a process that is fluid and evolving meeting the needs of different generations and situations. Focusing on the past but interpreted in the present thus creating a future through the creative use of heritage.*

*(Ashworth and Tunbridge (1996) Smith and Waterton (2009). Redefined for the Brunswick Project by Smith 2012).*

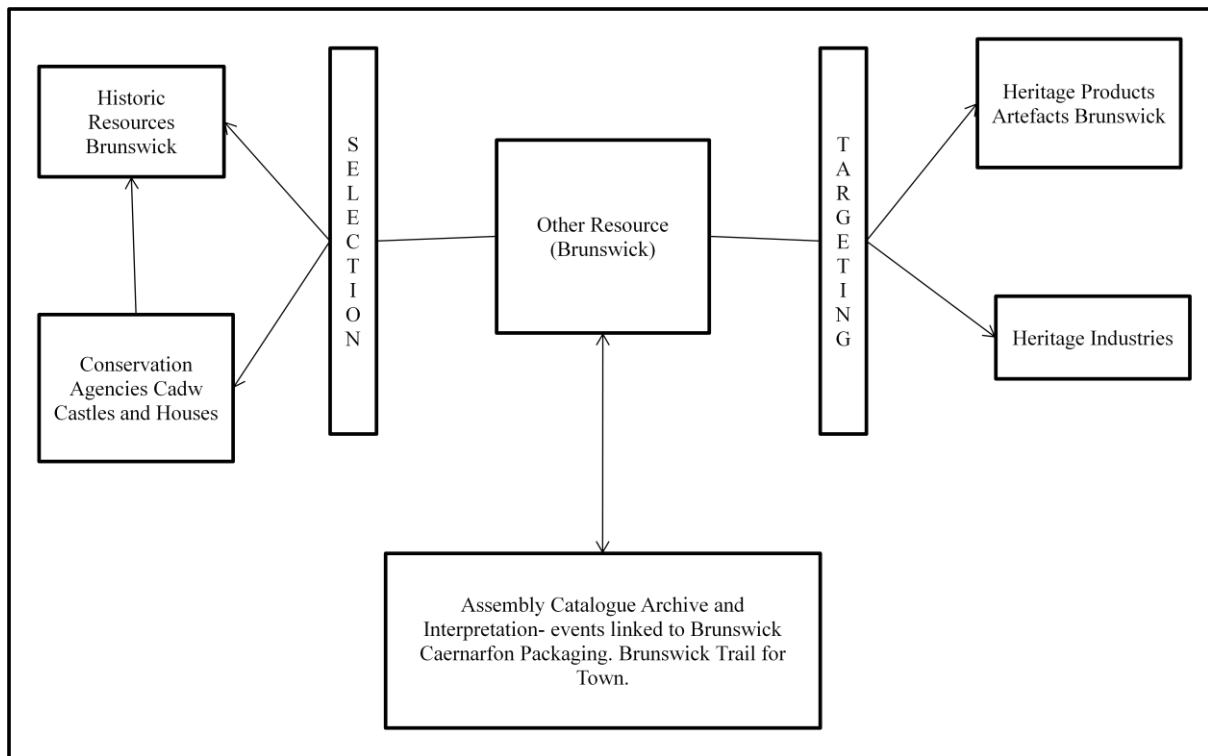
It is this definition of heritage which will be applied to the research project as the Irish case studies revealed successful heritage attractions utilise the monetary aspect of heritage in terms of assisting in the economic stability of local communities. However, the needs of each location as illustrated through the case of the Irish case studies were different thus enabling heritage to be seen as unique to each site. The heritage created focused on the past but was designed in such a way that it had an impact on the present. The Irish case studies assisted in identifying the fluidic evolving process of heritage within each location creating a heritage attraction which celebrates heritage by including all sections of the community.

Heritage is a tool which has to be handled with care it has the potential to foster a sense of national identity and can establish a sense of place but it can also be used as a retreat into the past an escape from the economic challenges of the present resulting in a false heritage; a misrepresentation of the past which fails to contrast the injustices and inequalities that existed in the past. Heritage can be used as a tool for change, recognising that past mistakes need not be repeated in the present and that the lessons learned from the past can help to shape a better future.

## **2.6. Commodification.**

Commodification is a process which requires selection, in terms of the heritage identified and manufactured to meet the needs of contemporary society. The creation of a heritage model as advocated by Ashworth and Tunbridge traces the links between the past (history) and its current functions as a facilitator, fostering an understanding of the mechanisms developed through which stories, artefacts events and people from the past are transformed and marketed as a heritage product.

Heritage can be the medium through which declining areas can be revived; Tunbridge and Ashworth (1996) proposed a heritage model:-



**Diagram 2.0. Heritage Model Proposed by Ashworth and Tunbridge (1996).**  
**Adapted for the Brunswick Project by Smith.**

The model proposed by Tunbridge and Ashworth portrays heritage as an industrial assembly line through which heritage is manufactured utilising past events ranging from memories, stories, people, myths, legends and surviving physical relics manufactured to create heritage. These assets acting as the raw materials mixed and selected to create a heritage product which in turn feeds the heritage industry. The intrinsic purpose of the heritage product relies on links and associations to the selected location through the creative use of artefacts, buildings, landscapes and sites which impart an aesthetic and antique value to the product which in turn facilitates connections to be made by visitors with the material on display. The extrinsic value of the heritage product relates to the conservation and preservation of aspects of heritage selected by the society as a marketable product for consumption by visitors to the location.

The heritage model proposed by Ashworth and Tunbridge is not written in stone, the judgements and the selection processes involved in identifying the heritage for display infers a preconceived view of the needs of visitors to the sites. When in reality the needs of the visitor are in a constant state of flux due to the changing needs and attitudes of society. The Commodification process needs to be viewed as an ongoing evolving process influenced by different versions of the past which are influenced and controlled by the present resulting in a valued heritage product.

The creation of a successful heritage asset requires careful and detailed planning in order to ensure that the needs of the local community are protected whilst at the same time the heritage asset is also protected for the enjoyment of present and future generations. The process of Commodification suggests that heritage is an emerging and evolving process which requires frequent updating in order for it to attract visitors. With the creation of a manufactured heritage

care needs to be taken when developing the heritage asset to ensure that the whole story relating to the site is accurately told in a complimentary manner befitting its surroundings and history. The selection of the heritage asset is a crucial component in creating a successful heritage attraction which generates income for the area whilst at the same time protecting the heritage from damage and excessive marketing.

The Commodification process requires selection in terms of the heritage identified for consumption by contemporary society. The marketing of heritage can be compared to the world of fashion which evolves and changes to meet the needs of the client, in much the same way heritage needs to evolve and develop to meet the demands of society. Commodification can be seen as a process evolving to meet the needs of the present but which is also influenced by different views of the past. The heritage utilised is marketed to meet the needs of successive generations which select and develop the asset to meet their needs.

### **2.7. Raising the profile of a location.**

Heritage when viewed as a process is a powerful tool that can be developed to raise the profile of a location through the recognition of its past but it needs to be handled with care. Decisions need to be made in terms of the desired outcome for the location ranging from preserving aspects of the past through the creation of heritage attractions as in the case of Wigan Pier.<sup>21</sup> TO the current trend to restore and preserve historic waterfronts by converting them into desirable residential locations which in the case of the Liverpool docks project also includes the creation of museums and art galleries. Both views of heritage can benefit the area, the money generated from attractions such as Wigan Pier supporting the local economy through employment within the heritage sector. Whilst the restoration of historic waterfronts create desirable upmarket properties creating and preserving the visual appearance of its past history and improving the appearance of these once run down areas, but in many instances creating spaces which are devoid of the spirit that made them.

Developing heritage as a tool for raising the profile of an area requires careful planning<sup>22</sup>; otherwise the uniqueness of the heritage asset is lost amongst the desire to generate income to support the needs of the local community and the heritage owner. The decisions made relating to conservation and protection of the heritage asset are crucial and should be made alongside the selection processes undertaken when creating a heritage product that appeals to visitors. This is possibly one of the reasons why recreations of the past such as Wigan Pier have been successful in marketing the heritage of the area the (industrial legacy of the cotton mills). Visitors to the site were presented with a visual image developed around the old industrial buildings of the Pier recounting the life of cotton workers during the late 19<sup>th</sup> and early 20<sup>th</sup> century. The heritage at Wigan Pier was packaged to attract an audience, which assisted the local economy which assisted in the preservation of the old mill buildings and wharf at Wigan Pier an integral part of the visual

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<sup>21</sup> Wigan Pier was developed a heritage attraction which recounted the industrial past of Wigan. The site portrays the importance of the canal system as a transport tool used to carry the cloth manufactured at the many textile mills located in the town. Due to budget cuts the site has now closed.

<sup>22</sup> The development of heritage assets as a tool by which the profile of the location can be raised is demonstrated in appendix one the Irish case studies on pages 230-249. Demonstrating how the heritage of a location was developed as a tool though which tourism was encouraged.

identity of the local area. The development of the historic buildings at Wigan Pier utilised the “unique” character of the location creating a heritage experience which blended in with the history of the area as a manufacturing base for the textile industry.

However, the mass marketing of heritage does not always reflect the uniqueness of the location. The creation of large water front projects such as the Albert Dock complex in Liverpool resulted in heritage being packaged for a specific consumer market<sup>23</sup>, the old buildings might have been restored but the spirit of the area was lost; it now has the appearance of similar developments across the country (Salford Quays, Victoria Doc at Caernarfon). The spirit of the location has been lost replaced by a constructed view of the area in the 21<sup>st</sup> century the only link with the past heritage of the area being the restored buildings with many of them functioning as exclusive luxury waterfront apartments.

The restoration of historic waterfronts has in many instances protected and restored the historic buildings associated with the area implying that heritage is valued in terms of the aesthetic appearance of the area and that it should be protected. However, heritage is not just the past portrayed through buildings, artefacts, objects and landscapes it is about people and how their stories traditions and music enriched their lives and which still influence people’s lives today. The mass production of waterfront heritage developments has resulted in the “spirit” of the area being lost, the local people have been relocated and the industrial buildings which resounded with the sounds and smells of industry have been sanitised to create expensive apartments, resulting in a loss of identity in terms of maintaining the industrial heritage of these once working class neighbourhoods.

The creation of these waterfronts developments has raised the profile of the area through the creation of exclusive neighbourhoods but heritage is about more than buildings. It is about the people who helped to shape the area giving it a unique identity which as illustrated through the work of the Brunswick Ironworks contributed to a sense of place for Caernarfon through the visual heritage of the company which assisted in raising the profile of the area.

## **2.8. Visual Heritage. The use of photographs.**

The visual and artefactual bias of heritage finds itself dependant on the creative use of objects and images from the past which encourage people to make connections. On a simple level a picture paints a thousand words<sup>24</sup> whereas a written description of the same scene might not necessarily have the same impact in terms of making connections on a personal level with the material on display.

The extensive visual heritage of the Brunswick Ironworks and the creation of the photographic archive created a visual record of the work of the company. Samuel (1994) cautions care when accepting the authenticity of photographic archives, and argues that historical research is required to support the material. This process requires oral testimonies and written documents which are spliced together to create a whole picture providing authentication and verification for the

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<sup>23</sup> The creation of deluxe water-fronts apartments.

<sup>24</sup> The phrase is American in origin. Attributed to F.R. Barnard in 1921 who used the term to describe the effectiveness of graphics to convey meaning,

photographs. Photographs can portray the spirit of the place/location and in the case of the Brunswick Ironworks it encapsulated the skills of the art metal blacksmith charting the development of their skills over the course of a century. The Brunswick history was authenticated by the various photographs contained within the history of the company which was supported by the oral histories provided by the Williams family and the creation of the Brunswick archive.

The use of photographs within heritage provides a snap shot of the period illustrating what the photographer identified as valuable in terms of preserving the scene for future generations. Conflict can arise when using photographs within heritage as in the case of the extensive photographic archives which were established during the Armistice celebrations at the end of the Great War (1914-1918). The photographs most commonly used to depict the event, shows people dancing in the streets, with very few photographs of the wounded soldiers returning home from the war. It would appear that value judgements were taken relating to the content of the photographs used by the press and the subsequent visual records associated with the Armistice. The use of the celebratory material illustrated that the content of the displays reflected what was deemed suitable, judgments were made that people would not want to see the true face and cost of the war portrayed though the images of the maimed soldiers who had returned home.

The use of photographs within heritage can be used as set dressings which do not necessarily reflect the true impact of the event portrayed. The photograph depicting the 1909 prize winning gate at the National Eisteddfodau shows DJ Williams wearing a clean white shirt. This gives the impression that this was the normal attire for art metal blacksmiths, when in actual fact a white shirt would not be worn within the workshop, with all the men including DJ Williams wearing appropriate clothing. The white shirt was worn to identify and separate DJ Williams from the workman also portrayed in the picture who wore a white shirt without a collar.<sup>25</sup>

Creating collections which depict an aspect of the past were started in many instances because the objects were valued and appreciated by the collector. In the case of the artefacts of the Brunswick Ironworks they were collected as they represented visual examples of their skills as art metal blacksmiths, with many of the objects forming the basis of their marketing displays at Rural Industrial craft shows and local and national Eisteddfodau. The artefacts collected by the Company illustrated, the varied range of products created and offered for sale to the public. According to Pearce (1994) different people collect objects as they make connections with the collector on a personal level either because of its use/purpose or its aesthetic qualities. The creation of collections necessitate value judgements to be made on the part of the collector, but one man's treasure can be seen as another man's rubbish and the value of the collection can also alter with time as tastes change.

The creation of the Brunswick collection established a link with the past through the work of the Williams family, but it has also built a bridge to the future in terms of creating lasting examples of the skills of the art metal blacksmith. The legacies from the past encompass a broad spectrum of heritage which reflects past achievements which foster a sense of place and appreciation, which in turn shaped a local and national identity. The utilisation of heritage as a mechanism for raising the

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<sup>25</sup> The photograph of the prize winning gate is located on page 77.

profile of the area is instrumental in terms of developing the past to create a future for towns and cities affected by de-industrialisation, generating revenue which contributes to supporting the declining communities.

Hooper-Greenhill (2000) proposed that meanings of objects are constructed according to the perspectives from which they are viewed in relation to the discourses within which they are placed. Swales (2007) acknowledged that material remnants from the past are potential relics with the importance and value of the artefact altering with the passage of time. The journey from the past to the present imbues the artefacts with meanings identified from understanding the circumstances relating to its creation. Swales discusses the differences between a relic and an artefact suggesting that a relic is an object that survived destruction thus relating to heritage whereas an artefact relates to history (Swales 2007: 340). This distinction identified by Swales in terms of a relic and an artefact is restrictive in terms of the Brunswick project as the artefacts created by the company for the Unknown Warrior have crossed from history to heritage. The artefacts created by the company are tangible objects from the past which are connected through history (World War One 1914-1918) to heritage through the commemorative acts that have taken place marking the 90<sup>th</sup> Anniversary of the conflict. These acts of commemoration connected the past to the present creating a tangible past that established a link between the living and the dead through a shared memory remembering the great loss of life that occurred during the conflict.

Heritage according to Tunbridge and Ashworth (1996:20) and Lowenthal (2004:19-23) is formed in the present and reflects inherited and current concerns about the past. The connection to the past according to Swales (2007) is variable and focuses on both the tangible and intangible aspects of heritage which are not separate entities but are in fact interconnected, working together to create a living evolving heritage that take many forms. Swales (2007) explains this as the duality of heritage the recognition of an official and unofficial heritage which combines to create the whole heritage experience as in the case of Stonehenge. Swales identified Stonehenge as an example of the official and unofficial heritage associated with the site. The official heritage relates to its recognition as a World Heritage Site with the unofficial heritage relating to its role as a Pagan and Druidic monument linked through the practices of these Pagan groups who use the site during the winter and summer solstices. The value and meanings associated with the site are different in terms of its official heritage a Scheduled Ancient Monument and the unofficial values and meanings ascribed to the site by the Druids who celebrate its importance as an ancient centre of worship.

Watson and Waterton (2010) acknowledged, the role of visual culture as it reveals and constructs the past through the use of artefacts and objects that impart meaning and understanding. The use of artefacts and objects within heritage has according to Watson and Waterton (2010) inadvertently set artificial constraints on the way that heritage is used and perceived, resulting in a material culture that can create a heritage which is viewed as elitist by some social groups. The objects and artefacts selected to represent aspects of the heritage of a location can in fact restrict the recounting of the whole picture. Heritage according to Watson and Waterton (2010) has become too focused on materiality leading to the creation of a standard view of heritage, when it should be seen as an evolving dynamic process. (Dubini: 2002, cited in Watson, 2010) termed this as a heritage which reveals windows of seeing rather than a history of images. Images and

pictures are an integral part of the meaning and understanding of heritage as a process allowing for the social processes involved in viewing heritage as a process to communicate, construct and produce meaning( Watson and Waterton 2010).

The history of the Brunswick Ironworks ‘tells their story’ resulting from the memories of three generations of the Williams family, supported by documentary evidence unearthed during the project which authenticated the story. The artefacts created by the Brunswick Ironworks are embedded with personal experiences which were encoded into the artefacts during their construction. The shaping and heating of the metal endowing the artefact with the essence of the art metal worker creating unique pieces of metal work which connects the past to the present. Swales (2007) advocated that all materials are remnants from the past, their value and importance altering with the passage of time.

The Brunswick project demonstrated that the visual bias of heritage and its ability to paint a picture- in this case the skills of the art metal blacksmith showed heritage as a fluid and evolving process providing signposts for the development of its profile through its work which connected the past to the present, and which has the potential to guide its future.

## **2.9. INTERPRETATION**

The role of interpretation within heritage is a crucial component of the total visitor experience to a site, interpretation provides the medium through which connections with the location are fostered and developed which recount the story through the use of visual and written media. The role of interpretation within the research project was necessary in order to identify where the heritage of the Brunswick Ironworks would ‘fit into’ the current level of interpretation within Caernarfon. This was necessary as it assisted in the identification of where the Brunswick heritage trail, one of the objectives for the project was developed to offer another heritage experience for the area.

### **Development of Interpretation**

The origins of interpretation can be traced back over thousands of years when storytellers interpreted their customs and traditions whilst sitting around the campfire. The storytellers were in fact early interpreters who enthralled their audiences with heroic tales from the past. Modern day interpreters share many of the same treasured stories and crafts; interpreters like storytellers from the past encourage people to develop an understanding of nature by learning about heritage and culture.

Interpretation in the 21<sup>st</sup> century within the English speaking world traces its origins back to the writings of John Muir, Enos Mills and Freeman Tilden, and to men like George Catlin, an early explorer/artist who recorded the changes occurring in America and Canada during the 1880s, using paintings and sculptures to depict the traditions and culture of the Native Indian people.

## **John Muir (1838-1814).**

John Muir was one of the most important spokesmen for the conservation movement in America in the 1880s helping to establish the Sierra club<sup>26</sup>. He was primarily responsible for ensuring that Yosemite was dedicated as a National Park in 1890.

*“I will interpret the rocks; learn the language of the flood, storm and the avalanche. I’ll acquaint myself with the glaciers and wild gardens and get as near to the heart of the world as I can”*

*(Merriman and Brochu 2002:12).*

It is possible that John Muir was the first person to use the word “interpret”<sup>27</sup> to describe the understanding of heritage (Merriman and Brochu 2002). His understanding of the natural environment inspired people to appreciate the beauty of the natural world which in turn encouraged them to protect it for future generations to appreciate and enjoy through the creation of National Parks in America.

## **Enos Mills (1870-1922).**

John Muir met Enos Mills in California and invited him to camp in Yosemite, telling him of his dream of making Yosemite a National Park. Mills followed Muir’s advice to become a skilled observer of nature and to write about it recording his adventures in “Adventures of a Nature Guide”<sup>28</sup> and writing a booklet entitled “The Story of the Thousand Year Pine” (1909) recounting the events that occurred during the lifetime of the tree:-

*“The peculiar charm and fascination that trees exert over people I had always felt from childhood, but it was the great nature lover, John Muir who first showed me how and where to learn the language”.*

*(Mills: 1909:9).*

Mills wrote about making connections with the environment and interpreting the meaning of the resource over 100 years ago, yet the information contained in his 1909 text is still relevant in the 21<sup>st</sup> century. Effective interpretation crosses the barriers of language and national interest by revealing meaning in the resource which transcends conflict, enabling understanding and appreciation to emerge which evokes an emotional response based on life’s experiences:-

*“Nature hoists no flights of hatred; wilderness melodies sound no barbaric notes of war. In nature’s boundless scenes, by a trail and campfire, the boundary lines of nations are forgotten. The entire world is our country, and we are loyal to humanity”.*

*(Mills: 1909:1).*

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<sup>26</sup> The Sierra Club was formed in 1892 by John Muir and was the first grass roots environmental organisation. John Muir was elected its first President in 1892 a position he held until his death. It was linked to the creation of the Yosemite National Park created to protect the landscape of Yosemite and its giant redwood trees.

<sup>27</sup> Interpretation in this instance referring to an understanding and appreciation of the natural environment.

<sup>28</sup> An adventure of a Nature Guide was published in 1920.



Mills was an observer of both nature and human nature and viewed the natural world as the medium through which peace and harmony between nations could be achieved. Nature maintains a natural balance and an appreciation and understanding of that balance leading naturally to protection.

### **George Catlin (1796-1872)**

Whilst men like John Muir and Enos Mills wrote about the environment, George Catlin explored and recorded the lives of Native American Indians during the early to mid eighteenth hundreds<sup>29</sup>. His paintings creating a lasting pictorial reference on the traditions and culture of the American Indians supported by “Letters and Notes on the Manners, Customs and Condition of the North American Indians” (1841). The pictures painted by Catlin and the information contained within his notebooks preserved for future generations the traditions of the Native American Indians during a period in history when their way of life was changed forever by the arrival of settlers.

His pictures interpreted the lives of the American Indians through the medium of art which captured their way of life. By immersing himself into the lives of the American Indians Caitlin was in actual fact creating a visual ethnographic record of their lives preserving for future generations a vanishing way of life through his journals and art.

### **Freeman Tilden. (1883-1980).**

Freeman Tilden is acknowledged as one of the founders of interpretation in the English speaking world describing interpretation as:-

*“An educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, by illustrative media rather than simply to communicate factual information”.*

*(Tilden: 1957:8).*

He acknowledged that this definition was unsatisfactory perhaps because it fails to mention the “spirit” of interpretation. The definition does cover some recurring themes, the basic idea that effective interpretation exceeds the concept of simple facts, that interpretation reveals meaning and understanding. He advocated that the true “spirit” of a location is appreciated when visited in person so that the man made or natural heritage is experienced within its natural setting:-

*“To pay a personal visit to a historic shrine is to receive a concept such as no book can supply”*

*(Tilden: 1957:3).*

Tilden argued that the benefits of such direct contact allowed a type of learning superior to reading about the location in a book or viewing a picture to take place. He was referring to the connection that occurs when the “spirit” of the location evokes an emotional response that no words can express. Tilden was invited by the U.S. National Parks Service to study interpretation

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<sup>29</sup> Catlin published the Natives Customs and Condition of the North American Indians in 1841.

and to write about his findings in the early 1950's. The book entitled "Interpreting our Heritage" resulted in the identification of six principles for interpretation which focused on the role of communication as a method of imparting information in an entertaining/pleasurable way.

### **Tilden's six principles.**

- Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile.
- Information as such is not interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, all interpretation includes information.
- Interpretation is an art, which combines many arts, whether the material presented is scientific, historical or architectural. Any art is in some degree teachable.
- The chief aim of interpretation is not instruction but provocation.
- Interpretation should aim to present a whole picture rather than a partial picture and it must address itself to the whole man rather than any phase.
- Interpretation addressed to children (say, up to the age of twelve) should not be a dilution of the presentation for adults, but should follow a fundamentally different approach. To be at its best it will require a separate programme.

(Tilden: 1957:9).

Tilden's writings on interpretation and the identification of his six principles for effective interpretation made a timeless contribution to the profession. Interpretation is not simply the communication of facts, Tilden realised that facts are crucial to interpretation but interpretation is about more than recounting facts. It is about translating the facts in creative ways that allow people who are not experts to understand the complexities of the interpretive material. Effective interpretation crosses barriers by connecting the audience with their own life experiences, it breaks down barriers. Tilden called this type of interpretation the "fifth essence" explaining that sometimes words interfere with the experience and by taking time to stop, watch, listen and learn, the "spirit" of the location is revealed.

Tilden is acknowledged as the modern day father of interpretation; Ham (2007) called him "a man ahead of his time".<sup>30</sup> Tilden's theories on interpretation were based on an intuitive understanding of communication that was not supported by cognitive science at the time. Tilden's six principles focused on the importance of people making connections to the subject encouraging people to understand and appreciate the location. Information is crucial for good interpretation but the key to successful interpretation is to engage the audience through questions that relate to the topic thus encouraging visitors to understand the information on offer. Tilden's work focused on kindling a spiritual response to interpretation revealing meaning through an appreciation of the wonders of the world. Interpretation is an art incorporating many other art forms which are developed in order to convey a message utilising stories, music, dance, and re-enactments which connect people to

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<sup>30</sup> Sam Ham was talking about the legacy of Tilden at the Vital Spark Conference organised by the AHI in 2007.

the location. Effective interpretation provokes a response it is not instruction but provocation with the subject matter eliciting a response from the audience.

### **2.10. Interpretation in the Twenty First Century.**

Interpretation in the 21<sup>st</sup> century evolved beyond the six guiding principles cited by Tilden. His theories created the building blocks for interpretation which developed and evolved to encompass advances in technology and changes in the needs and expectations of visitors.

Cable and Beck (2002:8) added an additional nine ideas to complement Tilden's original six principles, resulting in fifteen principles for interpretation. The framework begins with a restatement of Tilden's six principles which had been re-worded to reflect interpretation in the 21<sup>st</sup> century.

1. To spark an interest, interpreters must relate to the subject to the lives of the people in their audience.
2. The purpose of interpretation goes beyond providing information to reveal deeper meaning and truth.
3. The interpretive presentation-as the work of art-should be designed as a story that informs, entertains, and enlightens.
4. The purpose of the interpretive story is to inspire and provoke people to broaden their horizons.
5. Interpretation should present the complete theme and address the whole person.
6. Interpretation for children, teenagers, and senior citizens when these comprise uniform groups should follow fundamentally different approaches.

### **Cable and Beck's additional Principles (2002).**

7. Every place has a history. Interpreters bring the past alive to make the present more enjoyable and the future more meaningful.
8. Technology can reveal the world in exciting new ways. However, incorporating this technology into interpretive programmes must be done with foresight and thoughtful care.
9. Interpreters must concern themselves with the quality and quantity (selection and accuracy) of information presented. Focused, well researched interpretation will be more powerful than a longer discourse.
10. Before applying the arts in interpretation, the interpreter must be familiar with basic communication techniques. Quality interpretation depends on the interpreter's knowledge and skills, which must be continually developed over time.
11. Interpretive writing should address what readers would like to know, with the authority of wisdom and its accompanying humility and care.
12. The overall interpretive programme must be capable of attracting support, financial, volunteer, political, administrative whatever support is needed for the programme to flourish.

13. Interpretation should in-still in people the ability and the desire to sense the beauty in their surroundings to provide spiritual uplift and to encourage resource preservation.
14. Interpreters can promote optimal experiences through intentional and thoughtful programmes and facility design.
15. Passion is the essential ingredient for powerful and effective interpretation passion for the resource and for those people who come to be inspired by it

Lewis (2005:27-28) identified seventeen principles which when combined produce effective interpretation which focuses on the whole learning experience:-

1. People learn better when they're actively involved in the learning process.
2. Each person has unique and valid ways of processing information and experience.
3. New learning is built on a foundation of previous knowledge.
4. People prefer to learn that which is of most value to them at the present moment.
5. That which people discover for themselves generates a special and vital excitement and satisfaction.
6. Learning requires activity on the part of the learner.
7. Friendly competition stimulates learning.
8. Knowing the usefulness of the knowledge being acquired makes learning more effective.
9. People learn best from first hand experiences.
10. People learn best when an experience is close to them in time and space.
11. An organised presentation is more memorable than an unorganised one.
12. Increasing the ways in which the same things can be perceived helps people derive meanings,
13. Giving visitors expectations at the beginning of an interpretative activity will focus attention and thus improve learning.
14. Using a variety of approaches will enhance learning.
15. The ways in which interpreters respond to people will affect their learning.
16. Questions can be effectively used to help visitors derive meanings.
17. People retain about 10% of what they hear. People retain about 30% of what they read. People retain about 50% of what they see. People retain about 90% of what they do.

This connection with the site through interpretation allows learning to take place which is suited to each individuals learning experience based upon the way in which they process information. Combining a number of different learning styles will enhance learning and foster an appreciation of the heritage of the location and its importance to the world wide community.

Freeman Tilden was indeed a man ahead of his time; his appreciation of the natural environment and his passion for the world around him provided the building blocks for interpretation enabling it to develop and evolve into a discipline in its own right. It is an essential tool utilised when recounting the history and heritage of the location. Interpretation affects people in different ways, creating links with the past, for example the Battlefield interpretation of World War One generates a sense of loss though a shared "family history". However, time separates people from events causing distortion of past events either because they were forgotten or rewritten. An

example of this is the interpretation provided for Clifford's Tower in York, it not only minimised its history but failed to include the story of the "ethnic cleansing" of the Jewish population who lived in York after the Crusades. The interpretation did not mention the imprisonment of the Jews from York within the Tower who when faced with annihilation, committed suicide. In this case history was not re-written through interpretation, it was simply forgotten or was it cast aside deliberately?

Interpretation is not without its problems in some instances it actually detracts from the visitor experience by overloading the visitor with too much information about the site. Interpretation is expensive<sup>31</sup>, but it is an essential component that when used effectively enhances the visitor experience and fosters an appreciation of the need to preserve and protect the location for posterity. Interpretation is an essential tool utilised to enhance the visitor experience, but effective interpretation needs to actively encourage people to become involved in the learning process.

Interpretation in the 21<sup>st</sup> century has evolved beyond the guiding principles of Tilden, as the principles cited by Beck and Cable (2002) illustrated and were further supported by Lewis (2005). The development of visual and technical aids have enhanced the visitor experience enabling interpretation to make connections with visitors through a varied range of tools developed to provide the opportunity for visitors to actively engage with the site. Whilst interpretation has been updated to suit the needs of the 21<sup>st</sup> century visitor, the guiding principles of enlightenment through knowledge remains the key stone of effective interpretation.

### **2.11. Heritage Interpretation and Conflict.**

Heritage interpretation can result in conflict when it actively aims to subdue the culture and identity of a location as in the case of Cornwall. According to Hale (2001), the role of heritage interpretation within Cornwall has resulted in conflict. The decline of the traditional bucket and spade holidays resulted in a reduction in tourism as visitors opted for holidays overseas. Tourism is essential to the economy of Cornwall and in an attempt to reverse this trend, a constructed identity of Cornwall was created portraying it as a county with romantic towns and villages rich in stories of pirates and folklore which Deacon (1997) termed as "guide book culture". This false identity has resulted in a contested heritage many of the people of Cornwall feeling alienated from their roots which were based in fishing, copper and tin mining, traditionally working class occupations. The constructed view of heritage which it now portrays is not Cornish in origin but rather an attempt at Anglicisation of Cornish history and culture aimed at encouraging visitors to the county. Marketing Cornwall as a tourist destination has generated an image of the county as a tourist destination rather than a place for and created to sustain local communities. Hale (2001) called this a "contested territory" many of the people in Cornwall see themselves as Cornish not English with their own language and culture marking them separate from the rest of Britain.

The creation of a standardised version of Cornish heritage which is interpreted by central government agencies (English Heritage and the National Trust) resulted in a false version of Cornish history which focused on romantic Cornwall, the land of Celtic myths and legends as well

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<sup>31</sup> The creation of interpretation boards is expensive for example a board measuring 420mmx594mm costs £495 constructed from recycled plastic. <http://www.filcris.co.uk/products/signs/interpretation-boards>

as English ethnic superiority<sup>32</sup>. The failure of these national heritage providers to interpret the contribution made by the Cornish working classes to the Cornish identity resulting in a top down version of heritage which in many cases excluded any consultation process with local communities relating to the heritage asset. This combined with the tendency for national heritage providers to appoint non Cornish people as managers furthers the feeling of alienation experienced by local communities<sup>33</sup>.

However the different representations of the Cornish heritage can be viewed as complimentary rather than contested<sup>34</sup>. Hale (2001) advocates that the national heritage providers could represent the history and culture of the elite aspects of Cornish history through castles, military establishments and county houses with Cornish heritage providers utilising the working class history of Cornwall through the preservation of industrial remains. Whilst this approach would engage local communities it would not resolve the issue of conflict, rather it would lead to further confusion with the portrayal of two forms of Cornish heritage.

*“This pre-occupation with the pre-industrial embraces notions of landscape and the picturesque... In Cornwall then, a key feature of Cornish identity and history thus remains unacknowledged and unseen, producing a sanitized ‘tourist gaze’...”*

*(Hale: 2001:188)*

There is no magical solution to the Cornish problem but maybe a more open sharing of the heritage amongst the various interested parties and the creation of a more standardised approach to the interpretation on offer at each location might assist in reducing the alienation felt by many Cornish people relating to their history and heritage. Interpretation has the potential to bring people together through a shared appreciation of the history and heritage of a location by “telling of the whole story” from all points of view presenting a complete picture which provides a tourist attraction for the shared enjoyment of local residents and visitors.

The contested heritage experience of Cornwall highlighted the discourse which can arise when heritage is taken out of the ownership of the local community and developed as a universal heritage which ignores the importance of the location; and the people who feel ownership of the heritage through their birthright. However, this is not the case with all heritage attractions which seek to combine the local dialect or national language as part of the heritage experience for visitors to the area. The Irish case studies researched as part of the project identified the sharing of the language and heritage of the sites through the use of bi-lingual signs and native speaking guides (Gaelic) at locations in Cork (the Cobh) and Waterford (Youghal).

Time according to Uzzell (1989) separates people from past events resulting in a diminished emotional engagement with history and heritage. This brings into question how does this distancing from the past effect emotional responses? Or is that time encourages an understanding and appreciation of the past as a result of that distancing. Therefore does interpretation in the 21<sup>st</sup> century create an accurate picture relating to past events or has time coloured people’s responses

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<sup>32</sup> Cited in Hale 2001:186

<sup>33</sup> Reference Hale 2001:192

<sup>34</sup> Contested heritage is discussed on pages 16-17.

to the past. The answer to this question would appear to be in interpretation recounting as accurately as possible the events associated with the area. By adapting this approach the interpretation of key events can in fact lead to reconciliation and a deeper understanding of the past.

This aspect of interpretation as a mechanism for reconciliation was illustrated through the turbulent history of South Africa as researched by Uzzell (1989). The District Six Museum in Cape Town is located within the old Central Methodist Church. This was the venue of apartheid protest meetings, vigils and prayer meetings for people affected by the protest riots associated with the removal of the Township. The Museum focuses on their forced removal, but the interpretation is aimed at reconciliation and forgiveness as befitting the new South African “rainbow nation”<sup>35</sup>. Time can heal creating distance and space between the raw felt emotions of the event providing the opportunity to create new insights into the problems that resulted during the conflict, fostering an understanding of how and why it happened and hopefully preventing it from reoccurring in the future.

Interpretation can be the medium through which understanding is sought by providing honest and accurate interpretations of past events, associations can be made which foster a deeper appreciation of the events which shaped the history of the location. Interpretation created for each location should be based on its unique history and heritage as evident during the visits to Southern Ireland undertaken as part of the research project.

### **2.12. The Irish Experience.**

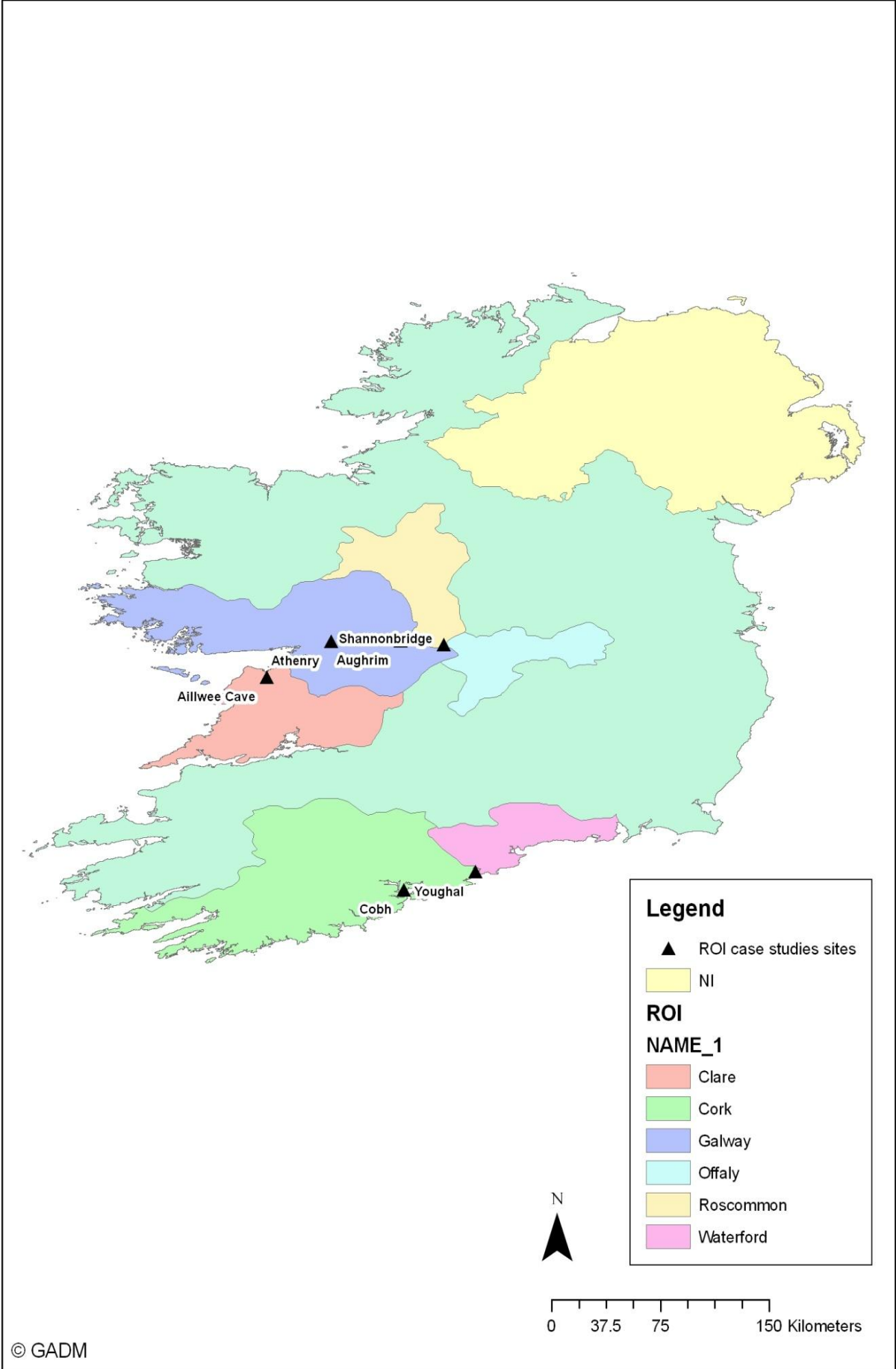
As part of the research project a number of visits were made to Southern Ireland to explore and appreciate how the history of the area had been developed into a heritage attraction for the benefit of the both the local community and visitors to the area. The Irish experience illustrated that a multi-layered approach to heritage which actively engages all “players” resulted in the creation of heritage attractions which utilised the unique qualities of each location.

The map overleaf illustrates the locations of the sites visited in Southern Ireland as part of the research project.

### **Map 2.0. Illustrating the locations of the sites visited in Southern Ireland as part of the research project.**

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<sup>35</sup> Rainbow nation was used by Archbishop Desmond Tutu in 1994 to describe post apartheid South Africa.





The Cobh and Youghal were visited during 2006, due to the fact that they are located in County Cork on the Southern coast of Ireland and thus closer to North Wales. Athenry, Aughrim (County Galway), Ailwee Caves, (County Clare) and Clonmachnoise and West Offaly Railway affectionately known as the “Bog Railway” (County Offaly) were visited in 2008. The Irish case studies were selected because they illustrated how the heritage associated with each location has been developed through interpretation. The development of these heritage attractions illustrated the transition from history to heritage as experienced and developed in Ireland. These case studies demonstrated how the heritage of each location visited had been utilised as a mechanism through which the heritage asset was developed for the benefit of the local community, raising its profile so that visitors to the area could experience the “Spirit of Ireland” (Bord Failte, 2010).

The Irish case studies revealed that heritage is a powerful tool that can be developed to create a sense of place for each location. The data collected from the Irish case studies assisted in identifying where and how the Brunswick heritage trail created as part of the project would fit into the heritage provision on offer in Caernarfon.

### **Creation of Irish Heritage Towns.**

Ireland is very proud of its rich and diverse heritage and recognised that it had the potential to support local communities through the development of its history. The Heritage Towns Project was launched in 1991 and following a rigorous selection process, twenty seven towns were selected.

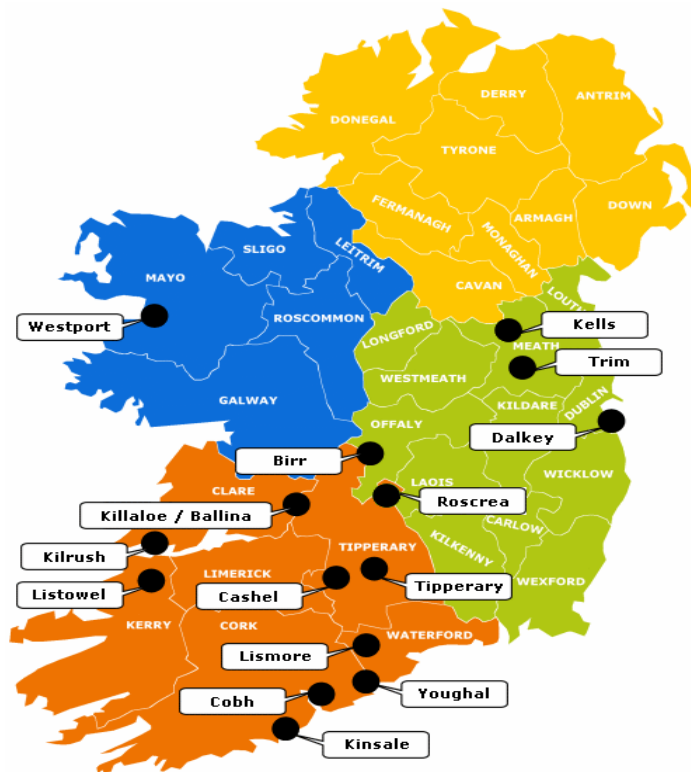
Heritage Towns were selected based on five target categories:-

- Opening conserved historic buildings to visitors.
- Conservation of historic buildings,
- Creation of themes based on the historic, architectural and literary heritage of the town
- Establishment of an integrated signage system including the provision of a traffic and pedestrian management scheme
- Establishment of a heritage centre for each location.

The Heritage Town’s Initiative aimed to generate a two- fold effect; the protection of the built environment through the conservation of historic buildings within each location, and as a mechanism for generating tourism in each region. This in turn would generate revenue for the town and support the local economy assisting in raising the profile of each site.

*“Our towns are not just bricks and mortar. Their spirit is the people who make them come alive and who welcome you warmly to enjoy and share their proud Irish heritage with them”.*

([http:// www.heritagetowns.com](http://www.heritagetowns.com))



**Map 2.1 The Designated Heritage Towns of Southern Ireland. Reproduced from [www.heritagetowns.com](http://www.heritagetowns.com).**

The site visits to Ireland explored different aspects of the history of Ireland ranging from Heritage Towns to railways and geographic features such as the Ailwee Caves. The data collected from each location visited is presented in Appendix One. It is important to recognise the transition from history to heritage which has taken place at the locations visited during the research project, and the role of interpretation in explaining and illustrating how the stories developed for each site assisted in this process.

The Irish case studies revealed that the development of the history associated with each location illustrated the journey from history to heritage as developed and explored in the case studies. The evidence created from these case studies assisted in the creation of the Brunswick Trail<sup>36</sup> showing how heritage can be developed as a mechanism that joins together different attractions located within a geographic area. The Irish case studies identified the importance of the creation of themes associated with each site a key component for the visitor experience as it actively engages the visitor and helps to convey the heritage message.

### **2.13. Conclusion**

This chapter illustrated how the heritage debate is gradually moving away from an acceptance of heritage as a concrete cold subject which reflects the values of the upper and middle classes, to a

<sup>36</sup> The Brunswick Trail is located in appendix 6 pages 305-319.

living fluid process that acknowledges all contributions from the past, and that the past can help to shape and guide not only the present but also the future. The journey undertaken during the research project illustrated how the two concepts of history and heritage are interconnected with each strand complimenting the other.

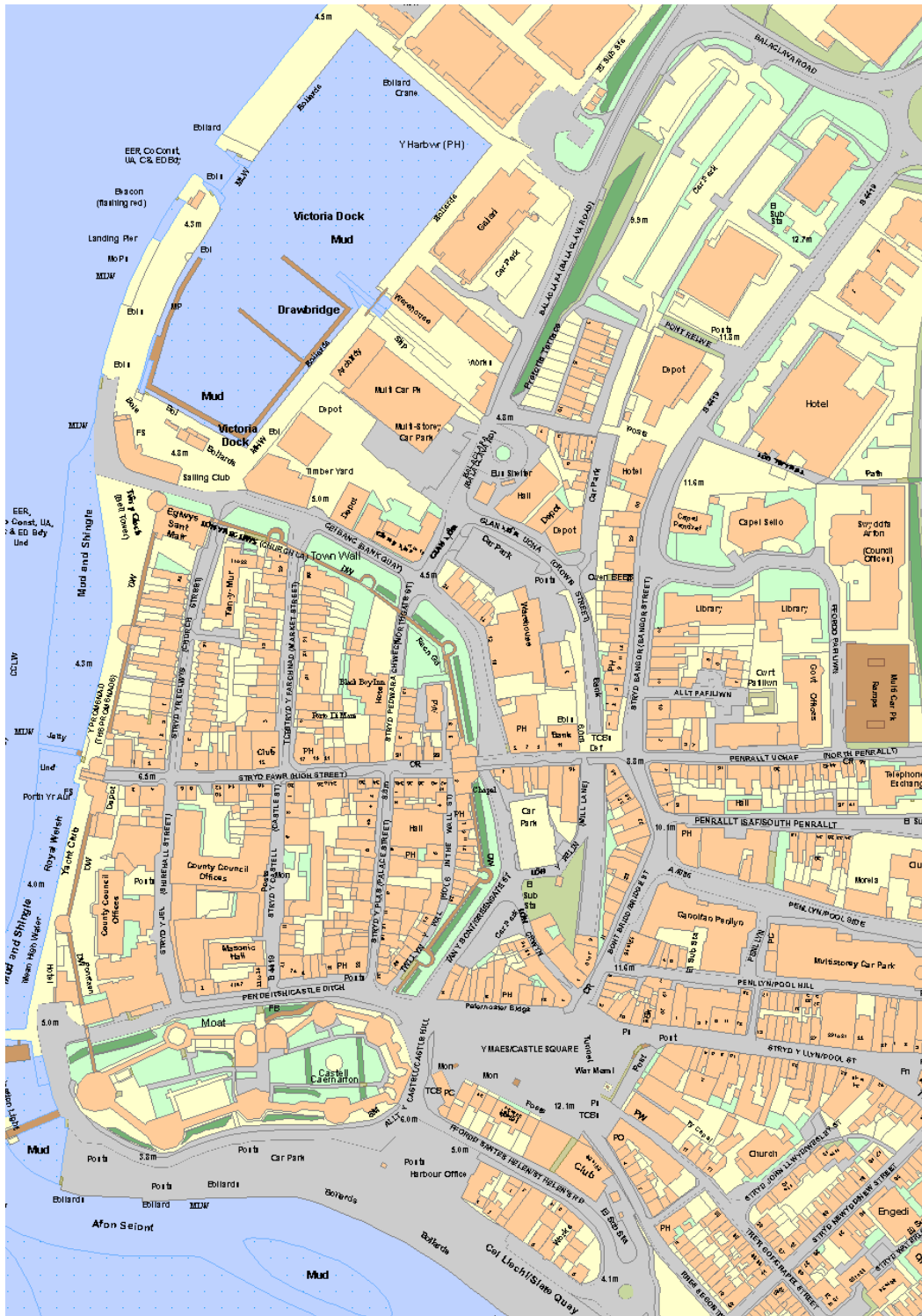
The research project sought to demonstrate how history in the form of a written account of the Brunswick Ironworks was transformed during the research process into heritage which was developed as a mechanism through which the profile of the company was raised. However, it was evident at an early stage of the research project that history and heritage whilst viewed as two separate areas of study were, in the case of this project interconnected. It was difficult to identify where history stopped and heritage began, perhaps this division is not necessary. History benefits from hindsight but the structure of the research project allowed this process to occur as a natural part of the research method with the heritage of the company providing an authenticated identity through the commemorative events linked to the Unknown Warrior.

History and heritage are interdependent both providing insights into the past; history illustrating the past through critical inquiry whereas heritage interprets and celebrates the past. Both impart knowledge about the past, the difference being that history facilitates the past whereas heritage interprets the past, interpretation providing the visual medium through which they are presented. Heritage as a concept is not written in stone but rather a living process that grows and transforms, assisting in developing an understanding of the world. It is not exclusive to specific social groups it is pervasive across all social classes providing that the opportunities for this to occur are set in motion. Heritage as revealed in the research project is a fluid process that was developed to raise awareness relating to the skills of the art metal blacksmith through an appreciation of the skills of the Williams family. Waterton (2010) termed this fluidity as multiple ways of seeing heritage a process that reveals understanding and connections through experiences gained from engaging in heritage activities. Heritage is no longer a “foreign country” Lowenthal (1985) but rather an undiscovered country awaiting exploration through a more flexible and open appreciation of heritage. Heritage should no longer be viewed as an upper/middle class white activity but as an activity that encompasses all classes, one which has the potential to break down barriers opening heritage up to everyone with each successive generation contributing to it in their own unique way.

The Brunswick project revealed that whilst art metal blacksmiths are classed as manual occupations, due to the fact that they work with their hands, they are in reality highly skilled creative craftsmen. Developing their skills to forge and design objects in metal creating a lasting visual record of their work for present and future generations to appreciate. The history of the Brunswick Ironworks revealed an unknown aspect of the history of Caernarfon (Unknown Warrior), providing insights into the work undertaken by the company identifying how history was transformed into heritage. The journey experienced during the research project revealed how the history of the Brunswick Ironworks aided and guided its transition from history to heritage though the development of its past (history) and how it was developed to guide its future (heritage).

The role of interpretation within the heritage experience is crucial. The contribution of history providing the building blocks for the interpretation with heritage sites creating the opportunity for engagement to take place fostering an appreciation and understanding of the role of heritage within everyday life. History, heritage and interpretation are intertwined each strand providing connections which create a visual picture of the role of the heritage asset by providing glimpses into the past which are based in the present but which also have the potential to influence the future. The research project revealed the role of interpretation as the glue that binds it together developing history and heritage as the tools through which the profile of the company was raised during the research project. Through the creation of a template that could be utilised by other companies, bringing their history to life. The objectives identified for the research project demonstrated how this could be achieved and highlighted the importance of establishing a close working partnership this provided valuable experience in terms of understanding and appreciating the skills of the art metal blacksmith in the 21<sup>st</sup> century.

# Chapter Three. Case Studies.



Map of Caernarfon reproduced with the kind permission of Gwynedd Council, 2013.

<http://www.gwynedd.gov.uk>

The above map illustrates the key locations within Caernarfon which are mentioned in this research project. The map is included as it visually demonstrates how the town has developed

around the town walls and castle which were erected by Edward 1 and which have influenced the development of the town since their construction in the 13<sup>th</sup> century.

### **3.1. Introduction.**

This chapter covers the development of Caernarfon, charting its early origins as a Roman outpost, the building of Caernarfon Castle and the impact that its construction had on the development of the town. The Castle now forms part of the World Heritage site of the Castles of Edward 1 located in North Wales. The case study on Caernarfon also charts the development of the town as a centre for the slate industry through to its current role as a both an Administrative and Legal centre for the County of Gwynedd and as tourist destination which focuses on the Castle and the Welsh Highland Railway.

The history of the area provided an insight into the development of the town which illustrated the interdependency of history and heritage, both providing insights into the past through the factual evidence created through the historical records of the town; through to its current role as a tourist destination which utilises heritage as a mechanism for interpreting the past through the use of visual media Samuel (1995).

The research undertaken as part of this research project on the development of Caernarfon created a sense of place for the history of the Brunswick Ironworks and assisted in the identification of the importance of the company in terms of it being both a historical resource and a heritage attraction<sup>37</sup>. The history of the company traces its development from 1906 to 2011 through the use of photographs and documentary evidence which illustrates the diverse skills of three generations of the Williams family, and how their work contributed to the history and heritage of the art metal blacksmiths on a local and national level. The Brunswick history and archive provided the documented historical evidence which assisted in the creation of the Brunswick heritage trail which highlights the skills of the company as art metal blacksmiths. The research focused on researching the history of the company and Caernarfon, with the work undertaken in Ireland illustrating how Irish history was transformed into a heritage asset. The research provided the opportunity for the researcher (Pam Smith) to form a connection with the company creating multi stranded results that reflected the reflexivity of the research project which illustrated the frequent “self referencing” involved in this type of research project Davies (1999).

The ethnographic study of the Brunswick Ironworks relied on the data created primarily from the fieldwork conducted during the project, locating and photographing examples of their work which spanned three generations of the Williams family and the social interaction which developed between the researcher and Brunswick Ironworks (Meurig Williams).

The history of the Brunswick Ironworks “tells the story of our past” (Hooper-Greenhill 2000:76) resulting from the memories of three generations of the Williams family supported by archival documented evidence which was unearthed during the project which authenticated the “story”.

The development of the skills of the blacksmith and their role within communities is traced through the overview of the history of the blacksmith, illustrating how the essential skills of the

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<sup>37</sup> The sense of place refers to the identification of the where heritage of the company would fit into the current heritage provision on offer in Caernarfon, the work of the company assisting in the visual image of the town.

blacksmith developed into an “art form” through the creation of the art metal blacksmith. This links through to the work created by the Brunswick Ironworks as art metal blacksmiths providing an understanding of the intricate skills required when working with metal and how these skills have developed and evolved over the centuries.

The history of the blacksmith created a bridge that connected the past to the present and the future through the development of the skills of the blacksmith. This journey is illustrated by the history of the Brunswick Ironworks and the diverse range of projects undertaken by them. The contribution made by David John Williams (1920) to the burial of the Unknown Warrior in Westminster Abbey has created a lasting legacy for present and future generations to appreciate creating connections to the past, present and future.

### **3.2. History and development of Caernarfon.**

The origins of the name Caernarfon were derived from:-

*“Caer signifies a castle, fortress or stronghold: yn is in, ar, the position opposite to, or beyond: and von is the Welsh word for Anglesey. Thus we have Caer-yn-arfon, the fortress or camp opposite Anglesey”.*

*(Jones: 1882:5).*

Peers (1917) mentions that Caernarfon received its name following the construction of the castle by Edward 1, but this is incorrect according to Jones (1882):-

*“Giraldus Cambrensis (Gerald the Welshman), who accompanied Archbishop Baldwin in a journey or itinerary through Wales in 1188, has mentioned the place among his chronicles of their march, and spells it “Kaer-yn-arfon”.*

*(Jones: 1882:5.)*

However Caernarfon was known by many other names (Jones 1882); Caer Seiont, Caer Segont and Segontium, this latter name was influenced by the Roman invasion and the construction of Segontium, a Roman fort at Caernarfon, Bryn Llanbeblig (Jones:1882).

Today the town is known as Caernarfon and functions as the administrative centre for the County of Gwynedd and as a tourist destination<sup>38</sup>.

Little is known about the development of the town prior to the arrivals of the Romans. It is possible that a Celtic summer camp existed at Twthill, a hill above the town, but no evidence to support this has been uncovered Peers (1917).

### **3.3. Development of Segontium.**

The Roman Fort Segontium was founded around 77 AD. The fort was occupied for nearly 300 years housing a detachment of 800 men at its peak. The location and structure of the fort was

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<sup>38</sup> The County of Gwynedd was formed from the Counties of Meirioneth, Arfon and Anglesey in April 1974 when local Government in Wales was re-organised into Counties and Boroughs with the creation of a Unitary Authority in April 1996. The County of Anglesey was ceded at the time from Gwynedd. There was further reorganisation when the Counties of Meirioneth, Dwyfor and Arfon were constituted to form the new County of Gwynedd.

confirmed as a result of the excavations which took place at the fort (1920 – 1922) by Dr Mortimer Wheeler and his team who excavated an area of about a quarter of an acre in 1921 and an area of about two acres during 1922.

*The excavations revealed that it was believed that the fort covered an area of approximately five and a quarter acres which were enclosed by clay ramparts five feet high. The early gates which allowed entry into the fort were constructed of timber with two roadways flanked by guardrooms, the fort was known as Segontium Devan. (Wheeler: 1924:49)*

A stone fort was possibly constructed during the second century; this was confirmed by artefacts recovered in 1921 and 1922. The excavations conducted revealed that a Roman road had passed through the north-west gate. They did not find the remains of the first roadway but Samian pottery discovered indicated that the early roadway and gate for the fort existed around the time of Claudius Vespasian.<sup>39</sup>

*The second roadway was flanked by guardrooms and the roadway was built from pencil slate with a covering of pebbles, and it was presumed that the gateway was constructed in the first half of the second century AD. This gateway and road were destroyed and a new single roadway was constructed this was dated to around 330-350AD, following the discovery of three coins during the excavations that were issued during this period.*

*(Wheeler: 1921:10)*

In the third century, Segontium became an important administrative centre for a large section of North Wales, establishing a tradition that still continues today. The fort during this century was manned by a minimal number of men as the majority of the men had to be transferred to the East and South coasts of England to counter the incursions of the Saxon pirates.

The fourth century saw the reoccupation of the fort and the construction of a lower fort above the River Seiont and a small dock and harbour. The construction of this early dock and harbour was instrumental in the choice of location for the construction of the castle by Edward 1.

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<sup>39</sup> Claudius Vespasian was born in 9AD and died in 79AD. He was Emperor from 69AD -79 AD.





**Photo 3.0. Exposed foundations of Segontium Roman Fort. Photographed Pam Smith 2011.**

Caernarfon was the terminus for the Roman road known as Watling Street that ran from the coast of Kent through London to Chester and onto Caernarfon. It was used as a supply route for the many Roman forts located along the route and the road terminated near the Roman fort at Segontium.

Jones (1882:11) mentioned the existence of a second Roman road that ran from Segontium (Caernarfon) along the western coast of Wales to St David's, the road was known as Via Occidentalis.

The site at Segontium was mentioned in the Mabinogi tale "The dream of Maccsen Wledig":<sup>40</sup>-

*"He dreamed of his journey to Caer Aber Seiont (Caernarfon), where according to the legend he saw "Elen of the Hosts" his future wife"*

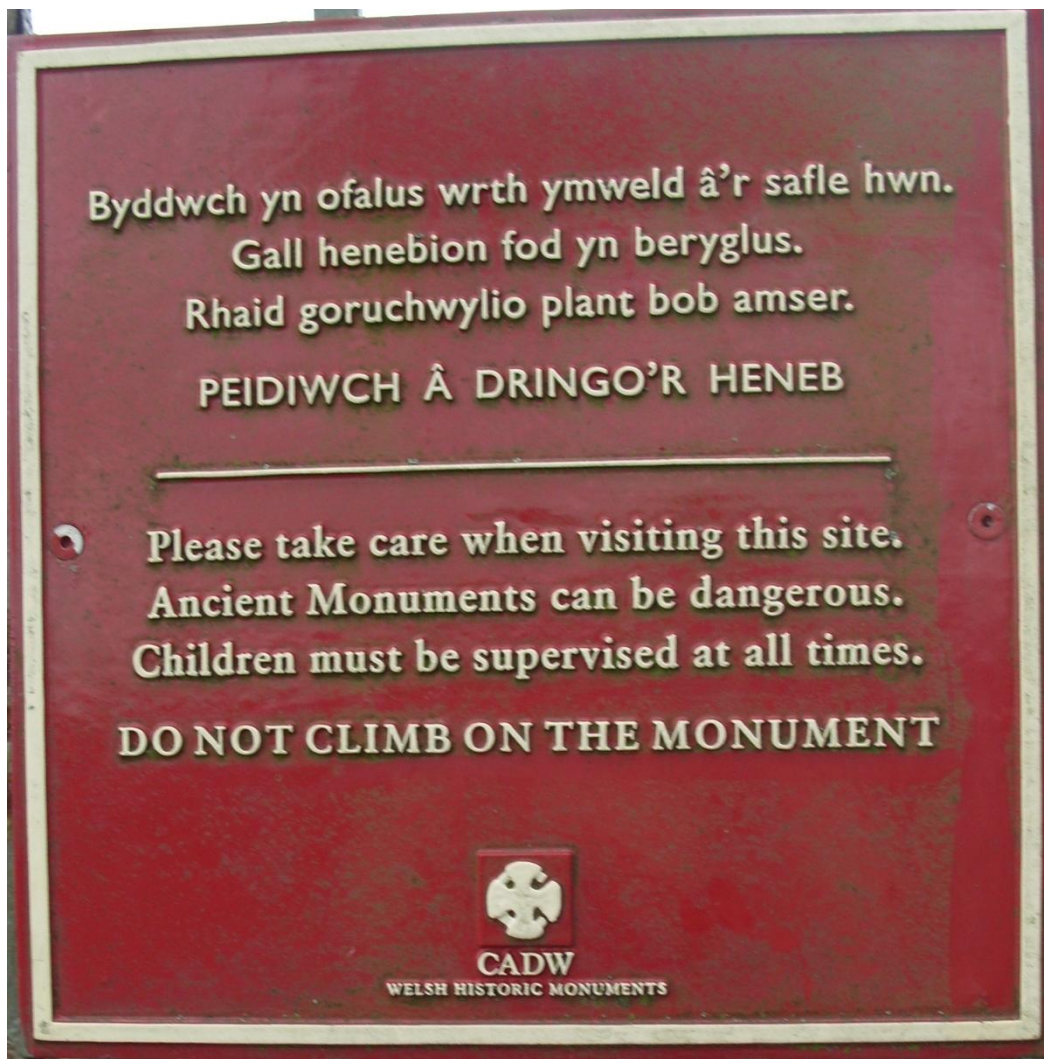
*(Boon: 1963:18).*

The site at Segontium is the only Roman fort in Wales where internal buildings remain exposed for study. (Boon 1963:3). The site is in the care of Cadw<sup>41</sup>. Segontium was listed as an Ancient Monument in (1937) with Cadw responsible for the maintenance of the grounds. The building is jointly maintained by the National Museum of Wales and the Segontium Trust<sup>42</sup>.

<sup>40</sup> "Breuddwyd Maccsen" - translated from the original Welsh stories, Pedair Cainc y Mabinogi from the Red Book of Hergest and the White Book of Rhydderch. Bollard, J.K.(2006)*The Mabinogi: Legend and Landscape of Wales*, translated Bollard Gwasg Gomer

<sup>41</sup> Cadw is the Welsh Government's historic environment service whose primary role is to conserve Wales's heritage. Cadw is a Welsh word meaning 'to keep' or 'to protect'.

<sup>42</sup> The Segontium Trust was dissolved in 2011 with the care of the site transferred to Cadw.



**Photo 3.1 Cadw Plaque Segontium. Photographed by Pam Smith 2011.**

The museum opened in 1924, and approximately 5000 people a year visit the site which is open all year from 12.30am-4.30pm (but is closed on Mondays except for Bank Holidays). Admission to the site is free. Boon (1963) explained how the site was rescued from development by a Mr John Roberts of Caernarfon who bought the site and erected and endowed the museum in 1924. (Boon: 1963:3).

The Segontium Trust in conjunction with the National Museum of Wales operates the visitor centre which contains exhibits that were unearthed during the Wheeler excavations (1920-1922). Regrettably the current economic climate resulted in the funding from the National Museum of Wales ceasing in 2009; but fortunately Caernarfon Town Council stepped in with a donation of £5000 to ensure that it remained open.

At the end of 2010, the museum building was closed and some of the more valuable exhibits transferred to the National Museum Cardiff for storage. The grounds are still open to the public as they are maintained by Cadw who have taken over the Fort (June 2011) and are developing plans for a new visitor attraction on the site which will focus on the history of Segontium.

### **3.4. Caernarfon after the Roman Occupation.**

The period following the collapse of the Roman Empire resulted in a turbulent period for North Wales; the next six hundred years saw fighting amongst the various Welsh tribes who were struggling for control of this part of Gwynedd.

After the Norman Invasion of 1066 William the Conqueror fought for control of North Wales. Under the command of Hugh Lupus, a large section of North Wales was conquered and a motte and bailey castle was built at Caernarfon (circa 1088.)<sup>43</sup> This castle was constructed at the water's edge on the peninsula formed by the estuary of the Seiont, Cadnant and Menai:-

*“After initial success, Norman control in North Wales was short lived. In 1094 Gruffudd ap Cynan regained his freedom and, with the help of his mother’s Irish relations, drove out the Norman Earls. The next seventy years, the reigns of Gruffudd (1094-1137) and his son Owain Gwynedd (1137-1170), mark the most peaceful period of Welsh independence”.*

*(Lynch: 1995:134)*

Owain Gwynedd died in 1170, and by the turn of the century Llywelyn ap Iorwerth was in control. During his reign the first stone castles were constructed at Dolwyddelan, Cricieth and Dolbadarn on the outskirts of Llanberis.

*“At his death in 1240 he was the undisputed ruler of all “pura wallia”*

*(Lynch: 1995:13)<sup>44</sup>*

In 1255 Llywelyn ap Gruffudd, the grandson of Llywelyn the Great began to re-build this section of the country. The Treaty of Montgomery (1267) recognised Llywelyn; as the effective ruler of this section of Wales as far south as Caerphilly with his role as ruler recognised and acknowledged by Henry III. The treaty acknowledged the title “Prince of Wales” and saw the acceptance of Wales as a unified state. The Prince of Wales was;

*“A vassal of the King of England but was, an independent political power”.*

*(Lynch: 1995:136).*

### **Caernarfon during the Medieval Period.**

Prior to the arrival of Edward 1, Caernarfon was a typical small Welsh town with a port and Borough Court<sup>45</sup>. 1272 saw the succession of Henry’s son Edward 1 to the throne; Llywelyn the last Prince of Wales refused to pay homage to the new King and war was declared in 1276. By January 1283, Llywelyn and his brother Dafydd were both dead marking the end of Welsh resistance in this part of Wales.

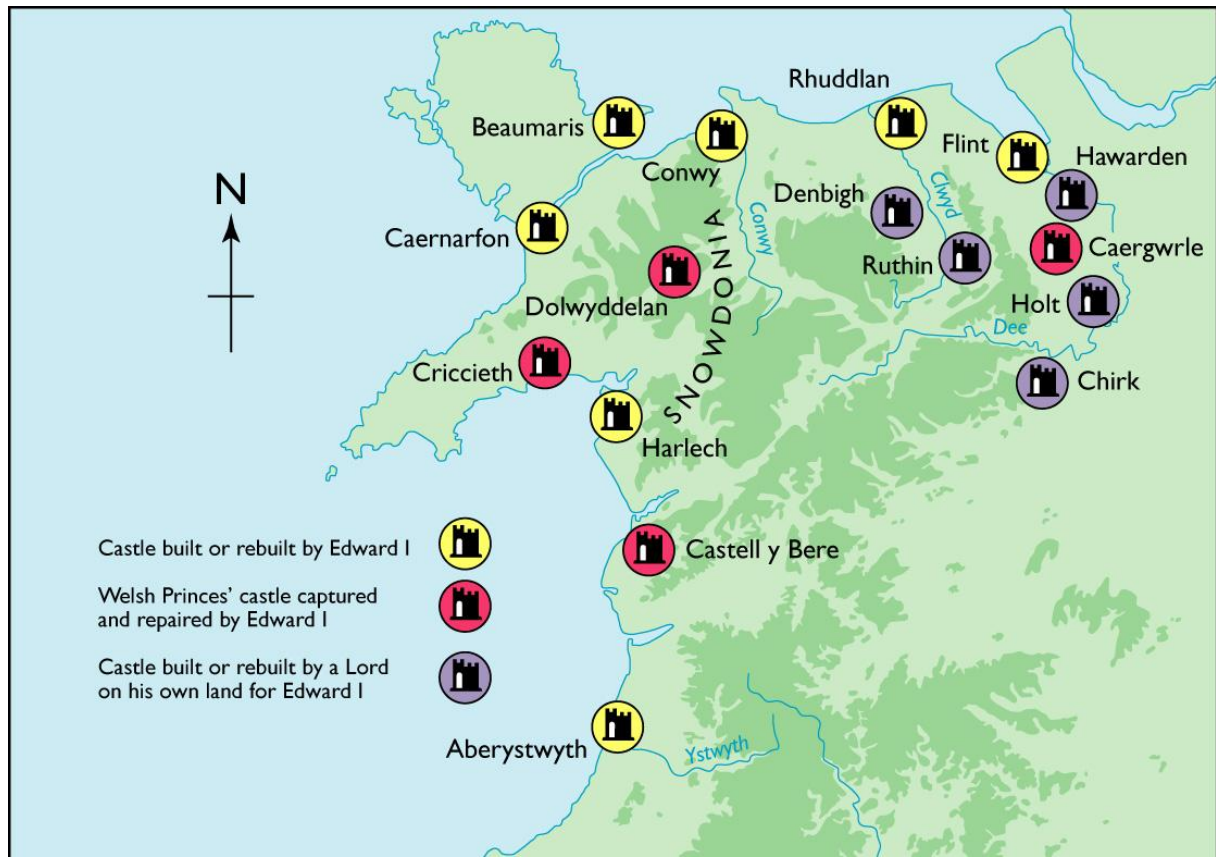
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<sup>43</sup> Motte refers to a mound or clod of clay and Bailey to an enclosure of land. The Motte and Bailey castles were the first castles constructed in England.

<sup>44</sup> Pura Wallia refers to the parts of Wales ruled by the Welsh Princes.

<sup>45</sup> Borough Court established by Charter and functioned as an extension of Government. The Boroughs were located in important towns.

Edward intended to strengthen his position by commencing work on a series of fortified castles. The map below illustrates the scale of the project undertaken by Edward 1 in order to assert his authority over the Welsh people by the construction of these castles.



**Map 3.0. From Cadw illustrating the Castles of Edward I.**

**Reproduced with their kind permission** (<http://www.cadw.wales.gov.uk>)

Pughe (1889) stated that:-

*“The vast military and strategic capabilities of Caernarfon did not escape the practiced eagle eye of Edward. Henri de Elreton, the government architect was commissioned by Edward to formulate a plan for the construction of a castle at Caernarfon. The site selected was a broad elevation of rock occupying the western extremity of a quadrangular slip of land which shelved into the Menai, from the base of Caer-y arfon. It was flanked by the estuaries of the Cadnant and Seiont”.*

*(Pughe 1889:14)*

### **3.5. Construction of Caernarfon Castle. 1283-1330**

The castle was designed by Master James of St George, and was designed to keep the English safe inside their walls and the Welsh out. The native Welsh inhabitants were perceived as a threat to

the new English settlers who had set up home inside the castle, so the Welsh lived outside of the walls of Caernarfon and the English settlers lived inside the town walls.

The building of the castle at Caernarfon was a strategic decision as it had access to the sea and provided a port of call for those travelling to and from Ireland. Caernarfon was backed by a forty mile wall of mountains, that now form part of the Snowdonia National Park and is located at the western end of the Menai Straits. The castle was built to impress. It was to be a Royal castle and functioned as the Administrative centre for this part of North Wales.

In the southwest corner of the town an old building was modified to create a courthouse establishing a legal connection with the town which continues to this day. The old Court building has been replaced by a new building located outside the town.



**Caernarfon Court House. Photographed by Pam Smith 2011.**

### **Construction of Caernarfon Castle and the Town Walls.<sup>46</sup>**

The town walls were constructed before the castle as it was essential to protect the English settlers:-

*“The town walls were built first before the construction on the castle site began to ensure the safety of the residents of the new borough”.*

*(Caernarfon Castle, HMSO 1930:4)*

The Royal Boroughs of North Wales were based on the system operating in France. Caernarfon castle and its walled town is based on a French bastide town, the idea was borrowed from Gascony in the Southwest of France where Edward 1<sup>st</sup> was Duke of Gascony. Edward 1 encouraged the English settlers to set up homes and businesses within the town walls and in return they were granted burgess plots in the new borough<sup>47</sup>. Only the English settlers were allowed to live within the town walls as they had to be protected from the Welsh the town walls were

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<sup>46</sup> The primary sources used for the discussion of the construction of Caernarfon, the town, town walls, castle and granting of the Royal Charter are the HMSO publications: Caernarvon Castle, 1930 and 1969.

<sup>47</sup> Burgess plot a strip of land purchased or rented from the Crown. The land was enclosed inside the castle walls and included space for a house which acted as both a shop and residence along with land for growing vegetables.

constructed prior to the building of the castle. The English settlers were allotted a plot of land 60 feet by 80 feet (Burgess Plot) for an annual rent of one shilling. The sixty four burgess plots allocated to the English settlers within the walled town of Caernarfon created the road system for the town which still exists today.

The town walls enclosed an area along the Menai straits and along the estuaries of the Cadnant and Seiont to the north and east, this created an area that was surrounded by walls from around 1283. Construction of the town walls had commenced circa 1282; these were huge walls that contained a moat fed by the rivers Cadnant and Seiont: the walls had twelve semi circular towers.



**Photo 3.2. Caernarfon Town Walls. Photographed by Pam Smith 2011**

The west wall ran from the base of the Eagle tower towards the Bell tower and equidistant from these two points the wall opened to create the seaward gate Porth yr Aur. The seaward gate was known as the ‘Golden Gate’ and was constructed to provide sea access for the castle and town to the Menai Straits<sup>48</sup>.

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<sup>48</sup> Porth y Aur is the Welsh name for the seaward gate in English it is known as the Golden Gate.



**Photo 3.3. Porth yr Aur (Golden Gate). Photographed by Pam Smith 2010.**

At Porth yr Aur the walls turned east, with two small towers sweeping back towards the castle and these formed the defences of the Queens Gate. The walls were approximately half a mile in length and had a second entrance, the land gate known as Porth Mawr, and a final half tower created another entrance into the town that was undefended and known as Greengate. Within the town walls three main streets were created, Shirehall Street, Castle Street and Palace Street running north to south, intersected by High Street which runs between Porth Mawr and Porth yr Aur.



**Photo 3.4. Porth Mawr Land Gate, Caernarfon. Photographed by Pam Smith 2011.**

The building date for the castle was confirmed in the Pipe Rolls as 1283:-

*“The pipe rolls are the accounts held by the Exchequer which contain the records of Royal income arranged by county for each financial year. The pipe rolls were written in Latin until 1733 when they changed to English”.*

(<http://nationalarchives.gov.uk/records>)

The document listed expenses relating to the cost of building the castle during 1283-1286. The expenses relate to wages paid to carpenters working on the quay from August 1284 to March 1285, and to the labourers involved in the construction of the ditches around the castle:-

*“October 1284 to November 1285 £1,154, 11 shillings and one and a half pence are spent on the town walls.... 1285-1290 £3,428, 13 shillings and three pence were spent on building work at the castle”.*

(HMSO 1930:4)

The castle was built as a symbol of power stamping the authority of the English over the Welsh and was constructed to resemble the walls of Constantinople:-

*“To give it its great tones of many colours it was modelled on the walls of Constantinople, using bands of darker stone to imitate their characteristic reddish brown tile courses and adopting their regal looking polygonal towers”*

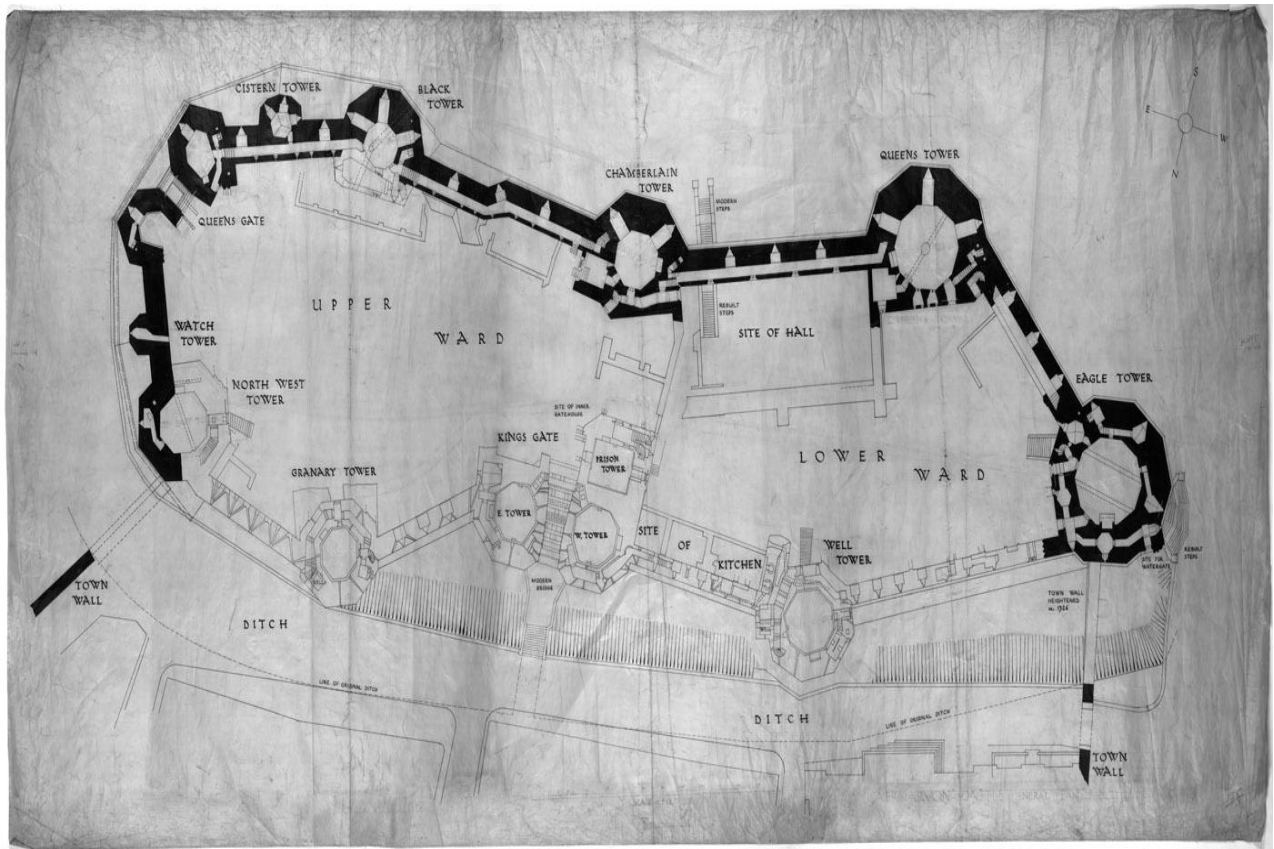
(HMSO1969:6).

The polygonal towers are a unique feature of Caernarfon Castle as illustrated in the map overleaf.<sup>49</sup>

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<sup>49</sup> The plan of Caernarfon is a copy of an original plan held by Cadw date unknown, which explains the faded and worn appearance of the map.





**Image 3.0. Caernarfon Castle. Reproduction of the plan granted by Cadw. (Crown Copyright 2011).**

The Castle was built to impress consisting of a series of impressive towers, the principal one being the Eagle Tower which was constructed circa 1285-1294. It is known as the Eagle Tower because of the number of eagle figures which were set onto the top of the tower in 1317.

The castle had a principal entrance- the ‘King’s Gate’ a fortified entrance which allowed access into the town over the moat via a drawbridge. The gate had double iron studded doors, four portcullises, a drawbridge and barbican. The Barbican was the outer fortification of the castle that protected the gate to the castle. It was an exterior walled passage which contained Murder holes<sup>50</sup> located in the ceilings and arrow slits located in the side of the Barbican passage. Above this entrance a statue of Edward II can still be seen although it is very weather beaten.

<sup>50</sup> Murder holes or machicolations were holes through which soldiers would pour boiling water or pitch onto attacking soldiers.



**Photo 3.5. Statue of Edward II Caernarfon Castle. Photographed by Pam Smith 2011.**

The Queen's gate was named after Queen Eleanor the wife of Edward I and it is believed that it was through this gate that Queen Eleanor entered the castle, once the construction of the castle had been completed. This entrance was protected by a drawbridge, portcullis and strong doors. Edward I needed to encourage the Welshmen of Gwynedd to support the new order. He made the decision that his first son would be born at Caernarfon and be created Prince of Wales in the hope that this would unite the Welsh Princes.

*“The first Prince of Wales Edward II born 25<sup>th</sup> April 1284 was not born inside the Eagle Tower as the foundations for the tower were not laid. It is possible that he was born inside the old wooden castle at Caernarfon”.*

*(Peers: 1917:11).*

The castle had a third entrance located in the base of the Eagle tower, allowing access to the harbour anchorage. Unfortunately the castle was never completed it remained partially finished as funding was no longer available. Edward I died (1307) whilst fighting the Scots and his son Edward II eventually stopped the building programme in 1330.

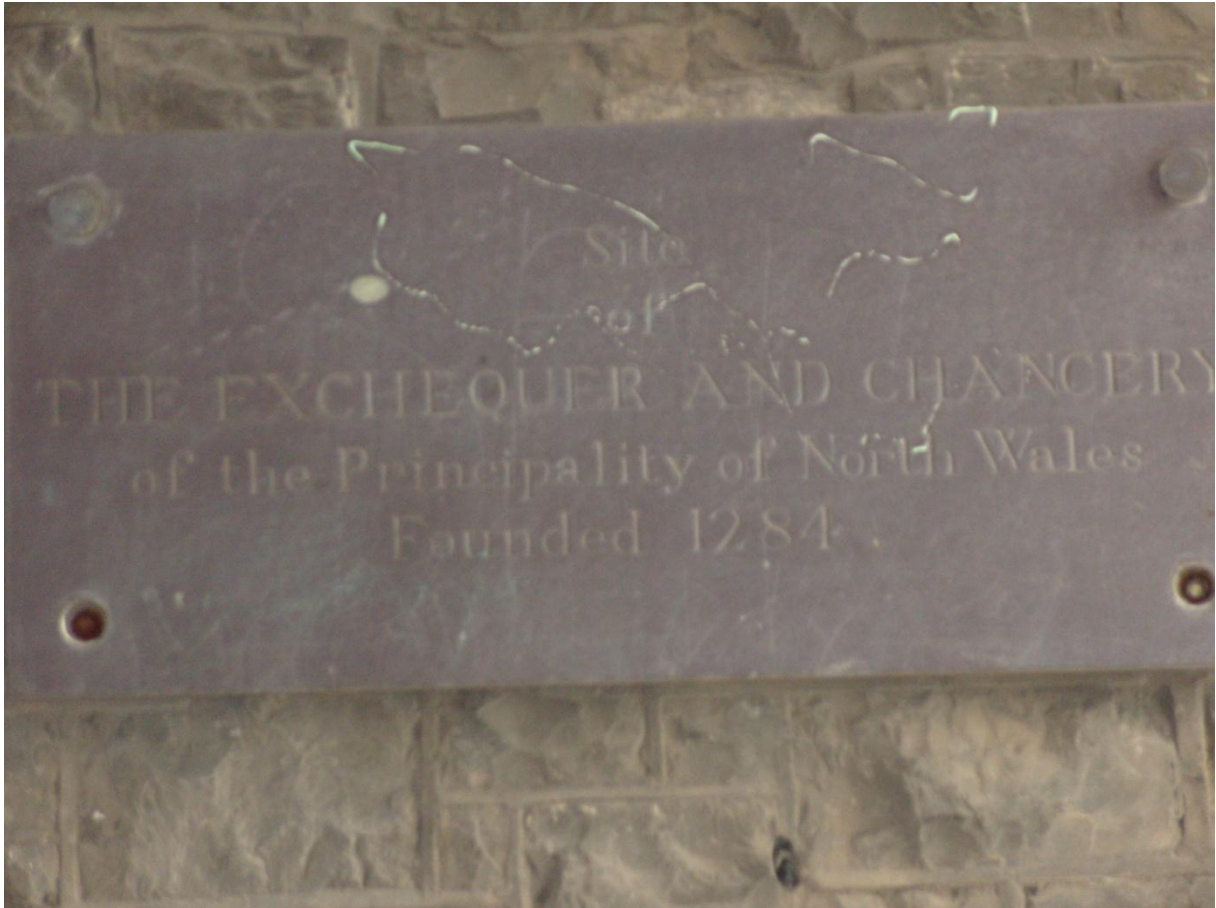
### **Granting of a Royal Charter.**

The Royal Borough of Caernarfon was created by Royal Charter, granted by Edward I in 1284. The Charter stipulated that the Constable of the Castle was also to be the Mayor of the Town; he was supported by two bailiffs who were elected annually by the townspeople, a tradition that continued until 1835. Caernarfon was ideally located to function as the County Town for the newly created Shire of Karnarvon<sup>51</sup>; it also functioned as the Administrative Centre for North Wales:-

*“Caernarfon Castle was constructed as the capital of the new English Principality of Wales; the Castle was constructed to fulfil the role of fortress, and Palace to the Royalty and their households” (HMSO 1969:5)*

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<sup>51</sup> This is the original spelling on the site of the former Royal Exchequer at Porth Mawr.



**Photo 3.6 Caernarfon's role as an Administrative Centre for North Wales is recorded on this plaque located within the archway of Plas Mawr Gate. Photographed by Pam Smith 2011.<sup>52</sup>**

Porth Mawr functioned as the Exchequer and Chancery due to the fact that access to the Castle was restricted to Royalty and members of their household; the payment of taxes was undertaken at Porth Mawr.

### **3.6. Caernarfon after Edward I.**

The Black Death ravaged Wales during the fourteenth century, leading to unrest and the rebellion led by Owain Glyndwr who challenged the English rule in a revolt in 1402.<sup>53</sup>

*“It was estimated that the plague killed almost a quarter of the Welsh population, bringing great social change to the countryside, where traditional laws of inheritance and labour dues could no longer be sustained in the face of the new reality”*

*(Lynch 1995:139).*

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<sup>52</sup> Due to the location of the plaque on the wall inside the arch at Porth Mawr and variable quality in the lighting, it is not possible to obtain a better photograph of this plaque.

<sup>53</sup> Caernarfon Castle withstood the sieges of 1403 and 1404 and for six years Owain was a constant threat to the English in Wales, but with the capture of his family at Harlech in 1409, he fled to the hills fighting a guerrilla type campaign against the English until 1413.(Lynch 1995)

The First Act of Union (1536) finally put an end to the distinctions between the Welsh and English systems. By the late sixteenth century the area around Caernarfon had developed a trade in the mining of minerals and slate. However, the Castle had been left to deteriorate functioning as a jail and was in a poor state of repair according to:-

*“Sir John Harrington (1609), the Constable (Caernarfon Castle), described the castle as of “no use at all but for a gaole of the county... The timber is all rotten having not been repaired since Edward 1, but the walls are all good”).*

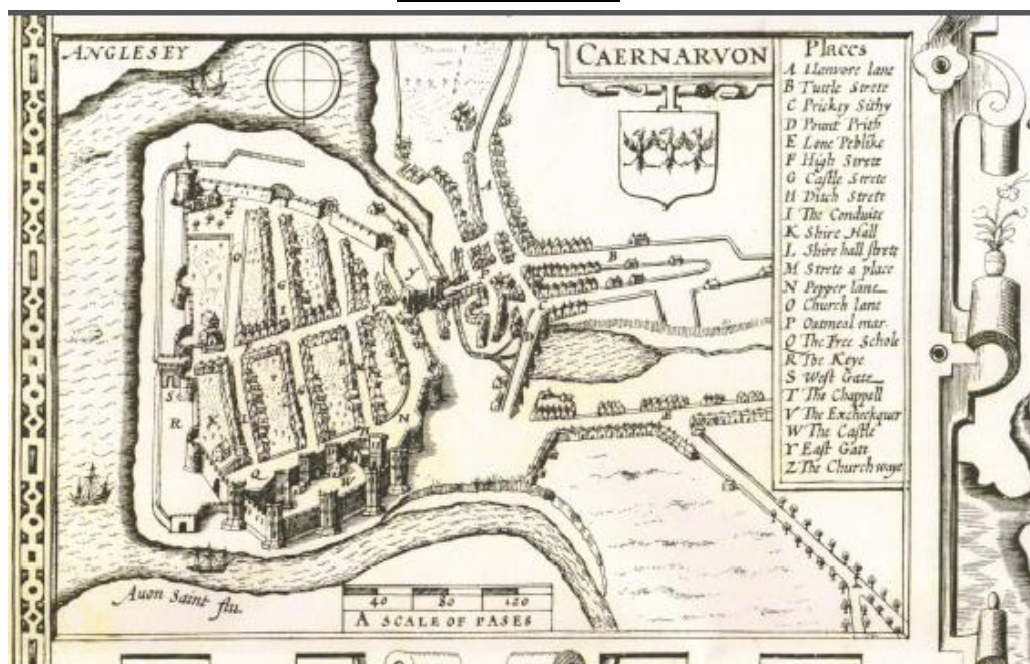
*(Peers1917:13).*

Caernarfon remained mostly within the confines of the walled town during the sixteenth century, this was illustrated in Speed’s map of the town (1610) which:-

*“Shows that there was little development of any permanent nature outside the town walls. Speed had described Caernarfon as a town with a castle, and a castle with a town”.*

*(Turner 1902:32)*

**Map 3.1. John Speed’s Map (1610) reproduced with the kind permission of Gwynedd Archives (2011).**



**Restoration of Caernarfon Castle.**

By the turn of the nineteenth century, the castle was in a poor state of repair and was in desperate need of restoration fortunately Sir Llywelyn Turner, (Deputy Constable of the Castle at the time) accepted the task of trying to prevent the castle from further deterioration.

He achieved this through generous donations from local wealthy men, combined with the creative use of the admission fee of 4 old pennies<sup>54</sup> paid by visitors to the castle. In his book which detailed the story of the repair of Caernarfon Castle” Turner stated that:-

*“Nothing struck me so much as the folly of allowing such buildings to remain unroofed and useless, and thus depriving the present and all future generations of the power of exactly realising the conditions under which Kings and Nobles of earlier days lived...”*

*The four pennies entrance fee charged for visitors to the castle in 1899-1901 amounted to £222, 3 shillings and one penny of which 18 shillings per week were deducted for the wages of the Keeper of the Castle. This left £175.7 shillings and two pence which to spend on restoring the castle”.*

*(Turner1902: 4 & 14)*

Turner was fortunate in that he had the support of some wealthy local people who wished to see the castle saved from further neglect:-

*“The whole funds required for restoring the Queen’s Tower with roof and floors of three storeys, were provided by the subscriptions of the late Lord Caernarfon, the late Lord Penrhyn, the late Lord Newborough and the late Mr Evans of Broom Hall, Mr Assheton Smith and myself. All other work has been done out of the four pennies”.*

*(Turner1902:16)*

The benefactors and supporters of the restoration of Caernarfon Castle were local men who had made their money in a number of ways.

- Lord Penhryn’s family had amassed a family fortune from the sugar and slave trade of the West Indies, the family then invested in the Welsh slate industry creating the Dinorwic quarry at Bethesda.
- The Lords Newborough and Caernarfon were landed gentry with vast estates in England and Wales.
- The Evans and Assheton Smith families had generated a vast fortune from the Welsh slate trade.

Sir Llewellyn Turner encouraged local residents to visit and appreciate the castle ensuring that the;

*“Caernarvon people for some reason or want of it being let in gratis, visitors had to pay 4d”.*

*(Turner1903:342)*

The work undertaken was extensive to protect the castle for the enjoyment of future generations:-

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<sup>54</sup> Four old pennies equate to the nearest decimal value of 1.25 new pence the transferable value of a three pence piece in old coins.

*“Caernarvon Castle with its perfect outline of walls, requiring only repairs....I have worked steadily with that view under the belief that a more practical generation will realise that castles erected with such perfect walls would last almost forever if properly taken care of...”*

*(Turner 1902:4)*

The castle had been altered over the years:-

*“I had long felt the disgrace to the Castle of having its splendid façade concealed on the north side by the filling up of the moat done many years ago, but there were no funds available to clear it out”*

*(Turner 1902:8)*

He was determined to find a way to restore the castle to its former glory. The solution to the problem arose in his role as Chairman of the Harbour Trust, creating the new harbour for the town:-

*“Gave the material (from the moat) to the contractor for carrying it away, and so got rid of these vast encumbrances, and obtained an earlier filling up of the quays”.*

*(Turner 1902:8)*

Much of the stone work was repaired by Mr John Jones a skilled stone mason who worked diligently alongside Sir Llywelyn Turner for thirty one years:-

*“I have great pleasure in again speaking of the admirable work of John Jones. The stairs corbel tables, loop holes and battlements being carried out in most perfect order... I feel certain that had I not had so honest and faithful a mason it would have cost double the amount.”*

*(Turner 1902:14)*

The work carried out by Turner on the castle was recognised in 1887 when at a meeting of the Archaeological Institute in Chester, Mr R.S. Ferguson R.S.A. commented that:-

*“Who spares no trouble to place and keep it in proper order and repair, for which everyone who can appreciate the striking beauties of such a glorious castle as this is deeply in his debt? A work carried out with most inadequate funds, future generations may see in Caernarvon Castle a close approach to its pristine state which is the object of his labour of love”.*

*(Turner1902:12).*

Whilst the repairs undertaken by Turner on Caernarfon Castle might today be judged as inadequate in terms of not matching the stone colour and maybe some of the work was not of the

highest standard but Sir Llywelyn Turner was instrumental in ensuring the future of the castle throughout the thirty one years spent on:-

*“My humble labour of love”.*

*(Turner 1902:15)*

### **3.7. Investiture of the Prince of Wales at Caernarfon 1911.**

In his role as Constable of the Castle, David Lloyd George<sup>55</sup> was instrumental in establishing the Investiture of the Prince of Wales at the Castle in 1911. All previous Investitures had been conducted in the presence of Parliament. He taught the future Edward VIII some “Welsh” for the occasion, assuring the future King that he had created a lasting bond of affection with the Welsh people.

In his “Memoirs”, the Duke of Windsor (1951) wrote that he believed that the ancient medieval ceremony had lapsed into obscurity but that David Lloyd George was in favour of reinstating the ceremony:-

*“Mr David Lloyd George... decided that its revival would appeal to the national pride of his people.... ‘L.G.’ proposed that the ceremony would be transformed into a spectacular Welsh pageant”.*

*(Windsor 1951:79)*

Caernarfon Castle was refurbished for the 1911 Investiture:-

*“The 1911 Investiture resulted in the flooring and roofing of several towers under the charge of HM Office of Works”.*

*(Peers 1917:13).*

Lloyd George in his capacity as Constable of the Castle was responsible for the ceremony. David John Williams of the Brunswick Ironworks was commissioned by the Ministry of Works to undertake extensive remedial work in the castle and whilst his work was well known within Caernarfon, the commission to create ironwork for the Investiture at Caernarfon brought his work to a wider audience.<sup>56</sup>

The people of Caernarfon would not be allowed entrance into the Castle unless they has a ticket, so in order to allow the ‘common’ people to have a view of the newly crowned Prince of Wales Mr Assheton Smith demolished three houses on the land that over looked the castle. A plaque to commemorate this was erected on the land vacated by the demolition of the houses.<sup>57</sup> The land was given to the people of Caernarfon by Mr Assheton Smith, with the proviso that the land

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<sup>55</sup> A position which he held for thirty years.

<sup>56</sup> The work carried out by DJ Williams for the Investiture is contained within this chapter in the section relating to the History of the Brunswick Ironworks pages 97-99.

<sup>57</sup> This is the site of the Lloyd George statue, and has a clear view of the castle balcony located at the Queens gate.

should always remain free from building, so that the people of Caernarfon could have a clear and uninterrupted view of the castle. The stone plaque carries the inscription:-<sup>58</sup>

*“In order that thousands of his countrymen might witness the Investiture of the Prince of Wales July 13<sup>th</sup> 1911”.*

The Duke of Windsor in his Memoirs wrote that;

*“Lloyd George assured me that I had forged a bond of affection with the Welsh and won the admiration of all those who witnessed the spectacle.”*

*(Windsor 1951:80)*

The Institute building in Caernarfon, (the current location of the Royal Town Council of Caernarfon) has a painting on display depicting the Investiture of the Prince of Wales at Caernarfon in 1911. The picture below is reproduced with their kind permission.



**Photo 3.7. Picture in the Institute Building Caernarfon depicting the 1911 Investiture. Photographed by Pam Smith,2011.**

### **3.8. Caernarfon and Industry.**

During the sixteenth century Caernarfon began to export slate to Ireland; this coastal trade was attributable to the development of a small port during Norman times which facilitated the use of Caernarfon as a coastal port and harbour. During this period, the town was dependant on coastal trade which resulted in it becoming a centre for ship building this led naturally onto the import of timber which was used in the ship building trade. By the end of the seventeenth century it was emerging as a centre of trade for the local area.

In the late eighteenth and early nineteenth century, urban populations increased as a result of the impact of the Industrial Revolution. Britain was transformed from an agricultural economy to an industrially driven one establishing it as one of the most productive economies of the period,

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<sup>58</sup> A photograph of the plaque was not included within this section of the research project as the wording on the sandstone plaque is almost illegible and the text was not clear to read. A photograph of the plaque is however contained in the appendices page 260 relating to the Heritage Trails for Caernarfon.



creating immense wealth but at the same time generating great poverty. The impact of the Industrial Revolution resulted in Caernarfon being transformed from a quiet market town into an industrial hub, with ship building, slate export, timber importing and the development of the port.

The development of industry within Caernarfon during the latter half of the nineteenth century resulted in an increased population as illustrated in the table below (Lloyd: 1998:143).

Year	Population figures Caernarfon.
1851	8883
1861	9937
1871	11039
1881	11907

**Table 3.0. Illustrating the growth in population for Caernarfon 1851-1881.**

Caernarfon in 1821 was a quiet market town with a population of less than 4000; by 1851 it had doubled to over 8883. The rise in population was attributable to Caernarfon's role as a commercial town:-

*“In addition to the port and its mariners, slate loaders and hobblers, merchants, customs officials and so on, Caernarfon was a town of ship-keepers, market traders, tradesmen, licensed victuallers, shop assistants and apprentices, attorneys and surgeons and many others”*

*(Lloyd 1998:143)*

### **3.8.1. Development of the Slate Trade.**

The demand for quarrymen to work in the slate quarries of the Nantlle valley<sup>59</sup> resulted in the slate being exported to Manchester, Dublin and Cork, to roof the new factories and homes built to house workers employed in the factories of these emerging industrial towns.

The increased demand for slates meant that demand was outstripping supply due to transport problems encountered when carrying the slates from the quarries to Caernarfon for shipment from the harbour. The slate was transported to Caernarfon using horse and carts which were too slow. In 1825 a Private Act of Parliament<sup>60</sup> was granted for the construction of a tram road, which would carry the slate from the quarries into the port. As a result of this act the Nantlle Railway Company was formed. The railway was built by George and Robert Stephenson who constructed the narrow gauge railway to carry slate direct from the quarries to the new slate quay at Caernarfon. The railway was opened in 1828, the same year in which the Slate Quay was completed. The railway ensured that the slates from the quarry were carried quickly to the harbour using the new tramway ensuring that the growing demand for Welsh slate was met.

<sup>59</sup> The Nantlle Valley encompasses the villages of Talysarn, Penygroes and Nantlle and is located 7 miles from Caernarfon

<sup>60</sup> Private Act of Parliament May 1825 led to the creation of the Nantlle Railway Company seven miles in length connection the slate quarries of the Nantlle Valley to Caernarfon Harbour. (Lloyd 1998: 249).

1852 marked the arrival of a standard gauge railway connecting Caernarfon to the main London line via the Chester/Holyhead railway. The railway was operated by the London and North Western Company, fortuitously for the Port of Caernarfon, the freight rates on the Chester and Holyhead Railway were high, thus ensuring that the coastal trade in the transport of slate continued well into the last decade of the nineteenth century.

The railway enabled the slate to be transported more efficiently although at a higher cost to the consumer.

*“Between 1903 and 1904 35,172 tons of slate was sent by rail from Caernarfon compared to 29,702 tons by sea”*

*(Lloyd 1998:268).*

The increased use of the railway marked the decline of Caernarfon as a shipping port for the transport of slate; transportation by rail was quicker and enabled the slate to be transported around the country quickly. The impact of the First World War accelerated the decline of the slate trade, many of the quarries and mines closed due to a lack of orders as the building industry virtually ceased during the war. The final death knell for the slate industry was 1917, when the slate industry was declared to be a non-essential industry, possibly due to the dire need for men to serve at the Western Front. Many of the quarries closed heralding the end of the slate trade in Caernarfon. This marked the gradual slow decline of the slate trade as demand for Welsh slate was facing stiff opposition from the use of pot roof tiles which were cheaper to produce and allowed a roof to be built in half the time required for a slate roof

### **3.8.2. Development of Caernarfon as a Port and ship building centre.**

*“Between 1758- 1898 over 200 hundred vessels were built at Caernarfon”.*

*(Lloyd 1998:92).*

*“Most of the boats constructed within Caernarfon were built on the banks of the river Seiont close to the castle because priority was given to the slate trade as this was seen as the major industry for the town.”*

*(Lloyd 1998:93).*

The port of Caernarfon was for a short time also a centre for emigration from this part of Wales to America and Canada. This was linked to the development of the North American timber trade; the ships that were crossing the Atlantic from Caernarfon offered berths aboard the ships for fee paying passengers.

Lewis Lloyd (1998) wrote extensively about the role of Caernarfon as Port from 1793-1900 and his book traces the development and origins of the port and the impact that it had on the town. For a short period of time from 1830-1860, quarrymen immigrated to America from Caernarfon in search of a better life:-

*“One of the first ships to offer this service was the brig Ann; she sailed from Caernarfon to New York on February 5<sup>th</sup>/6<sup>th</sup> 1836. In 1843 local ship owner Mr H. Owen offered berths aboard his sailing barque the Hindu bound for New York from Caernarfon under the command of Captain Richard Hughes in 1843.”*

*(Lloyd 1998:93)*

The Hindu carried slate for North America and would return with a load of North American timber. 1851 saw an increased demand for this service as Welsh quarrymen were lured to the new slate quarries of Vermont in America by the promise of higher wages and better living conditions. The skills of these Welsh quarrymen helped to establish the American slate industry. During this period, Ellen Edwards<sup>61</sup> was running her school of navigation in the town and was responsible for teaching navigation, to many seamen from the area. She taught navigation to Captain John Pritchard, who later became Captain of the steam ship *Mauretania*.<sup>62</sup>

Following the impact of the First World War and the decline of Caernarfon as both a port and as a centre for the Welsh Slate industry, the town reverted to its former role as a market town. Caernarfon developed its role as a tourist destination mainly as a result of the Castle, and its link with Mr David Lloyd George.

### **3.9. Caernarfon Castle. UNESCO World Heritage Site.**

The castles of Edward I was granted World Heritage Status by UNESCO in 1987 and together they represent one of the finest examples of medieval military architecture in Europe. They were granted World Heritage Status based on the following criteria set by UNESCO:-

*(i): Beaumaris and Harlech represent a unique achievement in that they combine the double-wall structure which is characteristic of late 13th century military architecture with a highly concerted central plan and in terms of the beauty of their proportions and masonry. These are the masterpieces of James de St George who, in addition to being the king's chief architect, was constable of Harlech from 1290 to 1293.*

*Criterion (iii): The royal castles of the ancient principality of Gwynedd bear a unique testimony to construction in the Middle Ages in so far as this royal commission is fully documented. The accounts by Taylor in Colvin (ed.), *The History of the King's Works*, London (1963), specify the origin of the workmen, who were brought in from all regions of England, and describe the use of quarried stone on the site. They outline financing of the construction works and provide an understanding of the daily life of the workmen and population and thus constitute one of the major references of medieval history.*

*Criterion (IV): The castles and fortifications of Gwynedd are the finest examples of late 13th century and early 14th century military architecture in Europe. Their construction, begun in 1283 and at times hindered by the Welsh uprisings of Madog ap Llywelyn in 1294, continued until 1330 in Caernarfon and 1331 in Beaumaris. They have only undergone minimal restoration and provide, in their pristine state, a veritable repertory of*

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<sup>61</sup> It was very unusual to have a woman running a school of navigation.

<sup>62</sup> A plaque commemorating the role of Ellen Edwards is located on page 258 in the appendix on Caernarfon plaques.

*medieval architectural form: barbicans, drawbridges, fortified gates, chicanes, redoubts, dungeons, towers, and curtain walls.*<sup>63</sup>

<http://whc.unesco.org/en/list/374>



**Plaque 3. Located inside Caernarfon Castle confirming its status as a World Heritage Site. Photographed by Pam Smith 2009.**

### **3.9.1 Caernarfon in the Twenty First century.**

Caernarfon has continued to function as a Legal centre and has a Magistrates Court and Crown Courts; it also houses the Administrative headquarters for Gwynedd County Council. Caernarfon is reliant on tourism as its main income generator focusing on the Castle and its link to the Investiture of the current Prince of Wales in 1969. However, with the commencement of the Welsh Highland Railway Project in the late 1990's and its aim to establish a heritage railway link between the Welsh Highland Railway and the Ffestiniog Railway in Porthmadog, the town now has an additional tourist attraction. The 'new railway' was officially opened from Caernarfon to Porthmadog in May 2011<sup>64</sup>.

### **3.9.2 Caernarfon Castle and the 2012 Cultural Olympiad.**

The castle was selected as one of the sites for the "Cultural Olympiad" locations selected to support the 2012 Olympic Games in London. The Cultural Olympiad in Wales was established through a partnership with the Arts Council for Wales and Cadw with funding provided by Legacy Trust UK via the Heritage Lottery.

The aim of the project was to celebrate the culture and heritage of Wales by engaging the community in events located at key historic sites across Wales. "The Cauldrons and Furnaces" project ran for three years from 2009-2012, culminating in events across Wales which celebrated the opening of the Olympic Games in London on July 27<sup>th</sup> 2012. The Cauldrons and Furnaces strand of the project focused on eight locations across Wales one of which was Caernarfon and aimed to:-

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<sup>64</sup> The development of the WHR is mentioned in the History of the Brunswick Ironworks as they were involved with the project through the construction of railway bridges pages 114-117.

*“Showcase the rich cultural diversity of our small nation through a wide range of creative activities at eight historic sites...”*

<http://www.cadw.wales.gov.uk>

Mr Alun Fred Jones Welsh Assembly Member for Caernarfon<sup>65</sup> commented that:-

*“Cadw is proud to be a key partner in the delivery of the Cultural Olympiad in Wales. As part of the overarching 'Power of the Flame' programme, the 'Cauldrons and Furnaces' initiative, which will be delivered in partnership with Cadw, promises to excite every community in Wales and bring the values of the Olympics to our diverse linguistic and cultural communities”.*

<http://www.cadw.wales.gov.uk>

Caernarfon Castle was selected as one of the sites within Wales for the Cultural Olympiad which should result in increased visitor numbers to the Castle as new exhibitions recounting the history of the castle and the work undertaken by local craftsmen within the castle was the focus for the exhibits **.It is envisioned that the work carried out in the castle by the Brunswick Ironworks during its one hundred years of working within the castle will form part of the new exhibition.**<sup>66</sup>

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<sup>65</sup> Up until the National Assembly Elections of May 2011, Mr Jones was the Heritage Minister for the Labour- Plaid Cymru coalition government in Wales.

<sup>66</sup> The Cauldrons and Furnaces event took place July 2012.

### **3.10. The development of the skills of the Art Metal Blacksmith.**

The history and development of the skills of the blacksmith were researched so that the skills of the Williams family could be appreciated and understood. The history and development of the skills of the blacksmith formed an essential link with the Brunswick Ironworks research project. Blacksmiths have been an essential part of the life and well being of communities in which they lived and worked for many centuries and the skills of the art metal blacksmith as practiced by the Brunswick Ironworks have their origins within the development of the skills of these early blacksmiths and how they learnt to work with metal. A blacksmith was an essential component of village and community life, it was the blacksmith who produced metal objects which were both functional and decorative. The impact that these artisans had on the evolution of man is traced from its early origins to the contribution that these skilled craftsman are still making in the twenty first century.

*“The craft of the artist blacksmith is based on the ancient principles of hot forging iron and steel, working with a fire hammer and anvil”.*

*(British Artist Blacksmith Association 2009).*

### **The Early Blacksmiths.**

The blacksmith has throughout history been a valued member of society and their origins can be traced back to Bronze Age blacksmiths using clay and stone moulds to cast swords and daggers. However, the handles would snap as the rivets were not strong enough to hold the blade, but by the end of the late Bronze- Age the handles were an integral part of the weapon, similar in design to those found in Europe. In Britain a number of Bronze- Age swords have been discovered such as the sword discovered at Figsbury hill fort, Wiltshire.

*“Archaeologists have identified and dated small forged artefacts found in Ancient Egypt and Mesopotamia from 4000 BC. The artefacts were made from iron that was recovered from fallen meteorites containing an iron nickel alloy. Egyptians referred to this iron as iron from heaven”*

*(Sims 2006:45)*

The Roman God Vulcan was known as the ‘blacksmith to the Gods’ and was one of the mythological heroes mentioned by Homer in the Iliad and was reputed to have created the Trident for the Roman God Neptune and the divine armour for Achilles.<sup>67</sup>

### **Emergence of two types of Blacksmiths.**

The thirteenth century saw the skills and equipment used by the blacksmith revolutionised by the Stuckofen furnace, which was developed in Germany and consisted of a large barrel shaped

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<sup>67</sup> Described in great detail by Homer - Iliad, books volumes XVIII-XX.

furnace which utilised water driven bellows to drive air through the furnace, thus allowing the production of pig iron. It was then taken from the furnace and transferred to a low fire to reduce its carbon content, making the iron more pliable to work and less brittle. This step forward in technology enabled two types of blacksmiths to emerge:-

- Those who worked for the military producing arms and metal reinforcements for buildings such as portcullises and metal hammered doors,
- The other group produced locks and keys, and metal everyday objects, and it was this group which began to embellish their designs with motifs and ornate designs.

The blacksmiths were valued members of their community as they fulfilled a special role within the community; one group focusing on security whilst the other group created functional everyday objects, ranging from pots and pans to plough shares and metal rims for wagon wheels. The role of the blacksmith was valued;

*“The blacksmith has traditionally been regarded as the most important craftsman in the rural community.....the smith was the most important craftsman, a status he retained for many years. (Davies 1991:1)*

### **3.11. The emergence of the art metal blacksmith.**

Developments in the quality of metal being produced during this period marked the emergence of the art metal blacksmith who no longer produced practical everyday articles such as horse shoes and plough shares instead they used their skills to create works of art in metal. The art metal blacksmith utilised the same skills as the blacksmith, using hammer and forge but developed their skills to create ornate designs in metal to embellish houses, public parks, fountains and churches. The Renaissance period was when the skills of the art metal blacksmiths were emerging and<sup>68</sup> artists such as Jacopo Della Quercia (1374-1438) began to work with blacksmiths who were capable of taking his designs and recreating them in metal. Nicolo Grosso (an Italian art metal blacksmith) created the metal work for the Palazzo Strozzi in Florence (circa 1406), from the original designs of architects Majono and Pollaiolo.

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<sup>68</sup> Wrought iron is produced by puddling pig iron. The wrought iron can be hammered into shapes (malleability) and drawn out (ductility) to create intricate designs in wrought iron. (The Blacksmith’s Craft Council for Small Rural Industries). Puddling pig iron refers to the production of bar iron from pig iron without the use of charcoal. The molten metal was stirred by rods consumed during the process.



**Image 3.1. Wrought iron torch holder/horse tether created by Niccolo Grosso circa 1490 for the Strozzi Place, Florence. Image reproduced from the Free Cornell University Library USA (<http://www.flickr.com/photos/cornelluniversitylibrary/361113161>)**

The sixteenth century saw the emergence of the Baroque period with its emphasis on elaborate ornamentation. This was possible because wrought iron was now widely available it had a low carbon content which allowed the soft metal to be worked to produce intricate designs in wrought iron. Wrought iron was now the metal of choice for the art metal blacksmith as it could be heated and reheated to create detailed designs in wrought iron.

### **Art Metal Blacksmiths in the Seventeenth Century.**

The seventeenth century saw blacksmiths using sheets of metal because the process of rolling the metal had been developed which enabled them to create ornate designs. The advancements in metal production enabled art metal blacksmiths of this period to create designs which were usually flowers and leaves embellished with gold. One of the most famous art metal blacksmiths of this period was the French Master Blacksmith Jean Tijou. He was commissioned by King William III and Queen Anne to work at the Royal Palace of Hampton Court. He created the famous Hampton Court Screen ;( the screen consisted of twelve ornate panels depicting symbols of the British Isles). It was designed to enclose the Privy Garden at Hampton Court and took three years to complete with work commencing in 1689.





**Image 3.2 Panel from the Tjhou Screen which is located within the Privy Gardens at Hampton Court Palace. Photograph reproduced from <http://www.free-picture-graphic.org.uk/picture>.**

Jean Tijou published his book entitled “New Book of Drawings 1693”<sup>69</sup> which contained twenty of his designs, the book was published so that other craftsmen could appreciate the designs and adapt and develop them for use in their work. The skills of Jean Tijou were much admired. With commissions from designers and architect such as Sir Christopher Wren; and was commissioned to design a series of screens and grilles for St Paul’s Cathedral which was completed in 1710.

### **3.12. Welsh Smiths. The Davies Brothers. Bersham Wales.**

The Davies brothers earned a reputation as skilled blacksmiths. Their forge was at Groes Voyle, Bersham, North Wales, because it was an industrial area with a plentiful supply of fuel readily available from the coal mines in the area. They worked from 1702-1755 and the gates at Chirk Castle, the gates and screen at St Peter’s Church Ruthin, and the Black Gates at Leeswood Hall in Cheshire are some of the best known examples of their work. They created the gates for Chirk Castle one of the earliest examples of iron work in Wales, reflecting the traditions of the period to embellish their designs with flowers and leaves.

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<sup>69</sup> The Tijou Screen was restored by Andrew Naylor of Hall Conservation during the 1980’s. The research conducted during the restoration of the Privy Garden revealed that grey was the original colour for the Tijou screen as it created a three dimensional effect which highlighted the intricate gold leaf designs.



**Photo 3.8. Chirk Castle Gates. Photographed by Pam Smith 2008.**

In Wales, the blacksmith had been an essential member of society since the days of the early Welsh Courts:-

*“The smith took his place of honour with the poet and the priest in the Prince’s Court”.*

*(Jenkins 1965:132).*

The Clynnog Chest located within St Beuno’s Church Clynnog, Gwynedd is one of the few surviving examples of the early skills of the blacksmith in Wales, and was made in the thirteenth century.



**Photo 3.9. Clynnog Chest Photographed April 2011 by Pam Smith.**<sup>70</sup>

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<sup>70</sup> <sup>70</sup>The chest was very difficult to photograph as it was stored inside a glass case and this resulted in distortions and shadows when photographing it.

The Black Book of Chirk circa 1200 mentioned that in the medieval Welsh Court:-

*“A chair was reserved for the blacksmith, as chief representative of the material world.”*

(Davies: 1991:1).

The blacksmith in Wales was a crucial member of the community. The census for 1831 cites 275 blacksmiths working in the county of Cardiganshire, with the 1851 census listing 250 blacksmiths in Anglesey, 335 in Brecknockshire and 520 in Caernarvonshire (Davies 1991). These figures illustrate the important role that blacksmiths provided to the local community. The blacksmith made a good living from his trade as the account books for Ben Evans a Blacksmith from Aberbanc, Dyfed illustrates circa 1889-1892:-

*“To mend a plough share and coulter 1s/2d.....casting mould board for a drill plough 7s/6d  
...mend oven 1shilling“*

(Davies 1991:10.)

Mr Evans would send out his bills annually, as most payments were made in late spring and early autumn, as this coincided with the sale of sheep and cattle in early spring and with the harvest in early autumn. However, not all of his customers would have paid with cash, many would have paid” in kind” for his services:-

*“Blacksmiths were sometimes paid for their services not with cash but in kind. The services of the blacksmith were essential but his customers did not always possess the ability to pay for his skills. Many paid with cloth, coal, boots, apples and animals such as sheep and pigs and scrap metal”*

(Watson: 2000:94).

### **3.13. The Industrial Revolution and its impact on the Blacksmith.**

With the Industrial Revolution of the late eighteenth and early nineteenth century, the skills of the blacksmith declined. The developments in the production of steel brought about by the work of Sir Henry Bessemer meant that the metal could now be moulded and cast using machinery, creating metal products in large numbers, which were cheaper than those of the blacksmith.

*“The Bessemer process was created by Sir Henry Bessemer in 1856. The Bessemer process detailed how to convert pig iron to steel in one step, without any expensive increase in fuel and labour costs. His contribution allowed steel to surpass iron as the fundamental material of the Industrial Revolution and it is the basis upon which civilisations around the globe advanced into the twentieth century”*

(Sims 2006:48)

This advance in the production of steel led to the demise of the local village blacksmith. This was the beginning of the “consumer society” the availability of mass produced goods allowed the working classes to purchase essential items for less money than those created by the village blacksmiths:-

*“By the late nineteenth century the blacksmiths were disappearing very rapidly and their work was being taken over by large scale manufacturers”*

*(Jenkins 1965:9)*

The skills of the blacksmith took years to master and the impact of the Industrial Revolution meant that the skills were almost lost.

*“Twenty years you might be a fair hand shoeing a horse, working and welding iron, making harrows and gates, mending broken things making new ones”.*

*(Niall 1966:31)*

### **Arts and Crafts Movement and the role of the Art Metal Blacksmith.**

The skills of the blacksmith were being threatened by objects mass produced in factories. The emergence of the Arts and Crafts movement circa 1850-1915 actively supported the skills of the blacksmith as master artisans. John Ruskin and William Morris were founding members of the movement, and they actively supported skilled craftsmen. At the heart of the movement was the belief that “art” required craftsmen, without whom, art could not exist. Ruskin wrote about the impact of the Industrial Revolution in *The Stones of Venice* (1880-1884.) detailing how the Industrial revolution was creating objects made by men operating machines which took away the skills of the thinking man.

*“Men were not intended to work with the accuracy of tools, to be precise and perfect in their actions”.*

*(Ruskin 1880:178).*

He believed that hand- made artefacts created by a craftsman such as the blacksmith warranted a high price in recognition of the skills required to produce the object. He advocated that:-

*“Money spent in the purchase of well designed plate, of precious engraved vases, cameos or enamels, does good to humanity”.*

*(Ruskin 1884 Volume II: 184).*

Ruskin advocated that this mechanical slavery could only be improved when people no longer encouraged the production of articles manufactured by this method, advocating that people must decide if they wish to purchase articles that are mass produced, without any hint of individuality, or whether they should make a conscious decision to purchase artefacts from skilled artisans. He advocated that the unique quality of a hand-made object was valued because of its rarity value and the status that was associated with owning a one off piece of art, jewellery, furniture or pottery.

The argument was flawed<sup>71</sup> because whilst the items that were mass produced in the factories and workshops were all of a similar quality and design, it was not ethically correct that the emerging social classes should be denied access to objects that would enable them to enjoy beautiful objects. Ruskin was supporting the skilled artisan but it was only the rich who could afford the unique hand-made articles, the masses had to make do with the mass produced items from the factories. However, he was instrumental in ensuring that the skills and values attributed to the hand-made articles of the skilled artisan were not lost, paving the way for the development of the Arts and Crafts Movement in Britain.

### **William Morris. (1834-1896).**

William Morris is revered as the father of the Arts and Crafts movement (1880-1910); it was whilst at Oxford University that he read the Stones of Venice by Ruskin. Well known as a poet, he published a volume of poetry in 1858 and was a close friend of Dante Gabriel Rossetti, one of the founders of the Pre Raphaelite brotherhood. William Morris was a “hands on practitioner” mastering many of the skills required to create his own designs this was possibly due to the influence of Ruskin who advocated that:

*“No master should be too proud to do its hardest work. The painter should grind his own colours, the architect work in the mason’s yard with his men...”*

*(Ruskin 1884 Volume II: 178)*

William Morris championed the skills of the medieval craftsman believing that these craftsmen:-

*“Knew his work from end to end, and felt responsible for every stage of its progress”.*

*(Pitkin Guide 2010:1)*

William Morris died in 1896, having spent his life championing the preservation of the skills of the artisan. He founded the Society for the Protection of Ancient Buildings, was an accomplished poet, artist and highly skilled craftsman in stained glass and ceramic tiles.

*“The past is not dead; it is living in us, and will be alive in the future which we are now helping to make”.*

*(Ormiston and Wallace 2010:11)*

William Morris and John Ruskin were instrumental in ensuring that the skills of the master craftsmen survived the turbulent era of the industrial revolution with Morris believing that;

*“We should be masters of our machines and not their slaves.”*

*(Ormiston and Wallace 2010:74.)*

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<sup>71</sup> Ruskin’s critics were the factory owners who viewed his ideas as radical and threatening to their futures. They advocated that Ruskin was creating an elite society because only the wealthy members of society could afford to purchase hand made goods.

The emergence of the Arts and Craft movement ensured that the skills of the blacksmith survived the onslaught of the Industrial Revolution and the mass production of items such as plough shares which were made from cast iron rather than hand forged. Blacksmith art metal workers created unique designs in metal which highlighted their skills as craftsmen and artists in metal and the items produced were perceived to be of a higher quality due to skill of the craftsman who appreciated and understood the intricacies involved in working with hot metal. The finished article was of a much higher quality than the items being mass produced by casting metal, as each item created by an art metal worker blacksmith was hand finished and unique.

### **3.14. The Training of the Blacksmith.**

The skills of the blacksmith took a life time to master, initially an apprentice served a seven year apprenticeship during which time he would learn the skills of the trade from a blacksmith but each smith guarded their secrets. When the apprenticeship was completed the newly qualified blacksmith became a Journeyman blacksmith working for a master blacksmith:-<sup>72</sup>

*“An apprentice to a trade where the master covered their work from outsiders”*

*(Niall 1966: 38)*

The skill of the blacksmith was one that develops and evolves over time as experience in the skills of working with hot metal were mastered, this resulted in each Smith having his own unique way of creating metal objects:-

*“The blacksmith is able to marry beauty and utility he is able to combine good taste and usefulness”.*

*(Jenkins 1965:5)*

The training of a blacksmith required him to understand the signs and effects of burning iron so that he was able to recognise instantly the correct degree of temperature (the metal) required for a particular operation (Rural Industries 2000:19). The trainee Blacksmith was taught how to light the fire for the forge using either coal, coke or gas, the correct size for the fire so that it heats only the metal and nothing else and to keep the fire at the correct temperature and to know where to place the metal within the forge for heating. This skill took years to master as all metals react differently at varying temperatures and specific tasks require the metal to be heated for different lengths of time.

During his apprenticeship the trainee blacksmith would learn the skills of a “striker”:-

*“Who stood facing the smith on the other side of the anvil ready with his heavy sledge to lie on blows as the blacksmith directed. By lightly tapping the spot with his small hammer, the blacksmith showed his striker where he wanted the sledge to strike”*

*(Watson 2000:34).*

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<sup>72</sup> Journeyman- an artisan who travelled from location to location.

The life of a blacksmith was physical and demanding, his movements precise and quick working with metal to create functional/decorative objects. Watson (2000) described the blacksmith as:-

*“He had the usual two thumbs and eight fingers; but in his case, these became an astonishing set of tools with which he manipulated to his own design an enigmatic material called iron”.*

*(Watson 2000:1)*

## **Blacksmiths in the Twentieth Century.**

However, throughout the centuries blacksmiths have proven that they are resourceful and creative; the skill of the blacksmith is alive and thriving in the 21<sup>st</sup> century. It has survived the trends of the past centuries to emerge as a craft that is still in demand in the 21<sup>st</sup> century.

*“A blacksmith working hot metal on the anvil comes to understand his material better than he could in any other way. This is especially true of the smith who turns to ornamental ironwork an excellent way of discovering the characteristic behaviour of iron”.*

*(Rural Crafts Book reprint 2000:11).*

The fact that the Brunswick Ironworks celebrated its centenary in 2006 is testament to the skills of the master art metal blacksmith.

*“When you understand how metal moves, and how to control the metal you gain knowledge which enhances the magic”*

*(Sims 2006:166)*

The skills of the art metal blacksmith have been passed down through three generations of the Williams family who are highly skilled artisans and whilst the materials used have changed, these creative and adaptable master craftsmen have seen their craft survive into the twenty first century. As the motto of the Worshipful Company Blacksmiths states:-

*“By hammer and hand all arts do stand”.*

*(Hey 2010:131)*

# CASE STUDY

## BRUNSWICK

### IRONWORKS CAERNARFON

#### 3.15. Introduction.

The history of the company is divided into sections according to the commissions under taken for the Company covering:-

- Government departments HM Office of Works and Cadw.
- Royalty through commissions for the Royal Palaces and the British Royal Family.
- Artists who created the designs which were translated into metal by the company.
- Individual commissions within the local vicinity.
- Construction projects located across the country.
- Commissions for famous people and places.
- Commemorative commissions the Unknown Warrior.

The history of the company was divided into the above sections as it was difficult to identify the work undertaken by DJ Williams when his son Harold was working with him as their work was very similar. Meurig Williams was unable to clarify to whom the work should be attributed, therefore the decision was taken to present the work based upon the commissions received by the company. This approach to the history of the company also assisted in the identification of one of the future outcomes for the research project the production of a book charting the story of the company to be undertaken once the research project was completed. By grouping the history of the company in this way, the journey from history to heritage was demonstrated as each generation of the Williams family have contributed through their skills as art metal blacksmiths to key events within the history of the United Kingdom, which through the passage of time have evolved into heritage assets.

*“The true craftsman cannot conceal his art; each turn of the wrist portrays a skill that speaks quietly of experience. Each hammer tap reveals the practical skills of generations. The touch of the artists and the craftsman are clearly and cleverly combined in all our work whatever the nature of the commission entrusted to us. It affords us both pleasure and pride in executing any class of work which demands the highest degree of accuracy and skill in its accomplishment.”*

*(Brunswick catalogue; Art and Antiquity.1930:1)*



### **3.16. The Journey begins.**

#### **David John Williams 1881-1966.**

David John Williams was born in Bethesda May 2<sup>nd</sup> 1881, his father Owen was a stonemason whose family originally came from Anglesey, the family moved to Bethesda and Owen Williams is listed as a stone mason in the 1871 census. David John Williams established the Brunswick Ironworks in 1906, having first learned his trade from his uncle Hugh Williams, one of the blacksmiths for the Penrhyn Quarry in Bethesda. In 1896, aged fifteen he went to Liverpool to develop his skills, serving a five year apprenticeship; having completed this apprenticeship he obtained a position in Manchester with David Rowe, a company that specialised in creative art metal work. It was during this time that he was taught the skills of the art metal blacksmith, building on his skills as a blacksmith. Whilst mastering the skills of the art metal blacksmith, the Arts and Crafts movement<sup>73</sup> was at its height; it resurrected the skills of the craftsman, advocating a return to hand-made items in preference to the mass produced items from the factories. This return to hand-made individual items enabled the skills of DJ Williams to be appreciated.

On returning home to Wales in 1906 he rented a small Smithy in Bontnewydd, a small rural village outside Caernarfon. No records exist of the exact location of the forge however Mr Meurig Williams the grandson of DJ Williams believes that it was located on the main road that runs through the village of Bontnewydd. This theory was supported by the owner of the house known as Carew, who when digging in his field found a large number of old horse shoes, indicating that this was possibly the location of the forge that DJ Williams purchased in 1906.

The map overleaf identifies the location of the Brunswick Ironworks over the past one hundred years showing that they were an important part of the industrial heritage of Caernarfon.

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<sup>73</sup> The Arts and Craft Movement (1860-1910) is discussed in the History of the Blacksmith discussed in this chapter page 70-72.



**Map 3.2. Illustrating the locations of the Brunswick Ironworks from 1906-2011.<sup>74</sup>**

### **3.17. The Local Connection.**

This section refers to the local commissions undertaken by the company and spanning three generations of the Williams family. It was at Bontnewydd that DJ Williams created the prize winning gate for the National Eisteddfod in 1909<sup>75</sup>; the prize was awarded for the garden gate designed for Lady Turner of Caernarfon, the daughter of Sir Llywelyn Turner<sup>76</sup>. The fact that the National Eisteddfod was held in London in 1909 at the Royal Albert Hall enabled his skills to be

<sup>74</sup> The map showing the locations of the company was created by Ian Harris the School of Environment, Natural Sciences and Geography Bangor University his work was much appreciated.

<sup>75</sup> The National Eisteddfod provided the opportunity for Welsh craftsmen to showcase their work.

<sup>76</sup> Sir Llywelyn Turner through his role as Deputy Constable of Caernarfon Castle was instrumental in the restoration of the castle. His work is outlined on pages 54-57.

seen by a much wider audience. The original gate survives and is a testimony to the outstanding quality of his craftsmanship.<sup>77</sup>



**Photo 3.10. Original photograph of the Prize Winning Gate 1909. DJ Williams on the right. (Photograph from the Private Collection of the Williams Family reproduced with their kind permission).**



**Photo 3.11. Eisteddfod Gate. Photographed by Pam Smith.2010.**

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<sup>77</sup> The location of the gate was not revealed as the owners granted permission to photograph the gate on the strict understanding that its location was not disclosed

On a local level the skills of DJ Williams were much sought after. In 1925 he designed a lamp and a coat of Arms for Mr D. Elliott-Alves the owner of Bryn Bras Castle, Llanrug Gwynedd. These excellent examples of the skill of DJ Williams can still be seen today and photographs of them are reproduced with the kind permission of the current owners of the castle.



**Photo 3.12. Wrought Iron light created by DJ Williams for Bryn Bras Castle 1925. Photographed by Pam Smith 2007.**



**Photo 3.13. Original photograph detailing the light created for Bryn Bras Castle. (From the Williams Family Archive reproduced with their kind permission.)**

The gates at the Celtic Royal Hotel in Caernarfon were designed and installed by DJ Williams circa 1930. In 2009 the company was contacted by the current owners of the hotel as the gates were in need of restoration. The owners contacted the company as a result of the publicity

generated during the research project which identified its link to numerous commissions undertaken by the company within the town.



**3.14. The gates at the Celtic Royal Hotel created circa 1930 and restored by the company in 2009. Photographed by Pam Smith 2009**

### **3.18. Relocation to Porth yr Aur**

During this highly creative period DJ Williams relocated his business from Bontnewydd to new premises located at the back of the Sportsman's Hotel Caernarfon.<sup>78</sup> The works were simply known as DJ Williams Porth yr Aur (the Golden Gate). The Sportsman's Hotel was demolished to make way for the new headquarters for Gwynedd Council.<sup>79</sup>

In 1931 DJ Williams created the ornamental ironwork and balustrades for the new County Offices in Shirehall Street Caernarfon. These fine examples of the skill of a master craftsman still survive and are used every day by members of Gwynedd Council.

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<sup>78</sup> The exact location of these premises is not known as the Sportsman's hotel was demolished to create the County Offices. The works were located in one of the old Coach House stables at the back of the hotel.

<sup>79</sup> The approximate location of the works at Porth yr Aur is shown on the map which identifies the locations of the Brunswick Ironworks over the past one hundred and five years page 76.



**Photo 3.15. Staircase railings designed by DJ Williams for County Offices Caernarfon 1931. Photographed by Pam Smith with kind permission from Gwynedd County Council 2006.**

DJ Williams continued to receive commissions for his work within the local area one of his most impressive were the entrance gates for the Vaynol estate at Bangor the home of Mr Assheton Smith<sup>80</sup>.



**Photo 3.16. Vaynol Estate Gates Bangor Gwynedd. Photographed by Pam Smith 2008**

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<sup>80</sup> Mr Assheton Smith was one of the four benefactors involved in the restoration of Caernarfon Castle.

### **3.19. Two Generations of the Williams family at the Brunswick Ironworks.**

DJ Williams was joined by his son Harold in the family business in 1930. Harold served a five year apprenticeship during which time he learnt the skills of the art metal blacksmith from his father. During this time DJ Williams worked extensively within the local area and for HM Office of Works. The Brunswick Ironworks were commissioned by the Bangor Diocese to create the Chancel screen for Christ Church Caernarfon. Unfortunately, the Chancel screen was lost when the Church was converted to a fun centre in the late 1990s'. However, the quality of the craftsmanship was appreciated and one of the gates which formed part of the bottom section of the screen was saved. It is now on show in the former Church; admission to the small museum located within the building is free, and it is open daily.



**Photo 3.17. Part of the Chancel Screen from Christ Church Caernarfon now on display in the former Church in the small museum upstairs. Photographed by Pam Smith 2008 with their kind permission.**

The 1930's were a very productive period for the company and provided an ideal opportunity for Harold Williams to learn the craft of an art metal blacksmith from DJ Williams. In 1937 DJ Williams was working in the local area creating lighting fixtures for the Queens Theatre Rhyl, and lights for the New Congregational Church in Old Colwyn.<sup>81</sup>

Harold Williams continued to learn his trade as an art metal blacksmith under the guidance of his father, but these were unsettled times and another war was looming on the horizon. In 1939 War

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<sup>81</sup> Photographs of these are located in the Brunswick Archive held in Gwynedd Archives Caernarfon. The reference for the catalogue is XD135/3/1/2/.

was declared and Harold started to work for the Rural Industries Bureau, repairing essential agricultural machinery, travelling to farms to repair machinery to ensure that essential food production was maintained. He was a very skilled welder and his services much in demand during the war. DJ Williams was involved in war work from 1939-1945 with the Ministry of Aircraft production employing eight men who worked on war work for the Daimler Company Ltd, at Penrhyn Castle, Bangor. The type of work carried out by the company during this period is not known, it was most likely linked to the building of aircraft components. No documentation relating to the type of work undertaken by the company has been found during the research project, possibly due to the need to maintain secrecy during the war.

Harold Williams worked for the Rural Industries Bureau throughout the war becoming a Welding Instructor and was away from home a great deal travelling extensively to repair and maintain farm machinery. The Brunswick Ironworks was licensed by the Ministry of Supply during the war for the supply of materials to companies working in essential war work; they had unlimited access to steel for the creation of road springs which were a vital component for trucks and other vehicles used by the army which were manufactured by the company.

Even during the war Brunswick Ironworks was still repairing and restoring gates. The gates at the Rhug Estate outside Corwen belonged to Colonel Wynn, later Lord Newborough. The gates were dismantled at the start of the war, possibly in an attempt to prevent them from being taken for scrap metal as part of the war effort. Colonel Wynn wrote to DJ Williams requesting that the gates from the Rhug estate stored for repair at the Brunswick Ironworks be returned in January 1945 for the repatriation of his eldest son from the war. Sub- Lieutenant R.C.M.V. Wynn known as Mickey Wynn.<sup>82</sup>



**Photo 3.18. The gates at Rhug Estate restored by DJ Williams circa 1945. Photographed by Pam Smith 2009.**

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<sup>82</sup> Mickey Wynn was awarded a DSC for his role in the t Nazaire raid. He was captured during the raid and spent the rest of the war as a prisoner.



In 1947 the National Eisteddfod was held at Colwyn Bay and some of the proceeds from the event were used to create new entrance gates for Eirias Park, where the Eisteddfod was held. The gates were made by DJ and Harold Williams and were so large that they could not fit inside the works and were constructed in sections on the slate quay.



**Photo 3.19. Gates made by DJ Williams for Eirias Park Colwyn Bay 1947. This gate had a plate attached to it carrying the name of the Brunswick Ironworks. Photographed by Pam Smith 2008.<sup>83</sup>**

DJ Williams was commissioned to create a set of gates and lights for a new memorial garden at Holywell in Flintshire in 1946. The gates and lights were restored in 2006 by Flintshire County Council, possibly to mark the 90<sup>th</sup> anniversary of the Somme Offensive. Located on each side of the gates are two plaques that record the names of the fallen from both World Wars. These gates carry a plaque carrying the inscription made by “DJ Williams of Caernarfon”.



**Photo 3.20. Gates Holywell Flintshire made by DJ Williams on the left complete with lanterns circa 1946 and on the right the gates restored by Flintshire County Council 2006. Photographed by Pam Smith 2007.**

<sup>83</sup> The plaque is still visible on the gate.

As the reputation of the company continued to grow they received various commissions for entrance gates within the local area. Intricate entrance gates were designed for a section of the Roman wall in Holyhead highlighting the skills of the art metal worker. The gate allows entrance to the bottom section of the graveyard. These gates were probably designed and created by Harold Williams, as DJ Williams was now in his seventies and had handed the running of the business over to his son.<sup>84</sup>



**Photo 3.21. Gates at Holyhead in the Roman Wall. Photographed by Pam Smith**

<sup>84</sup> Meurig Williams believes that his grandfather designed the gates and Harold made the gates following his designs.

By 1957 DJ Williams was now seventy four years old, but still creating beautiful and unique designs in metal. The running of the business was now undertaken by his son Harold. In 1957 he received the commission to create the summer house gates for Plas Newydd Llangollen, the former home of the Two Ladies of Llangollen. The gates created can still be seen today and are much admired by visitors to the house and grounds. The photograph from the Williams family archive show DJ Williams with the gates at Plas Newydd illustrating that whilst he might be in his seventies he was still working as a highly skilled art metal blacksmith.



**Photo 3.22. DJ Williams on the left at Plas Newydd. Photograph reproduced with the kind permission of the Williams family from their private collection.**

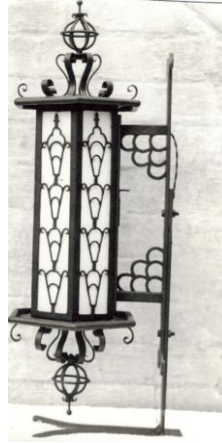


**Photo 3.23. Plas Newydd Gate made by DJ Williams. Photographed by Pam Smith 2008.**

### **3.20. Three generations of the Williams family working together.**

In 1962, Meurig Williams (Harold's son) joined the company, and for a short time three generations of the Williams family worked together. DJ Williams now eighty years old still came

to work for a couple of hours in the morning and then again in the afternoon. DJ Williams was still creating unique designs in metal; one of his last commissions was the electric lantern, made for Mr Humphrey Jones of Caernarfon.



**Image 3.3. Final piece created by DJ Williams for Mr Humphrey Jones of Caernarfon. Reproduced with kind permission of the Williams family archive.**



**Photo 3.24. Original lantern photographed by kind permission of Mr Humphrey Jones at his house in Caernarfon. The lantern had lost its decorative knots. Reproduced with their kind permission of Mr Humphrey Jones family. Photographed by Pam Smith 2008.**

DJ Williams died in 1966 aged 85 and was buried in Llanbeblig churchyard Caernarfon. During his sixty years as an art metal blacksmith he had worked on some of the most important

commissions of the century most notably the Tomb of the Unknown Warrior in Westminster Abbey.

In 1966 Harold Williams and his son Meurig were working together, Meurig being taught the skills of the art metal blacksmith by his father. Harold Williams was commissioned to design new entrance gates for the Royal Welsh showground at Builth Wells and they were known as the Wheat-sheaf gates due to the inclusion of a wheat sheaf motif on the gates. The wheat-sheaf was incorporated into the design to create a link with agriculture. The gates are still used today.



**Photo 3.25. The Wheat sheaf gates at the Royal Welsh Showground designed and installed by Harold Williams. Photographed by the Royal Welsh Showground Secretary (2009) and reproduced with their kind permission.**

In 1968 the clerk of the Parish at Llanuwchllyn near Bala contacted the company and commissioned them to design new gates for the cemetery. They were designed by Harold Williams, the design reveals the more modern aspect of design demonstrating that the skills of the art metal blacksmith had developed and evolved to suit the requirements of the 1960's. The gates are still in daily use.



**Photo 3.26. Cemetery Gates at Llanuwchllyn near Bala. Photographed by Pam Smith 2009**

Gwynedd Council extended their offices in Caernarfon and required new gates and railings for the building which the company was commissioned to design and install. This re-established the link between the company and the County Council established in 1931 when DJ Williams created the new staircases and railings for the original Council buildings<sup>85</sup>.

The new gates and railings are not as ornate as those of DJ Williams however they still highlight the skills of the art metal worker<sup>86</sup> in the late 20<sup>th</sup> century and were designed to provide security for the building. These modern railings are the work of Meurig Williams who was now running the company.



**Photo 3.27. Gwynedd Council Buildings gates by Meurig Williams photographed by Pam Smith 2009.**

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<sup>85</sup> The work carried out by DJ Williams is located in the section entitled The Local Connection page 80.

<sup>86</sup> The preferred term for the art metal blacksmith known as either art metal workers or metal fabricators.



**Photo 3.28. Celtic Dog Gates designed by Meurig Williams. Created for the sheltered housing complex at Tre'r Gof Caernarfon. Photographed by Pam Smith 2008.**

The skills of the modern art metal worker are seen in the design of the Celtic Dog Gates created by Meurig Williams for the sheltered housing complex in Caernarfon, which is located behind the Post Office.

Throughout this period the company built and installed fire escapes for local schools, hospitals and businesses, and their work can be seen throughout Caernarfon and the local area. They carried out work on the conversion of the old Corn Mill, Palace Street Caernarfon. This work highlights their skills as metal fabricators (the modern term for art metal blacksmiths). The building was converted into a bar and restaurant complex, the metal work both inside and outside the building is the work of the company.



**Photo 3.29. Metal fire escape Corn Mill Palace Street. Photographed by Pam Smith 2009 reproduced with the kind permission of the owners of the building.**

By the end of the 1990's the workshops on the quay were no longer suitable for the needs of the company. They were subject to flooding and were too small for the company to carry out their commissions for the larger pieces that they were building and in 2000 they relocated to Peblig Mill<sup>87</sup>.



**Photo 3.30. Brunswick Ironworks Peblig Mill Caernarfon. Photographed by Pam Smith 2011.**

### **3.21. HM Office of Works and Cadw.**

The fact that DJ Williams was able to exhibit his skills at the 1909 Eisteddfod brought his skills to the attention of a much wider audience. As a result of this he was commissioned in 1911 by the Office of Works<sup>88</sup>, to create new railings for the exterior of Caernarfon Castle as part of the general refurbishment which was undertaken in preparation for the Investiture of the Prince of Wales, which had been championed by David Lloyd George. He designed and built a cover for the well in the well tower, designed and installed the metal work and studs for the new doors to the castle, and created a key that was presented to King George V by Lloyd George on the occasion of the Investiture of Prince Edward as the Prince of Wales in 1911.

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<sup>87</sup> The locations of the Brunswick Ironworks are identified on the map.

<sup>88</sup> Prior to 1908 Caernarfon Castle was under the care of the Office of Woods and Forestry.





**Photo 3.31. Caernarfon Castle Railings created for 1911 Investiture of the Prince of Wales.**  
**Photographed by Pam Smith 2010.**

The castle key is stored in a turret within the Queens Tower at Caernarfon Castle an area not open to the public, special permission was obtained from the Head Custodian to photograph it as part of the research project.<sup>89</sup>



**Photo 3.32. Key created by DJ Williams for the 1911 Investiture of the Prince of Wales.**  
**Photographed by Pam Smith, 2010.**

The reputation of DJ Williams as a gifted art metal worker led to more commissions from HM Office of Works, this Government department being the predecessor of English Heritage and Cadw. They are responsible for the care and maintenance of historic buildings and monuments in the United Kingdom.

In 1915 he received a Commission to design new gates and railings for the Victoria Tower Gardens at the Houses of Parliament. The commission was for 800 feet of railings and three gates.

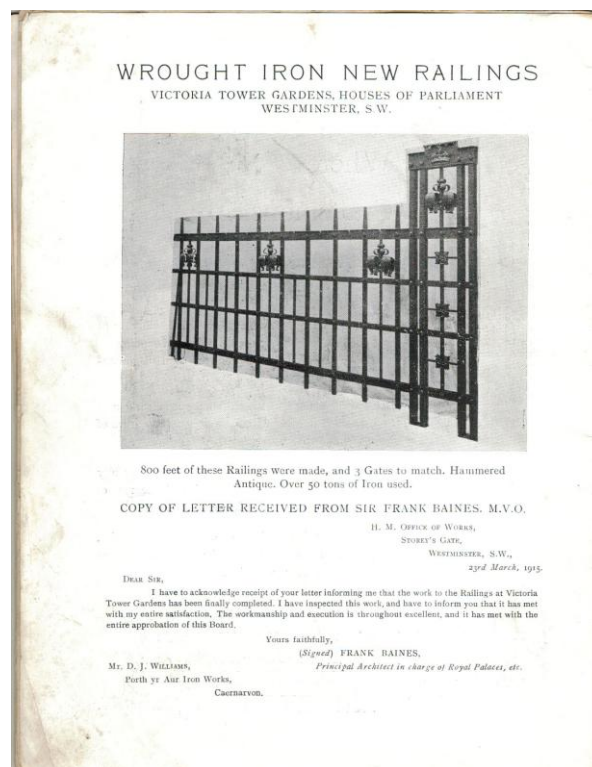
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<sup>89</sup> This key is still used as part of ceremonial visits. It is secured in the castle and is presented to dignitaries where appropriate. The last presumed use of the key would have been for the visit of Queen Elizabeth II in 2010

A copy of the letter of thanks from Sir Frank Baines the Principal Architect in charge of the Royal Palaces for HM Office of Works and an original photograph of these railings and gates has been catalogued as part of the Brunswick archive.<sup>90</sup> Unfortunately these gates and railings were lost during the Second World War taken as part of the national drive for scrap metal, but DJ Williams had the foresight to photograph the gates and railings for posterity.



**Image 3.4. Victoria Tower Gardens Railings reproduced from the Brunswick Catalogue. Circa 1920.**



**Image 3.5. Letter and Photograph reproduced from the Brunswick Catalogue. Detailing the work of DJ Williams on the Gates and Railings for the Victoria Tower Gardens.**

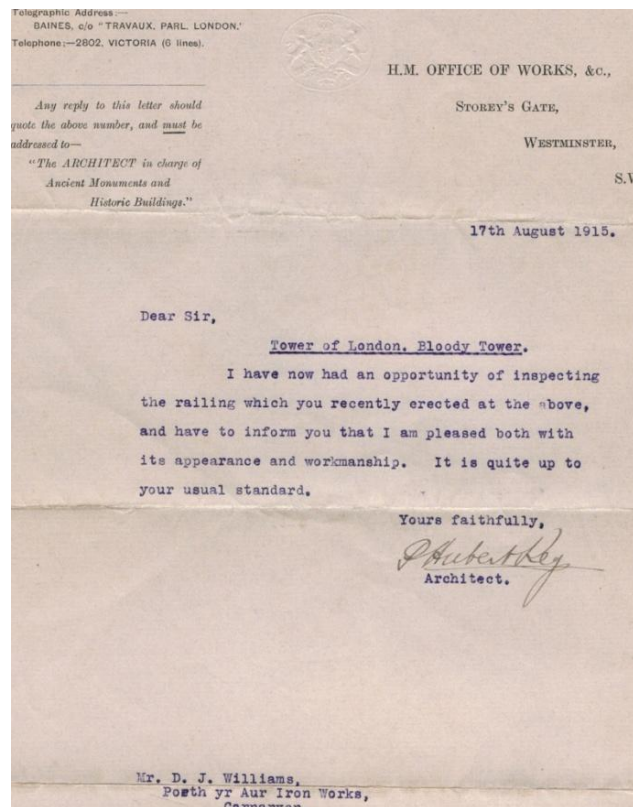
DJ Williams continued to receive commissions from HM Office of Works and in 1915 he created new railings to replace the old ones which were damaged for the Raleigh Walk at the Tower of

<sup>90</sup> The original photographs of the Victoria Tower Gardens Railings form part of the Brunswick Archive and the picture can be viewed at Gwynedd Archives Caernarfon.

London. The original letter of thanks from HM Office of Works was recently discovered in a drawer at the works and belongs to the Williams family private papers; it does not form part of the Brunswick archive<sup>91</sup>.



**Photo 3.33. The railings at the Bloody Tower London. Photographed by Pam Smith with kind permission from the Custodian, Tower of London 2009.**



**Image 3.6. Letter of thanks to DJ Williams re the railings for the Tower of London. Reproduced by kind permission of the Williams Family Private Archive.**

The letter from HM Office of Works mentioned that “it is quite up to your usual standard” presumably in recognition of the work previously carried out by DJ Williams relating to

<sup>91</sup> The letter from the Tower of London was discovered in 2006 during the sorting of the documents found at the Brunswick Ironworks which were catalogued as part of the research project and now form the Brunswick Archive located at Gwynedd Archives Caernarfon.

commissions for Caernarfon Castle and the Investiture of the Prince of Wales (1911) and the commission for the Victoria Tower Gardens at the Houses of Parliament (1915). Throughout this period DJ Williams continued to receive commissions from HM Office of Works and carried out work in Windsor Castle, Hampton Court Palace and the Admiralty Board Room creating fire grates and fire dogs for these buildings. The fire grates and fire dogs for Hampton Court Palace and the Admiralty Board Rooms are still in existence. The photograph reproduced below was taken by the Curator of the Admiralty Board rooms in 2006 after contact had been made inquiring if the fire grates and fire dogs still existed?<sup>92</sup>

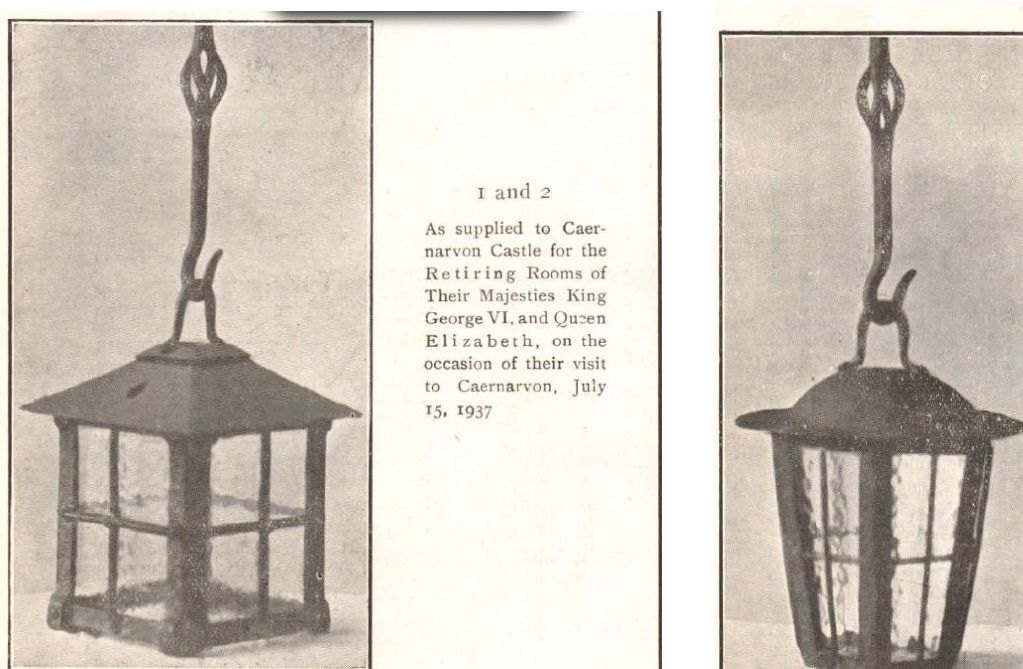


**Photo 3.34. Fire grate and fire dogs in the Admiralty Board Room created by DJ Williams. Photographed by the Curator of the Admiralty Board Rooms (2006) and reproduced with their kind permission.**

The link with Caernarfon Castle was re-established in 1937 when DJ Williams was commissioned to create antique lamps and brackets for the Castle to mark the visit of their Majesties King George VI and Queen Elizabeth. The lights were installed in the retiring rooms for the Royal visit but were lost during the refurbishment of the castle when the Royal Welsh Fusiliers Museum was created. However, photographs of the lamps designed by DJ Williams remain and are reproduced below from the catalogue belonging to the company with their kind permission.

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<sup>92</sup> The replies received from the Curators at Hampton Court and the Admiralty Board Rooms are in the correspondence section contained in the appendix 8 page 338.



**Image 3.7. Lights created and installed by DJ Williams Caernarfon Castle 1937.**  
**Reproduced from Brunswick Catalogue.**

In 1952 the Brunswick Ironworks were commissioned by HM Office of Works to restore the gates at Chirk Castle. These magnificent gates had been made by the Davies brothers over two hundred years previously.<sup>93</sup> However by 1950 the gates were in a very poor state of repair and the upkeep of the estate was given to the Ministry of Works in the 1950's by Colonel R. Middleton, the owner of the estate. The restoration of the gates at Chirk took seven years to complete and special tools had to be made so that the intricate designs could either be repaired or replaced. Many of the intricate acorns, acanthus leaves and scrolls were replaced in copper by DJ and Harold Williams to ensure the longevity of the gates; two generations of the Williams family working together on this important commission.



**3.35. Original photograph of part of the gates dismantled and awaiting repair at the Brunswick Ironworks, reproduced from the Williams family archive with their kind permission.**

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<sup>93</sup> See photograph 3.8 page 68.



**Photo 3.36. Chirk after their restoration by DJ and Harold Williams. Photograph reproduced with the kind permission of the Williams Family Archive<sup>94</sup>.**

### **3.22. Coronation Crown.**

Harold Williams was now running the business as DJ Williams now in his seventies and worked part time at the works. In 1953, Brunswick Ironworks were commissioned by HM Office of Works to create a copy of the Coronation Crown, for the Coronation visit to Caernarfon by Queen Elizabeth II and Prince Philip. The crown was used as the top knot for the canopy that covered the platform constructed inside the castle for the visit. The crown took over a month to create with the work being undertaken by Harold Williams, the finished crown weighed one hundred pounds and stood four feet tall. It was covered in gold leaf and semi precious stones. The crown was discovered at the Institute Building in Caernarfon, the home of the Royal Caernarfon Town Council, whilst researching the history of the company. The gold leaf had been covered in black paint and the semi precious stones had disappeared, but the crown was nevertheless a faithful large scale replica of the Coronation Crown.

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<sup>94</sup> The restored gates Chirk castle circa 1958.



**Photo 3.37. Coronation Crown Replica made by Harold and DJ Williams 1953. Photographed by Pam Smith at the Institute Buildings Caernarfon 2008. Reproduced with the kind permission of Caernarfon Town Council.**



**Photo 3.38. Original photograph of the Crown before the gold leaf and semi precious stones were added. Reproduced from the Williams Family Archive.**

### **3.23. Investiture of Prince Charles at Caernarfon Castle.**

1969 was the year that the present Prince of Wales was invested at Caernarfon Castle. Prince Charles had been created the Prince of Wales at the closing ceremony of the Commonwealth Games at Cardiff in July 1958. Prince Charles used the staff, ring and sword of office made from Caernarvonshire gold, and used by his great uncle Prince Edward in July 1911 when he was invested as Prince of Wales at Caernarfon. He wore the uniform of the Royal Regiment of Wales and the staging of the Investiture was the responsibility of the Constable of the Castle, Lord Snowdon.

The castle was transformed with a central slate dais installed in the outer ward and an overhead transparent canopy carrying the Prince of Wales feathers. The metal work which supported the

canopy was the work of the Brunswick Ironworks and a new platform for the Queens Gate was also installed by the company. It was from the Queen's Gate that the Queen presented her son as the new Prince of Wales. The metal work for the canopy was decorated with intricate metal clasps which were created in two halves so that they could be easily attached to the metal supports. The work undertaken by the company on the Investiture was recorded by the Lord Chamberlain's Office. The Office of the King's Work and its successors were responsible for providing the structures and decorations required for major ceremonial occasions dating back to the middle Ages. The Lord Chamberlain's Office is located within the Royal Household and worked with the Office of Works. The contribution of the company was record in the National Archives.

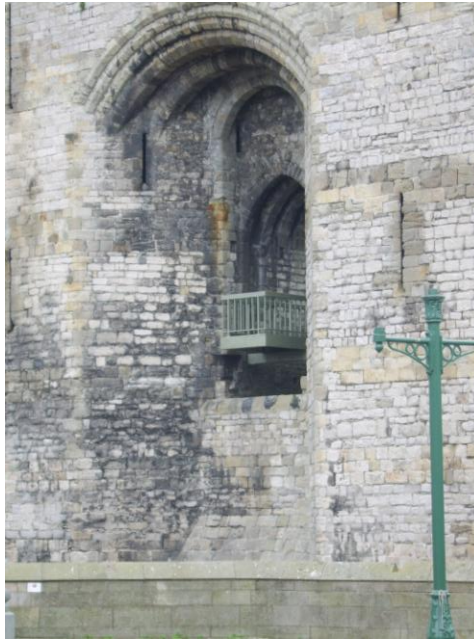
*"Brunswick Ironworks; 1969 ceremonies the fabrication and erection of flagpoles and banner fixings".*

*(National Archives Work 21/174).*



**Photo 3.39. Metal clasps used during the Investiture of the Prince of Wales July 1969. Photographed by Pam Smith reproduced with the kind permission of the Williams family.**





**Photo 3.40. Platform made by Brunswick Ironworks for the Investiture of the Prince of Wales July 1969. Photographed by Pam Smith 2006.**

1980 saw the company working on various projects throughout the area for Cadw<sup>95</sup> restoring and installing new railings for the castles of Harlech, Rhuddlan and Cricieth. Meurig Williams was now running the business and designed and installed the new railings for Beaumaris Castle and the new railings for Conwy Town Walls which are shown below.



**Photo 3.41. Conwy Town Walls showing the Railings designed by Meurig Williams Photographed by Pam Smith 2009.**

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<sup>95</sup> Cadw under the auspices of the Welsh Government care for the Welsh Historic Environment.



**Photo 3.42. Railings at Beaumaris Castle made by Meurig Williams. Photographed by Pam Smith 2009.**

### **3.24. The Royal Connection.**

The skills of the Brunswick Ironworks were appreciated and admired by Members of the British Royal family who have examples of their work located within Windsor Castle and Buckingham Palace. DJ Williams was commissioned to create the ironwork for the casket presented to King George V to commemorate the re-opening of the Westminster Hall part of the Royal Palace of Westminster which was nearly destroyed by fire. The iron for the casket was made from old spikes from the roof that survived the fire and dated back to the sixteenth century. The ironwork was antique hammered and polished by DJ Williams. The original letter of thanks and a miniature version of the casket showing the design for the ironwork were found at the Brunswick Ironworks, along with one of the metal spikes which were melted down by DJ Williams to create the ironwork.

*Dear Mr Williams,*

*I desire to place upon record my appreciation of the excellent work you carried out in executing the hammered ironwork for the casket. As usual your work was of the highest excellence and you gave complete satisfaction, and it reflected in the admirable standard of execution which I invariably find in your work carried out for the Department.*

*I am yours faithfully*

*Frank Baines Director of Works.*

*(XD 135/3/1/1/ Gwynedd Archives Brunswick Archive).*



**Photo 3.43. The bands and clasps designed for the casket using original nails from Westminster Hall. The photograph is reproduced with the kind permission of the Williams Family 2010.**

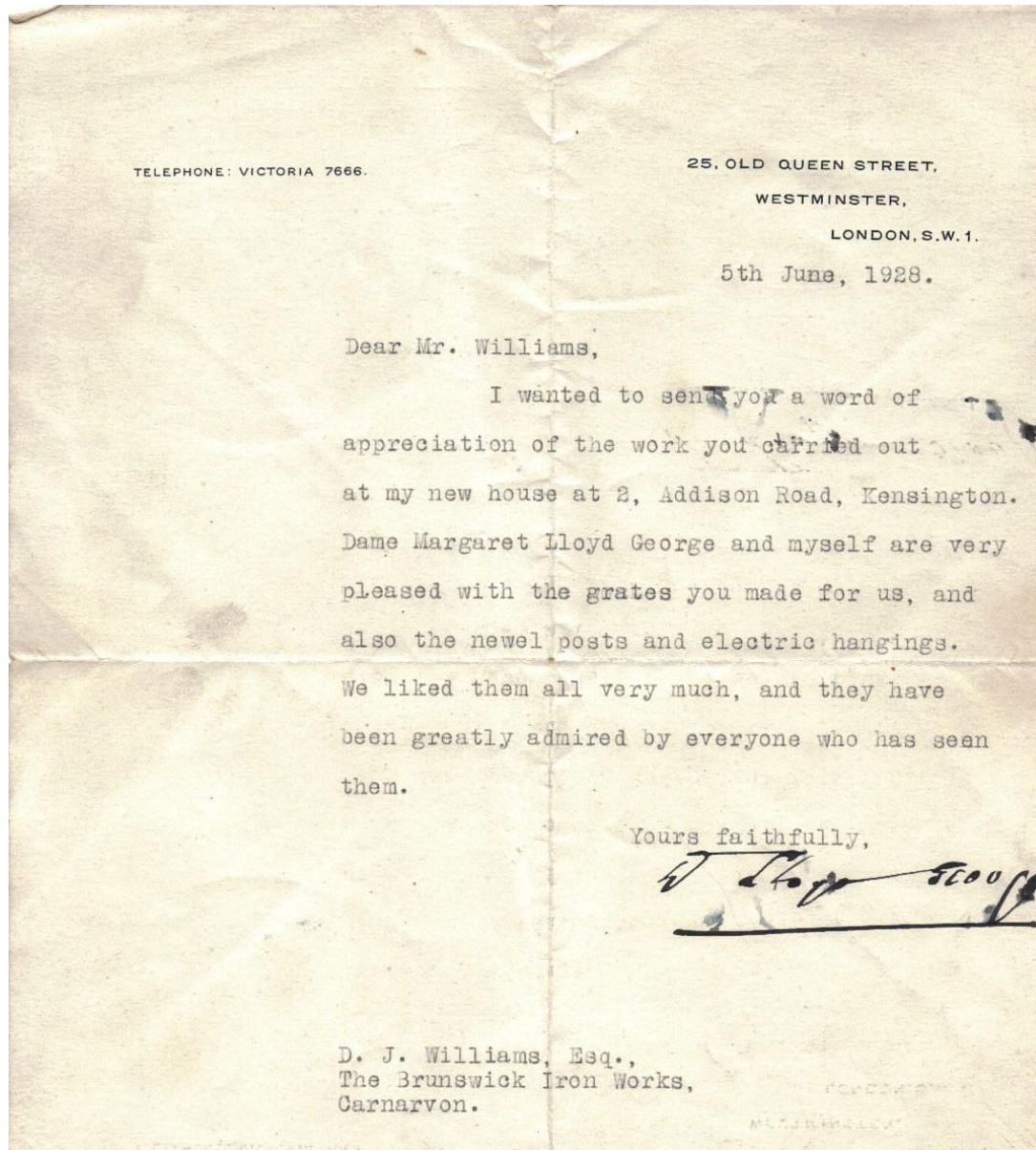


**Image 3.8. Casket for George V reproduced from the Williams Family Archive reproduced with their permission.**

### **3.25. Famous People and Places.**

The Brunswick Ironworks have carried out numerous commissions linked to well known places and famous people. In 1928 DJ Williams received a commission from David Lloyd George, the former Prime Minister and Member of Parliament for the Caernarfon Boroughs. He commissioned DJ Williams to create newel posts and electric light hangings for his new London

home at 2 Addison Road Kensington. The letter of thanks from Lloyd George was found during the research and forms part of the personal papers in the possession of the Williams family.



**Image 3.9. Letter of thanks to DJ Williams from David Lloyd George 1928. Reproduced from the Williams Family Archive with their kind permission**

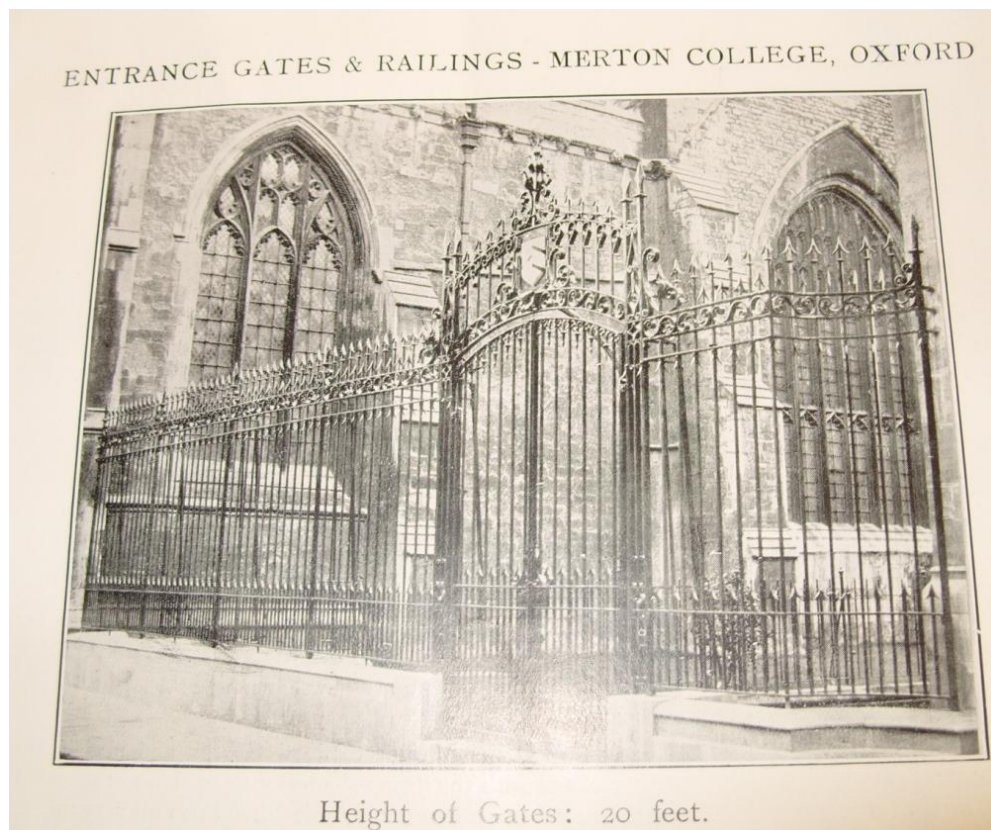
The reputation of DJ Williams as a master craftsman was growing and in 1931 he was contacted by Merton College Oxford to create new entrance gates and railings for the college. The gates and railings are still in use today and much admired by students and visitors to the college. DJ

Williams received a formal letter of thanks from Mr J. Deane Jones the Sub Warden at the college which is reproduced below from the Brunswick Catalogue by kind permission of the Williams Family.

*“Dear Mr Williams,*

*The new railings have been greatly admired in the last week by residents and visitors. Now they are painted in their proper colour they look quite delicate without losing their strength, and the gate looks magnificent. The college is entirely satisfied and I offer you our sincere congratulations on a fine piece of Craftsmanship”.*

*(Brunswick catalogue circa 1930’s).*



**Image 3.10. Merton College Gates Oxford taken from the original catalogue of Brunswick Ironworks. Reproduced from the Williams Family Archive with their kind permission.**

**3.26. Working with Artists.**  
**Sir Clough Williams Ellis.**

In 1946 DJ Williams and his son Harold received the commission for the monogram and gates for the Grave of the Earl of Dwyfor, the late Prime Minister David Lloyd George. This marked the end of a working relationship between these two men from Caernarfon that had commenced in 1911 with the Investiture of the Prince of Wales at Caernarfon Castle. David Lloyd George wished to be buried on the banks of his beloved river Dwyfor at Llanystumdwy. Sir Clough Williams Ellis created the design of the gates and monogram for the grave of this eminent Welshman who wished to be buried in Wales. DJ Williams translated the designs created by Clough Williams Ellis into metal. The gates and monogram can still be seen at the grave of David Lloyd George at Llanystumdwy.



**Photo 3.44. The gates and monogram designed by Sir Clough Williams Ellis made by DJ Williams for the grave of the Earl of Dwyfor (David Lloyd George). Photographed by Pam Smith 2010.**

After the Second World War, Brunswick Ironworks continued to flourish with DJ and Harold working side by side. The reputation of the company as master art metal workers was continuing to gain both local and national recognition.

### **Mr R.L. Gapper Artist.**

The company was commissioned to create a memorial to Sir Owen Morgan Edwards (1858-1920). Owen Edwards was born at Llanuwchllyn near Bala. The gate was designed by Mr R.L. Gapper a lecturer in art at Aberystwyth University and the design was entitled the Resurrection<sup>96</sup>. The gate can still be seen at Llanuwchllyn, and is a very unusual in that it opens using a pivot hinge with the pivot consisting of a skull.



**Photo 3.45. Gate for Sir O.M. Edwards designed by Mr R.L.Gapper made by DJ Williams  
Photographed by Pam Smith 2009.**

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<sup>96</sup> The gate was entitled “Resurrection” meaning “coming back to life “reflecting Sir OM Edwards’ Non Conformist Methodist Principles.



**Photo 3.46. Original photograph of the gate reproduced from the Williams Family archive (2010).**

The letter below from Mr Gapper was found during the research project, the original letter forms part of the Williams family private archive, but it was reproduced for a catalogue created by the Company in the 1930's. A copy of the letter below acknowledges the work of the company.

*The design for the above incorporates very massive granite supports (from Trevor quarry) to the wrought iron gate executed in your works. The latter is an attempt to represent the Christian belief in victory over death. This over sized figure is unusual in that no previous example was known where wrought iron figures were worked in this manner. I would like to testify to the happy co-operation I have had with you and your workmen in translating my design into its final form, and to record my gratitude for the manner in which you made this possible and the satisfaction which this work has given to all those concerned.*

*Yours sincerely*

*R.L. Gapper. B.Sc. A.R.C.A. Lecturer in Art.*

(Gwynedd Archives XD 135/3/1/1/ Brunswick Archive).

In 1947 DJ and Harold Williams (in association with R.L. Gapper); designed and created a fire screen and fire dogs as a gift from the people of Caernarvonshire to Princess Elizabeth on the occasion of her marriage to Philip of Greece. This allowed DJ and his son Harold to work together on the commission. The fire screen and fire dogs were a gift from the people of Caernarvonshire; commissioned by the County Council.





**Image 3.11. Fire Screen designed by R.L. Gapper made by Harold and DJ Williams. Reproduced from an original photograph from the Williams Family Archive with their kind permission.**

In 1957 the Brunswick Ironworks were commissioned to construct the entrance gates to the car park and garage for the Iraqi Royal Palace in Baghdad. However, King Faysal II was killed in the massacre at Al Zihar Palace on July 4<sup>th</sup> 1958 along with other members of the Royal family. The gates were never made but during the research project the original drawings for the proposed gates were discovered<sup>97</sup>.

### **Local Artist Ann Catrin Evans.**

The company has remained true to its roots and has continued worked with local artists, continuing the work undertaken by DJ and Harold Williams in the 1940's and 1950's. Meurig Williams has been working with Ann Catrin Evans since the 1990's on various projects ranging from street furniture, to modern sculptures, continuing the tradition established by DJ Williams when he worked with artists such as Sir Clough Williams Ellis and RL Gapper who designed the gates for the memorial to Sir OM Edwards at Llanuwchllyn.

Ann Catrin Evans created street furniture as part of an overall strategy to create public works of art for Cardiff, and designed the door handles for the Welsh Assembly building at Cardiff, both of which were made by Brunswick Ironworks following the her designs.

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<sup>97</sup> The designs for the gates of the Iraqi Royal Palace Baghdad are located in the appendix 8 page 342.



**Photo 3.47. Street Furniture designed by Ann Catrin Evans created by Brunswick Ironworks and installed by the company in 2009. From the Brunswick Ironworks archive reproduced with their kind permission.**



**Photo 3.48. Street Furniture in Cardiff designed by Ann Catrin Evans and made and installed by the Brunswick Ironworks 2009. Reproduced from the Williams Family Archive.**



**Photo 3.49. Rhondda Heritage Park Sculpture (2011) designed by Ann Catrin Evans constructed and installed by Brunswick Ironworks. From the Williams Family Private Archive.**

The Y shaped sculpture was designed by Ann Catrin Evans and was created by Brunswick Ironworks who installed the 23 foot high sculpture on the A 4058 in September 2009. The Y shaped sculpture is in metallic grey and measures approximately 23 feet and features an inscription of the words of the hymn Cwm Rhondda in both Welsh and English at its base.

### **3.27. Construction Commissions. The emergence of the metal fabricator.**

Harold Williams was now expanding the business, and was working with Pochin and Percy Trentam both construction companies who were heavily involved in the regeneration of Liverpool after the devastating damage inflicted during the bombing raids on the docks and surrounding areas during the Second World War.<sup>98</sup> It was during this period that the skills of the art metal worker were adapted they were no longer just art metal blacksmiths but became metal fabricators constructing metal structures for use within the construction industry.

Brunswick Ironworks was involved in providing structural steelwork for such projects as the Ford Motor Company's plant at Halewood. Ford moved to Halewood in the 1960's in response to a Government incentive to build the factory in Liverpool as a means of generating employment in the area, due to the decline of Liverpool docks. Brunswick provided the structural steelwork and

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<sup>98</sup> The docks at Liverpool were bombed during May 1941.

the skilled welders necessary to install the structures. They also worked extensively on the project to build an airport for Liverpool.

*“Liverpool Airport was built in the 1960’s and the company helped to build the terminal building and the hangers used for the storage of cargo and planes. The airport was expanded and Brunswick Ironworks worked extensively over the next six years on the terminal buildings and hangars required for this planned re-development of the airport”.*

*(Meurig Williams)*

Mr Harold Williams and Mr Meurig Williams continued to expand the business, working on the construction of one of the first nuclear power plants in Wales, Wylfa on Anglesey.<sup>99</sup> The 1960’s and the 1970’s were very successful and productive years for the company, working on projects as diverse as the building of a section of the M6 motorway known as “Spaghetti Junction” and the building of Liverpool Airport.

Brunswick Ironworks built the metal infra-structure for the fly over which forms part of the motorway. They also built the metal reinforcements and structures which allowed the motorway to pass over two main railway lines, the rivers Tame and Rea and the Salford Junction. This was the main intersection between the Birmingham and Fazeley Canal, the Grand Union canal and the Tame Valley canal. Construction on the motorway commenced in 1960 with the opening of the M6 motorway taking place in 1972

### **Liverpool Roman Catholic Cathedral.**

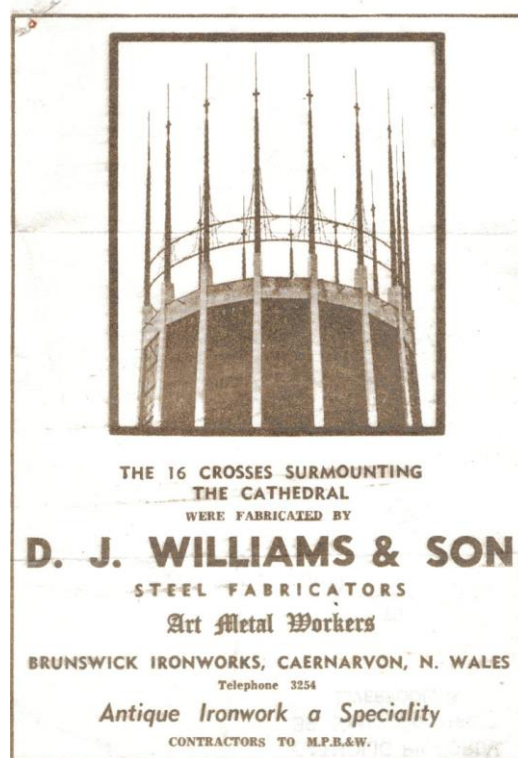
In 1967 the new Roman Catholic Cathedral in Liverpool was consecrated: the iconic Crown of Thorns that adorns the top of this iconic building was created by Harold Williams and was installed by Brunswick.

The first Roman Catholic Cathedral was built in 1856 by Edward Welby Pugin within the grounds of St Edwards College in Everton. In 1930 the Liverpool diocese purchased the old nine acre workhouse site at Mount Pleasant. Sir Edwards Lutyens was the architect who was selected for the building of the new cathedral. Sir Edward Lutyens had designed the Cenotaph in 1919. Work on the new cathedral stopped due to the outbreak of the Second World War and was never finished. The Lutyens Crypt which was completed after the war was to be incorporated into the new designs.

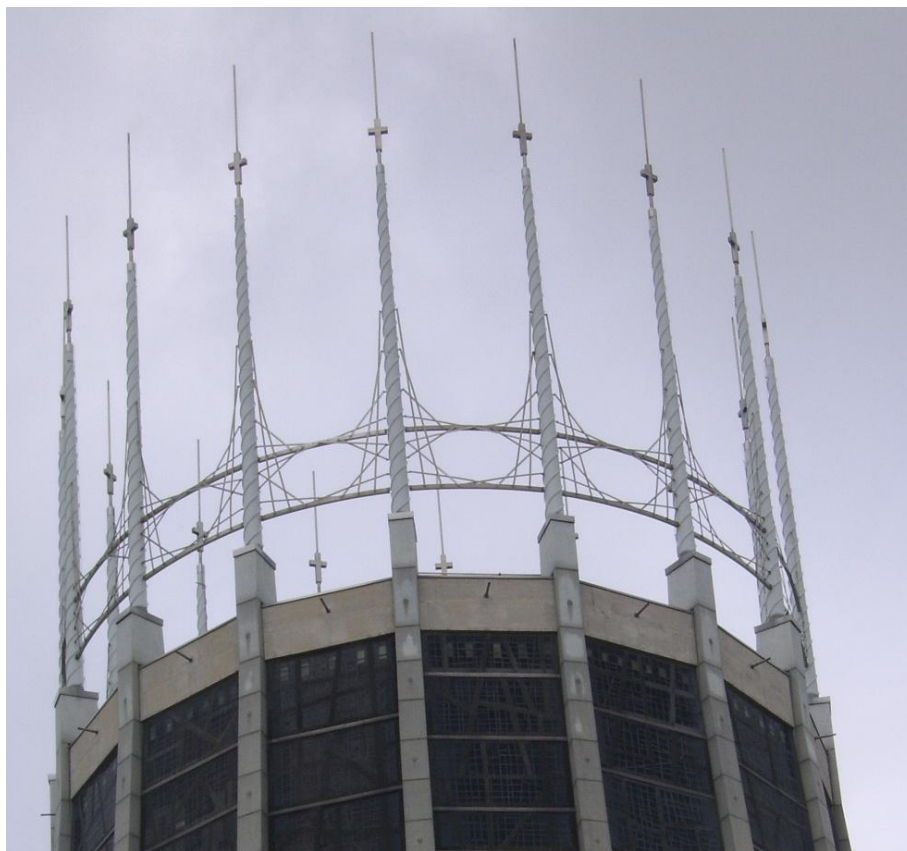
In 1960 architects from across the world were invited to submit their designs for the Cathedral. Over 300 entries were received the winning design was that of Sir Frederick Gibberd (1908-1984) and the building of the new Roman Catholic Cathedral commenced in October 1962. The Crown of Thorns designed by Harold Williams consisting of sixteen crosses. They were created at the slate quay works in Caernarfon and were installed by the company, who had to work on the dome of the cathedral carrying each cross up and welding it into position.

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<sup>99</sup> The work on the power station began in 1963 and it was activated in 1971 producing electricity for the National Grid.



**Image 3.12. Original leaflet advertising the work conducted on the Cathedral. Reproduced by kind permission of the Williams Family archive.**



**Photo 3.50. Crown of Thorns Liverpool Roman Catholic Cathedral. Photographed by Pam Smith 2009.**

The Crown of Thorns has since become an iconic landmark in Liverpool and is known affectionately as “Paddy’s Wigwam”.

**3.28. Harold and Meurig Williams working together at the Brunswick Ironworks.1969-1980**

By the 1970’s Meurig Williams the grandson of DJ Williams was now a skilled craftsman and worked on the replacement gates for the Cob at Porthmadog<sup>100</sup> which formed part of the sluice system for the area. The sluice gates illustrate how the skills of the company have diversified and developed to meet the demands of the twentieth and twenty first centuries. The gates were constructed on the quay side at the slate quay as they were too large to fit into the works. The photograph reproduced below illustrates the size and scale of the sluice gates which are still used today.



**Photo 3.51. Lock gates for the Cob Porthmadog. Meurig Williams with the lock gates. Williams family private archive reproduced with their kind permission.**

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<sup>100</sup> The Cob at Porthmadog is a sea wall built by William Madocks in 1811 to reclaim a large portion of Traeth Mawr from the sea. The sluice gates replaced by the Brunswick Ironworks are used in case of very high water to protect the town from flooding.

Throughout the 1970's the company continued to work in the local area and further afield with work in Liverpool and Birmingham with Pochin and Taylor Woodrow. However, the company had not forgotten its roots and continued to receive commissions for gates within the town for example the Barrister entrance gate for the Crown Court in Caernarfon.

During the late 1970's the company worked on the hydro electric power station project in Llanberis known as Electric Mountain. The power station was completed in 1984 constructed deep inside Eldir Mountain, an old slate cavern. During its construction 200.000 tonnes of concrete and 4.500 tonnes of steel were used. The company was involved in the section of the project relating to the steel infrastructure for the building, helping to build the steel super structure forming the largest man made cavern in Europe.

The company also worked in Anglesey at the Anglesey Aluminium Plant which was opened in 1971 and continued to work at the plant over the past forty years carrying out essential maintenance work until it closed in 2009/2010. During the 1990's the company continued to produce structural steelwork for various building projects in the area, one of the most notable being Llyn y Gele club house, a local caravan park that required a new modern club house for its visitors.



**Photo 3.52. Structural steel work for Llyn y Gele Clubhouse. Reproduced by kind permission of the Williams family.**

The company also built a bridge providing access over the river Seiont in Caernarfon the bridge was both functional and decorative. This was their first venture into bridge construction and the lessons learnt from this project providing valuable experience for future projects.



**Photo 3.53. Bridge over the Seint. Designed by Meurig Williams. Photographed by Pam Smith 2008.**

### **3.29. Brunswick Ironworks and the Welsh Highland Railway Project.**

The Welsh Highland Railway decided to reinstate the railway line between Caernarfon and Porthmadog utilising sections of the original line that closed in 1924. In 1995 planning permission was granted for the Caernarfon to Dinas section of the railway to be reinstated. The County Council agreed to a 999 year lease of the site at Dinas for the sum of £1 per year payable in advance. At the same time the old station buildings at Dinas were put up for sale, and they were purchased in 1996. The line from Caernarfon to Dinas was to follow part of the original Nantlle Railway route which was used to transport the slate from the quarries of the Nantlle valley to the Slate quay at Caernarfon. Fortunately some of the original line survived between Caernarfon and Dinas, most importantly the tunnels at Coed Helen and Plas Dinas along with the river bridge at Bontnewydd. With the building permission obtained the Welsh Highland Railway became a registered company in July 1996 with their charitable status granted in July 1996. This was a huge project with funding obtained from the Welsh Assembly and the European Union as well as private donations from supporters of the project.

The first Welsh Highland Railway was created by an Act of Parliament in 1901<sup>101</sup> and this saw the creation of the route between Porthmadoc and Beddgelert; this included a section of the old Croesor tramway. The tramway was the old horse drawn tramway that had brought slate from the nearby quarries for shipment out of Porthmadoc. 1906 saw the creation of the route from Beddgelert to Rhyd Ddu and in 1908 the route was extended to Dinas and Caernarfon. The railway suffered from financial difficulties and for a short time it was taken over by the Ffestiniog

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<sup>101</sup> The WHR was established by the PBSSR ACT 1901 (reference Johnson 2006 The Welsh Highland Railway).



railway company but this also failed resulting in 1924 in the suspension of train services for the Welsh Highland Railway. Fortunately this was not the end of the railway, Clough Williams Ellis the creator of Portmerion suggested that the track belonging to the WHR should be converted into a bridle path. This suggestion secured the future development and reinstatement of the railway line from Caernarfon to Porthmadoc.

In order for the railway to run from Caernarfon to Porthmadoc a series of original bridges required extensive restoration work and five bridges had to be replaced. The Brunswick Ironworks tendered for the work, were successful and have now completed the final bridge in 2009, the impressive Pont Croesor Bridge. They refurbished three existing bridges, and built and installed five new bridges, over the course of four years from 2005-2009. The railway now runs from Caernarfon to Dinas-Waunfawr-Rhyd Ddu-Beddgelert-Hafod y Lyn. Work on the final section of the line to Porthmadoc was completed in 2011.<sup>102</sup>

### **Bridges for the Welsh Highland Railway Project.**

Prior to the commencement of the Brunswick Research Project in February 2006 the company was already working on the construction of the Nantmor and Dylif bridges for the Welsh Highland Railway.



**Photo 3.54. Nantmor Bridge installation October 2006. Reproduced from the Brunswick Ironworks archive reproduced with their kind permission.**

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<sup>102</sup> This created one of the longest heritage railways in the country.



**Photo 3.55. Under construction Brunswick Ironworks 2008 the Pont Croesor Bridge.  
Reproduced from the Brunswick Archive with their permission.**



**Photo 3.56. Installation of Dylif Bridge March 2007. From the Brunswick Ironworks  
Archive reproduced with their kind permission.**

The work undertaken by the company on the restoration and building of the bridges was acknowledged through the publication of an article in the Snowdon Ranger Magazine entitled

Building Bridges Making Connections Number 59 Winter 2008<sup>103</sup> the article was written by the researcher as one of the tools utilised in raising the profile of the company.



**Photo 3.57. Bryn y Felin Bridge. Photographed by Peter Johnson (2007) reproduced with his kind permission.**

### **3.30. Brunswick Ironworks and the Heritage Railway Industry.**

The company has diversified working with the Heritage Railway sector utilising their skills in the building of water tanks and cranes for heritage steam railways. The company has built a number of tenders and water tanks for the engines of the Welsh Highland and Ffestiniog railways and have received commissions from other heritage steam railways.



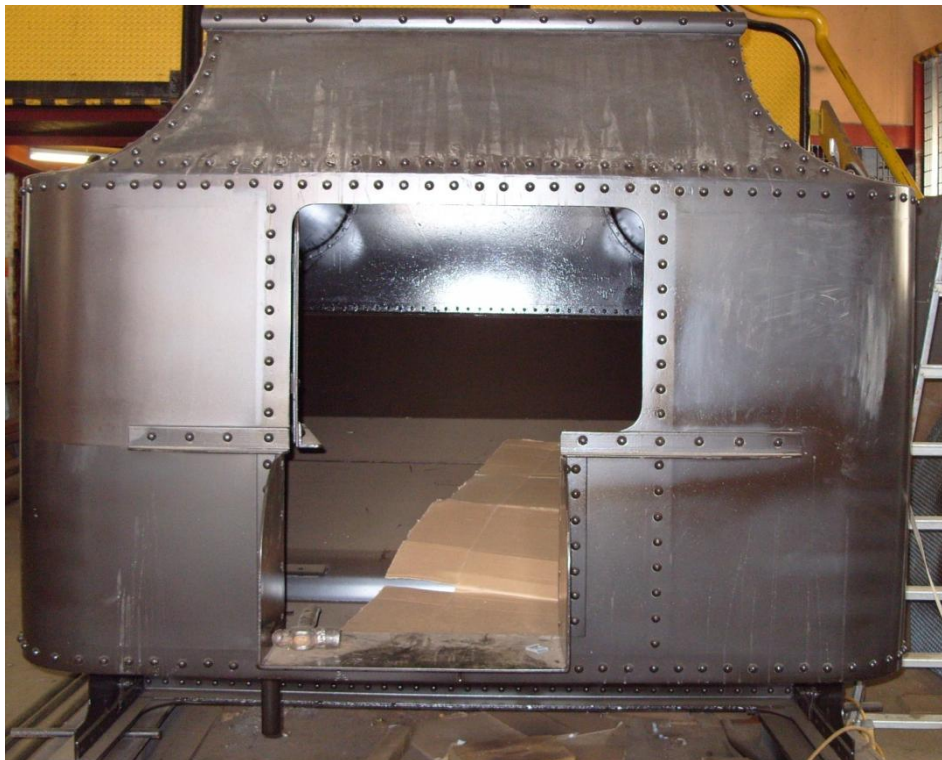
**Photo 3. 58. Beddgelert Station showing the water crane and water tower fabricated by Brunswick Ironworks for the Welsh Highland Railway. Photograph by Peter Johnson (2009) reproduced with his kind permission.**

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<sup>103</sup> The article is located in the appendix 8 in the section relating to the WHR Project and the Brunswick Ironworks pages 342-348.



**Photo 3.59. Water tank steel frame constructed for the Welsh Highland Railway Dinas Station Caernarfon. Photographed by Pam Smith. 2009**



**Photo 3.60. New tender fabricated by Brunswick Ironworks for a Garret Engine on the Welsh Highland Railway. Photographed by Pam Smith 2008.**

Brunswick Ironworks completed the water tanks for “Lyd” a replica engine of one the Manning Wardle locomotive that used to operate on the Lynton and Barnstaple railway before its closure in the 1930’s. The engine has been built to operate on the Welsh Highland and Ffestiniog Railways and was in steam for the first time over the May Bank holiday weekend 2010 at Boston Lodge works on the Ffestiniog railway at Porthmadog.



**Photo 3.61. Lyd at Rhyd Ddu. Photographed by Barrie Hughes( 2010) and reproduced with his kind permission.**

### **3.31. Commemorative Commissions.**

#### **DJ Williams and the coffin of the Unknown Warrior 1920.**

On November 1<sup>st</sup> 1920 DJ Williams received a telegram from the Ministry of Works requesting his presence in London on a “matter most urgent”<sup>104</sup>. Mr Williams travelled to London on the overnight train on November 1<sup>st</sup> and was commissioned to create the ironwork for the coffin of the Unknown Warrior. The reason for the late summons to London was attributed to the fact that the ironwork had already been made by someone else but was judged unsuitable.<sup>105</sup>

*“Mr Williams travelled up to town all night and went back the next night (to Caernarfon) and worked day and night to finish”*

*(Work 20/1/3).*

Despite detailed research, no documentation to this effect has been found to confirm this theory however Mr Meurig Williams the grandson of DJ Williams confirmed verbally that this was possibly the reason why his grandfather was contacted at such short notice. Mr Meurig Williams spoke about the role of his grandfather in the creation of the ironwork for the coffin of the Unknown Warrior during BBC’s Priceless Antiques programme (November 2009). He believed that his grandfather was contacted at such short notice because Lloyd George was aware of his work for the 1911 Investiture at Caernarfon, coupled with this was the fact that his work was well

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<sup>104</sup> The text of the telegrams is reproduced in the appendices in the section relating to the Unknown Warrior by kind permission of the Williams family.

<sup>105</sup> Photographs of the work in the Tower and Victoria Tower Gardens are located on page 93.

known to the Office of Works as a result of his work in the Tower of London and Victoria Tower Gardens.

DJ Williams worked at his workshop in Porth yr Aur under complete secrecy, creating the eight handles and iron bands for the coffin, and antique hammering the plaque for the top of the coffin that carried the inscription:-

*A BRITISH WARRIOR WHO FELL IN THE GREAT WAR 1914-1918  
FOR KING AND COUNTRY.*

On November 1<sup>st</sup>, the Prime Minister Lloyd George announced that:-

*“Warrior was to be the word chosen, so that the body chosen would represent the three services”.*

*(Inglis.1993:15).*

The name Warrior was selected as this would represent all three services that had fought in the Great War, even though the body selected for burial was a soldier from the battlefields of Flanders. The coffin was a gift to the Nation from the Guild of Undertakers to the British people; it was made from English Oak taken from a tree felled at Hampton Court Palace. The coffin was made by Messrs. Ingall, Parsons & Clive Co Ltd, 149 Euston Road London.<sup>106</sup> The iron bands designed by DJ Williams enabled a Crusader sword from the King’s private collection to be inserted under the plaque on the top of coffin.

*“It weighed almost two hundred-weight and had been patterned on the design of a sixteenth century treasure chest, made from two inch English oak with slightly rounded sides and lid, and a dark wax finish. There were two pairs of hammered wrought iron handles on either side of the coffin, which was bound with broad, studded bands of wrought iron. A plate of beaten iron in the shape of a sixteenth century shield, bearing the inscription; “A British Warrior who fell in the Great War 1914-1918 for King and Country”.*

*(Hanson 2005:435, the bold text is researcher emphasis).*

The ironwork designed and created by DJ Williams at his workshop in Caernarfon was acknowledged by Hanson:-

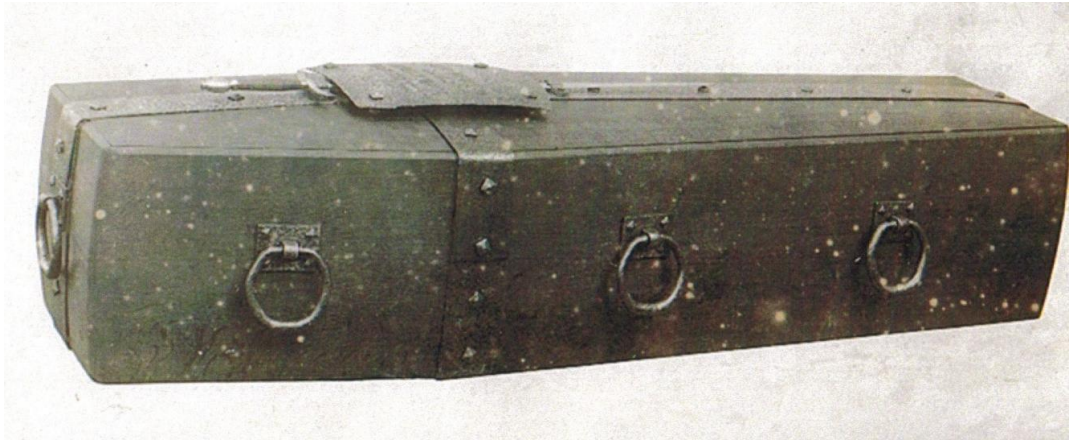
*“In deference to Lloyd George, the ironwork had been sent to Caernarfon to be finished by the craftsman who made the ironwork for the Investiture of the Prince of Wales”.*<sup>107</sup>

*(Hanson 2005:p435).*

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<sup>106</sup> As a result of the BBC Antiques Road Show Programme in 2008, Brunswick Ironworks received a letter via the BBC from the grand -daughter of one of the men from Ingall Parsons and Clive who had made the coffin requesting information about her grandfather. We explained that we did not have information relating to the construction of the coffin, but she was sent a copy of the photograph of the coffin detailing the Brunswick’s work.

<sup>107</sup> Whilst Hanson asserts that the granting of the commission to D.J. Williams was as a result of the prior relationship with Lloyd George, the Williams family oral history extends this through the acknowledgement of his work with HM Office of Works.



**Photo 3.62. Original photograph of the coffin detailing the work undertaken by DJ Williams  
Reproduced with the kind permission of the Williams family from their private collection.**



**Photo 3.63. The spare coffin handle created by DJ Williams in 1920. Reproduced with the  
kind permission of the Williams family. Photographed by Pam Smith 2010.**

### **The Journey of the Coffin.**

Initially the Williams family had believed that the coffin was transported to London where the “Unknown Warrior” was then placed inside the coffin prior to the service on November 11<sup>th</sup> 1920. Whilst researching, the project it was discovered that the coffin had in fact been transported to France arriving there on November 9<sup>th</sup> and on November 10<sup>th</sup> it was taken to Boulogne.<sup>108</sup>

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<sup>108</sup> However, members of the Williams family were unaware that this had occurred, assuming that the body had been transported to the United Kingdom prior to it being placed in the coffin. The fact that a perfect coffin needed to be transported to France would not have allowed for any error on the part of D .J. Williams and made his achievements the more remarkable.



**Image 3.13. The Unknown Warrior leaving the Chapel at St Pol. November 1920. Still photograph taken from the actual Pathe film of the event. Reproduced with kind permission of the Imperial War Museum.**

As part of the research project access was granted to the researcher by the Williams family to the original telegrams, photographs of the coffin, the letter of thanks from Sir Lionel Earle, the spare handle from the coffin, and the second plaque that was partly antique hammered by DJ Williams. These artefacts form part of the private collection of the Williams family, the second plaque was rejected because it carried the inscription:-

**A British warrior who fell in the Great War**  
**1914-1918.**  
**For King and Empire.**



**Photo 3.64. Rejected plaque for the coffin of the Unknown Warrior. Reproduced by kind permission of the Williams family. Photographed by Pam Smith 2007.**



This is the best reproduction of the plaque due to the effects of ageing and the partial antique hammering of the plaque by DJ Williams. The plaque that was attached to the top of the coffin buried in Westminster Abbey was not antique hammered, as the process obscured the text on the plaque. The plaque was rejected due to a decision taken by the War Memorial Committee that the Unknown Warrior should commemorate the fallen from the United Kingdom and not from the Empire.

The contribution of DJ Williams was acknowledged by the Ministry of Works:-

*“Mr Williams carried out his section of the work in a most excellent way and imparted to the metal a finish which only a craftsman of the highest order could produce. The work proved to be very laborious entailing working through two consecutive days and nights without sleep”.*

*(Work 20/1/3).*

The contribution made by DJ Williams relating to the burial of the Unknown Warrior passed into memory, and it was not until work began on the research project that his contribution to this National event was brought to the attention of a wider Public. The story of the Unknown Warrior and DJ Williams illustrates the journey from history to heritage; starting with the creation of the ironwork for the coffin of the Unknown Warrior in 1920 which with the passage of time became a heritage asset. This connection was highlighted through the commemorative events of the 21<sup>st</sup> century which remembered the Great War, and which brought the connection between the Unknown Warrior and the Brunswick Ironworks to the attention of a global audience.

### **3.32. 90<sup>th</sup> Anniversary of the burial of the Unknown Warrior.**

During the research period of the project, a number of commemorative events took place which commemorated the Great War (1914-1918). 2006 marked the 90<sup>th</sup> Anniversary of the Somme Offensive, 2008 denoted the end of hostilities and 2010 celebrated the 90<sup>th</sup> Anniversary of the burial of the Unknown Warrior in Westminster Abbey. These events provided the perfect opportunity for the history of the company to be utilised to mark these events, with the artefacts belonging to the company relating to the Unknown Warrior exhibited in Westminster Abbey (2006) and the Imperial War Museum (2008).

In 2010 the 90<sup>th</sup> anniversary of the burial of the Unknown Warrior in Westminster Abbey was commemorated with the Kent and East Sussex Railway <sup>109</sup>marking the event through the restoration of the Cavell van<sup>110</sup> which carried the Unknown Warrior from Dover to Victoria station in November 1920. They own the Cavell van and with the help of a grant from the National Lottery Fund, restored it to working order. The restoration work on the body of the Cavell Van was carried out at the Derby locomotive works in 2010. An article in the Heritage Railway Magazine mentioned the project and at the request of the company, the researcher was

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<sup>109</sup> Kent and East Sussex is a heritage steam railway.

<sup>110</sup> The Cavell van was named in memory of Nurse Edith Cavell who was executed by the Germans 1915 during the First World War for assisting British prisoners of war to escape. Her body was repatriated in May 1919 her body was carried from Dover to London aboard a luggage van renamed Cavell in her honour and now in the ownership of the Kent and East Sussex Railway. The connection between the Cavell vans is recounted on pages 367-368.

asked to contact them and to explain the link between the Unknown Warrior and the Brunswick Ironworks. As a result of this contact, the Brunswick Ironworks were commissioned to create replica handles and iron bands for the coffin that was to be displayed inside the Cavell van. In order to re-create the bands and handles which would be used on the replica coffin, Meurig Williams and his staff studied the original photographs of the coffin in order to reproduce accurate copies of the work undertaken by DJ Williams in 1920. The bands were created using mild steel as wrought iron is no longer available for this type of work. The work was very labour intensive with each band being heated and struck by hand using the same tools which would have been used by DJ Williams in 1920. The photographs below show the iron bands being antique hammered, they were then painted black. The handles themselves were made by Meurig Williams, this was a time consuming task with each handle being individually crafted by hand to ensure that they resembled the original handles made by DJ William; fortunately Meurig Williams had the original handle which he used as a template.



**Photo 3.65. The bands for the coffin were antique hammered by the craftsmen at the Brunswick Ironworks, Photographed by Pam Smith 2010.**



**Photo 3.66. The replica handles and bands made by Meurig Williams and his team prior to them being fitted onto the replica coffin. Photographed by Pam Smith 2010.**



**Photo 3.67. Replica sword for the coffin donated by Ben and Sam Smith. Photographed by Pam Smith 2010.**

The interest generated in the research project with the Brunswick Ironworks prompted a familial interest in the project resulting in the researchers' family contributing to the project in the form of the gift of a replica sword for the top of the coffin for the Kent and East Sussex Railway Cavell Van Project. Kent and East Sussex railway required a replica plaque for the top of the coffin and this was sourced after much research from a company in Liverpool that still hand etches letters into copper. The replica plaque will gradually age as it has been treated with a special chemical compound that protects the copper whilst at the same time speeds up the ageing process.



**Photo 3.68. Replica plaque created for the Kent and East Sussex Railway. Photographed by Pam Smith 2010.**



**Photo 3.69. Replica coffin detailing the replica handles. Brunswick Ironworks September 2010. Photographed by Pam Smith.**

The coffin was fitted with the iron bands, handles and plaque during the course of a day so that the coffin could be transported to Tenterden, Kent where the coffin was polished and the black bands and handles repainted by the volunteers from the railway who had built the replica coffin. The restored luggage van was unveiled at the Kent and East Sussex Railway on November 10th 2010. The commission for the replica coffin for the Unknown Warrior closed the circle on the work that was undertaken by Meurig Williams' grandfather in 1920, and whilst Meurig Williams had more time to work on the commission than his grandfather, he commented that;

*“He would have approved of my work, even though I could not use wrought iron as none was available and I had to heat the metal using a welding torch, but I did bend the metal by hand as my grandfather would have done when he made the original handles and bands for the coffin”.*

*(Meurig Williams, September 2010).*

### **3.42. Conclusion.**

The contribution of DJ Williams to the ironwork for the coffin of the Unknown Warrior in 1920 revealed the importance of remembering the fallen who had given their lives in the service of their country throughout the centuries. In order to appreciate the contribution made by DJ Williams to the tradition of creating memorials to the fallen an overview of the history of war memorials is located in the appendices in the section entitled Unknown Warrior.<sup>111</sup> . The appendix also contains a special reference to the creation of war memorials within Caernarfon so that the development of these memorials is placed within the context of the research project. This section also contains the detailed background planning and events leading up to the burial of the Unknown Warrior in 1920, it is provided as it places in context the contribution made by the Brunswick Ironworks to the event in 1920 and how this link was developed and shared with the Kent and East Sussex Railway in 2010 to mark its 90<sup>th</sup> Anniversary.

The section relating to the creation of the Tomb of the Unknown Warrior in 1920 contained in this section illustrates how history has become part of heritage; not only in terms of the Brunswick Ironworks but also that of Great Britain through the creation of the Tomb of the Unknown Warrior in 1920. The transformation of history into heritage involves society in making decisions relating to what they perceived as worthy of saving and that the heritage preserved as a result of this choice would be valued by future generations in terms of what they needed or wanted to save. History imparts value based on decisions made by historians as to what can be proven through evidence, whereas heritage requires a value judgement based on what society selects as worthwhile. In the case of the creation of War memorials they are based on fact (history) but also on the decisions made by the bereaved families, communities and Nations (heritage) that their sacrifices should be recorded for future generations through the creation of lasting memorials.

The history of the development of Caernarfon facilitated the identification of a sense of place for the heritage of the Brunswick Ironworks as it allowed their history to be placed within the context

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<sup>111</sup> Appendix nine is located on pages 349-390.

of the town. The fact that the business has been located within the town for over a century provided a link with the past through its work as art metal blacksmiths connecting locations within the town and the local area. The company is still part of the industrial heritage of the town and is developing a future heritage through its work with the Welsh Highland Railway; project a new heritage attraction for the enjoyment of present and future generations to appreciate.

The skills of the art metal blacksmith were explained through an overview of the history of the blacksmith which outlined the development of these skills and which placed the work of the Brunswick Ironworks firmly within the history of the blacksmith. The history of the company demonstrated the value of this type of ethnographic research project which revealed the importance of photographic and documentary evidence within the research project and it also revealed the foresight of DJ Williams to photograph and record his work at a time when photography was still developing. The Brunswick heritage is an assemblage of the memories and stories revealed during the project of three generations of the Williams family as blacksmith art metal workers. It established an emotional connection between the company and the researcher. It was a shared journey that revealed meaning and understanding as the project developed and evolved. Hooper Greenhill (2000) referred to this emotional connection as meanings and perspectives which are derived from objects viewed within the settings in which they were created. The Brunswick artefacts were touched, seen and felt during the research project establishing an emotional link which facilitated an appreciation of the skills involved in creating these objects. The objects created by the company are unique; they are not mass produced as they are hand crafted demonstrating the skills of the art metal blacksmith. The creation of the artefacts showcasing the skills required by the art metal blacksmith demonstrating the various processes involved in creating the objects, the hitting, shaping, heating and cooling of the metal endowing it with the spirit of the art metal worker.

The ironwork for the coffin of the Unknown Warrior and the Crown of Thorns were objects created by DJ and Harold Williams, imbued with meaning as a result of the context in which they exist (Westminster Abbey and Liverpool Roman Catholic Cathedral). Their impact was anticipated during their construction through the selection of their location and how “people” would react /interpret their importance as examples of heritage which demonstrate the skills of the art metal blacksmith. The contribution made by DJ Williams to the Tomb of the Unknown Warrior highlighted the strength of ethnographic research in that it focused “the event in a national setting”. This provided an insight into real life situations and their impact on people and places establishing a connection which enriched the research project through the immersion by the researcher in the history of the company during the fieldwork phase.

This chapter assisted in the identification of a sense of place for the research project in terms of understanding where and how the heritage of the Brunswick Ironworks fits into the current level of heritage provision within Caernarfon.

# **Chapter Four. Methodology.**

## **4.1 Introduction.**

In order to create a detailed history of the company it was necessary to work very closely with them over a three year period allowing the researcher to establish a working relationship with the company which immersed the researcher in the daily activities of the company, observing first-hand the skills of the art metal blacksmith in the 21<sup>st</sup> century. The immersion process placed the researcher firmly within the research project which revealed the research as a documented journey, a visual auto-ethnographic case study which allowed the researcher to experience immersion within the project enabling it to grow and develop as the research progressed. The research process grounded the project in terms of creating aesthetic experiences gained throughout the course of the research process which revealed “moments of self”. Noy (2007) termed this type of investigation as, research which seeks to unpack the felt, touched, embodied construction of knowledge. The Brunswick project resulted in a body of knowledge obtained from researching the history of the company which created bridges which allowed reflection on the past but also building connections to the future through the active promotion of the history and heritage of the company through its link with the Unknown Warrior.

## **4.2. Ethnographic Research Methodology.**

The research methodology lent itself to a visual auto-ethnographic approach with the case study the Brunswick Ironworks facilitating the inclusion of other research methods which were incorporated into the research methodology which supported the ethnographic case study. The strength of ethnographic research is that it focuses on “ordinary events in a natural setting” providing insights into real life situations from a personal perspective. An ethnographic research approach facilitated connections within the project to enrich the research which was supported by the visual and photographic evidence which emerged relating to the history of the company. The data which was generated as a result of the research project was a direct result of the working partnership with the company revealing a rich and diverse heritage that opened windows of opportunity for both the researcher and the company. An ethnographic approach to the research project was adopted as it focused the Brunswick Ironworks at the heart of the research tracing the journey from history to heritage as illustrated through the history of the company. The advantage of an ethnographic case study was that it allowed a close connection to develop between the researcher and the company with the resulting data being recorded in the form of a journal which was used to identify and set the targets for the research project which provided a detailed record of how the project developed and evolved. The fact that the researcher was able to work alongside the company and observe their work first hand provided a unique insight not only into the skills of the modern day art metal blacksmith, but developed a personal understanding of the skills required by the various staff who have worked for the company over the past one hundred years.

The Brunswick project lent itself to an ethnographic approach as there was a desire on the part of the researcher to understand how the company had developed and grown over the past century. This immersion in the working life of the company was a two way process allowing the researcher to learn about the skills involved in creating objects in metal, and how the unique history of the

company revealed itself through the case study which was developed to help to shape the future development of the company by utilising its past history as master art metal blacksmiths and its future as metal fabricators. It also allowed Meurig Williams to share his knowledge with the researcher. The ethnographic case study approach was selected as it illustrated the exploratory and descriptive aspects of the study as revealed through the history of the company and its transformation into “heritage” achieved through the journey experienced during the project by the researcher. Yin (1994:2) championed the use of the case study as a tool which contributes to our knowledge about an individual/ organisation which focused the research in a real life setting. Case studies can provide the answers to questions in a setting which encourages reflection/adaptation and review to take place in such a way that the project can grow and evolve as the research develops over the period of the study.

Hammersley et al (2007) discussed the value of ethnographic research as a method which requires an acceptance on the part of the researcher that the goal posts/outcomes of the research will change during the research and that ethnographic research is a reflexive process that operates throughout each phase of the research project. The case study approach selected for the research project was supported by the use of a number of other research methods which in turn supported the ethnographic case study. These supporting methodologies were selected in order to reduce the weakness of an ethnographic case study which can suffer from a lack of neutrality on the part of the researcher due to the immersion experienced by the researcher whilst studying the topic. This immersion can result in research which is imbued with personal judgements and reflections made by the researcher relating to the area under study. However, ethnographic research case studies have inherent strengths in the case of the Brunswick project this extended to the use of multiple data sources such as artefacts, diaries, photographs and recorded conversations that constitute the descriptive text which is set within a real life context. Ethnographic research according to Miles and Huberman (1994) is a unique research tool as it focuses the researcher on ordinary events in natural settings providing an insight into real life situations and their impact on people and places. The creation of the history of the company during the research project revealed that the research methodology best suited to this project was an ethnographic case study which emerged from the fusion of observation on the part of the researcher and the discovery of the extensive photographic and documentary archive held by the Brunswick Ironworks. Scales (2010) termed visual ethnography as the new orthodoxy of qualitative methods of research providing a methodology that allows access to material under study on a sensual and emotional level for both researcher and respondent. This type of research places the researcher firmly within the research encouraging active participation. This aspect of auto-ethnographic research was evident in the work undertaken during the research with Westminster Abbey (2006) when the artefacts from the Unknown Warrior were taken to the Abbey. The artefacts from the company were handled by the Receiver General of Westminster Abbey<sup>112</sup>, followed by a long silence which was eventually broken by the Receiver General who explained that he had been so moved by the experience of touching the artefacts that he had been emotionally moved by the experience.

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<sup>112</sup> The Receiver General of Westminster holds the most senior lay position at the Abbey.



### **4.3. Ethnographic Case Studies: - Strengths and Weaknesses.** **Strengths of case study research.**

Ethnographic research has advantages and disadvantages associated with this type of research method. On the one hand it allows immersion in the subject matter under study, but at the same time the interpretation/recording of the observations made during the study can reflect personal judgements and experiences brought to the research by the researcher. Immersion in the project allowed the researcher to work at ground level focusing attention on the story and how the history of the company evolved into a heritage asset which helped to guide its future development as revealed during the course of the research project. The ethnographic study (Brunswick Ironworks) charted the journey from history to heritage as a mechanism that was developed to raise the profile of the company which in turn shaped its future development.

Huberman et al (1994) cited the strengths of a case study as being able to provide sources of new information grounded in rich descriptions and explanations of processes identified within the area of study. The research is allowed to develop and evolve throughout the course of the project allowing the “story” revealed within the case study to have a unique spirit achieved through the extended contact with the subject (Brunswick Ironworks) and the shared dynamics of participation as experienced by the researcher and the subject. The creation of the case study on the Brunswick Ironworks facilitated the use of multiple sources of evidence such as photographs, artefacts and oral histories. The strength of ethnographic research is that it focuses on ordinary events in natural settings. The research material becomes the focus placing it at the heart of the project, creating a structure which is supplemented by the inclusion of other selected research methodologies.

Yin (1984:80) cited the value of single case studies as being the “stuff of much qualitative research” and that they can be very vivid and illuminating especially if the material selected is “critical, extreme, unique or revelatory”. Case studies create the “opportunity to learn about the subject matter” (Yin 1984:2), which in turn enhances our individual learning as part of the journey undertaken during the research project. Yin advocated that one of the strengths of the case study methodology is that it enables a research project to be both exploratory and descriptive; in terms of the Brunswick project this equates to researching the history of the company (exploratory) and descriptive in terms of utilising its history to effect change in a real life situation (raising its profile through the heritage of the company). The strengths of case study research in the case of the Brunswick project sought a solution to the research question for the project how “the journey from history to heritage can shape not only the past but that it can help to shape the future”. The case study as advocated by Yin enables a unit of analysis to be explored over a period of time which in the case of this ethnographic case study charted the journey experienced by the researcher throughout the course of the project. Yin states that it is not necessary to match/test any existing theory but rather that it (the case study) focuses on events in a real life situation as revealed through the case study.

The demands placed on the researcher during a case study are “far greater than those of any other research strategy” (Yin1984:55). In order to undertake case study research Yin advocates the

acquisition of specific skill sets for the researcher ranging from having the ability to ask good questions to a good listener and to be able to interpret the answers received without bias, be adaptive and flexible viewing situations as opportunities not threats which enhance the research by revealing new avenues of enquiry within the research project. The collection of data during the research project with the Brunswick Ironworks opened a door though which “I” (Pam Smith) walked, building on already existing skills but also requiring the acquisition of new skills as and when the need arose (learning how to create an archival catalogue). The inclusion of evidence from the numerous documents, archival records, physical artefacts, direct observations and interviews conducted throughout the research project with Mr Meurig Williams provided a knowledge base which was stable and exact providing the opportunity for the research to be reviewed by others.

### **Weaknesses of the case study.**

Yin (1984) highlighted the problems associated with weaknesses of case study research as the inability to retrieve results produced as part of the case study when it was conducted and the associated problems of replication necessary to validate the research. Yin stated that this is not always possible as the research takes place within a real life setting and recreating the exact conditions under which the research took place is very difficult to achieve; as too many variables are involved. These variables ranged from reporting bias on the part of the researcher due to inexperience and the desire to produce a report. The problems associated with gaining access to documents and archival records used within the study could be blocked or limited access to new researchers. This combined with inaccurate reporting due to poor recall on the part of the researcher when recording interviews can affect the validity of a case study research. The production of a case study is time consuming in terms of the demands placed upon the researcher especially when conducting interviews and researching documents. The case study methodology has been accused of being biased in terms of the value judgements made by the researcher relating to the material included within the study. However, Yin indicated that these weaknesses can to a certain extent be reduced within the case study by the selection of numerous sources of evidence which in turn becomes one of the strengths of this type of research. The use of multiple sources of evidence providing the opportunity for triangulation resulting from the development of converging lines of inquiry identified within the case study.

#### **4.4. Brunswick Case Study Methodology.**

The resulting case study ( Brunswick Ironworks) utilised a number of different research methods which supported the ethnographic case study which as Veal advocated can illustrate how:-

*“Case studies can be the basis of substantive research projects in their own right”.*

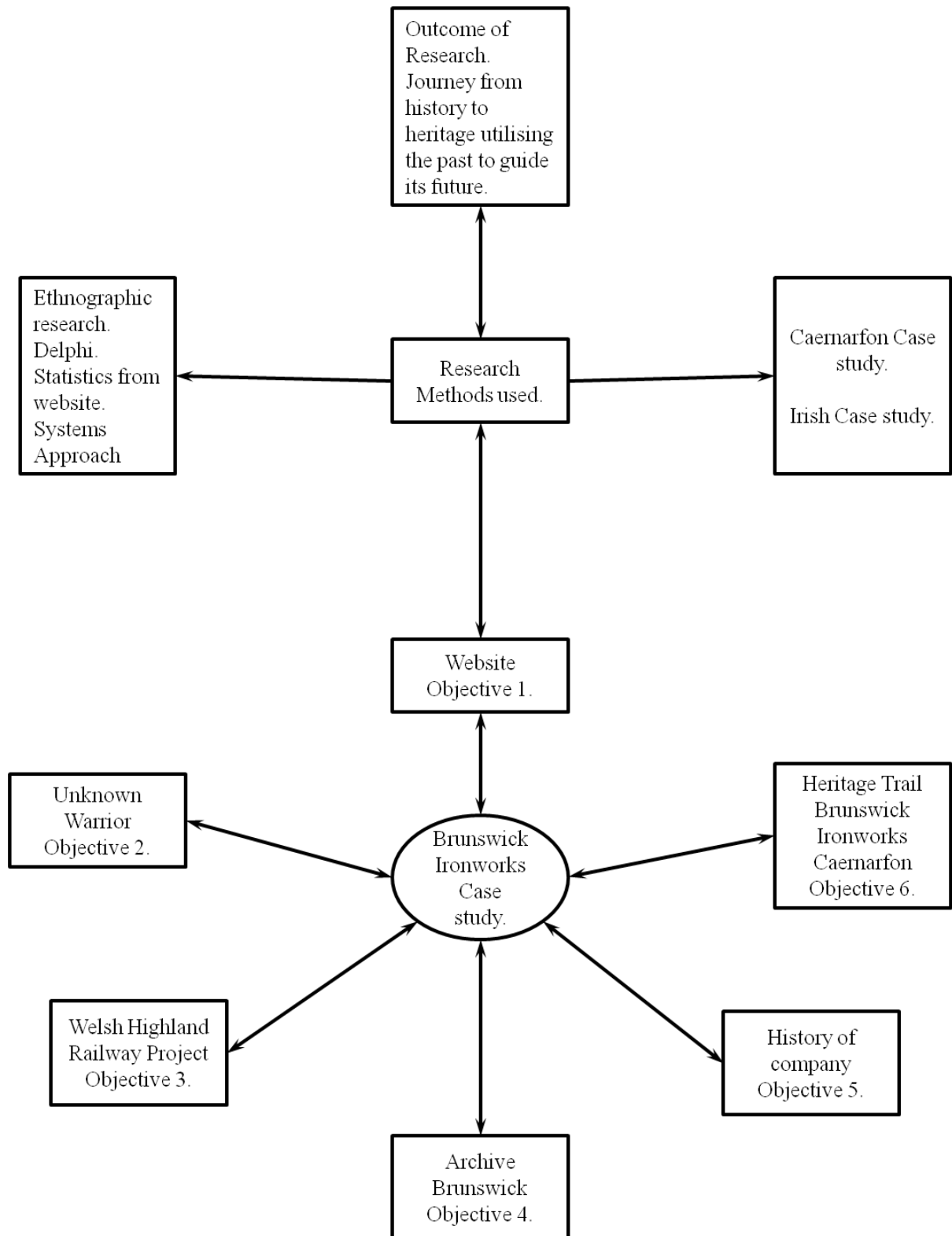
(Veal 2006:109).

The research project was multi-faceted with many strands of evidence emerging as the project evolved and developed, the case study methodology ensuring that the growth was fluid during its early stages whilst the full extent of the project was still emerging. Thomas (2011) broke down

the content of a case study into two distinct sections acknowledging that case study research is conducted in real life situations and that it can be used as the basis for detailed research as it provides the framework for the research project to evolve and develop as the research progresses. Thomas (2011) suggested that effective case study research follows a number of steps that are essential to ensure that the research design is based on a recursive approach, with the research developing and evolving with many twists and turns as new facts emerge from the research process which tie each aspect of the case study design to each other. The case study approach for the research project focused on using the methodology as a tool, which would explore the processes involved in the transition from history to heritage for the Brunswick Ironworks. In order to achieve this a number of additional research frameworks were added to the case study the Delphi technique used as an assessment tool to evaluate the impact of the research in terms of tracing the journey from history to heritage and how the past history of the company could aid its future development. This multi-phased approach was advocated by Thomas (2011) with the case study as the base building block and the additional research frameworks added to it to aid in the creation of an overall picture forming the building blocks upon which the research project was allowed to evolve and develop during its entirety:-

*“Case studies are analyses of persons, events, decisions, periods, projects, policies.... or other systems which are studied holistically by one or more methods, The case that is the subject of the inquiry will be an instance of a class of phenomenon that provides an analytical frame-an object-within which the study is conducted and which illuminates and explicates”.*

*(Thomas 2011:23).*



**Diagram 4.0 illustrating the development of the Brunswick Project Smith 2012**

The above diagram is a visual representation of how the project developed, and illustrates that the case study design for the project was the building block for the research supported by the inclusion of additional research frameworks which were selected and utilised creating a unified

structured approach for the research. The data generated from the visits to Southern Ireland supported the evidence that was emerging from the data generated from the Brunswick case study illustrating how the past can help to build a future not just for a company but for whole communities (as demonstrated through the Irish case studies). The creation of the ethnographic case study involved recording data relating to the history of the company which resulted in the creation of field notes which provided the opportunity for self reflection. Choices were made throughout the project relating to how it developed which was supported by discussions with Mr Williams relating to which material to include and exclude within the research project. This approach to research allows innovation and creativity to emerge resulting from its flexible approach.

#### **4.5. Reflexive Interpretation.**

Reflexive interpretation enabled the selection of research methods for the project which complemented each other, encouraging cross fertilisation of ideas as the project developed and evolved. This approach allowed each methodology to fulfil its role whilst not identifying any one methodology as the “only right approach”. Reflexivity facilitates the growth of the research project inspiring the researcher throughout its duration by allowing the empirical material to develop and reshape the outcome of the project (Alvesson: 2001:249).

Reflexive interpretation creates possibilities within the research project allowing for “reflection” to occur whilst the project evolves. This was an essential element of the Brunswick project as the empirical data generated throughout the project constantly altered the outcomes and expectations of the project. Reflexive interpretation allowed the researcher to step back from the project, assess the implications of any developments, and be creative in providing solutions so that the strands of the project interlinked to achieve the goal of the project raising the profile of the company through its heritage. A reflexive approach for the Brunswick project allowed all options to remain open in terms of achieving/not achieving the objectives set for the project. The fact that Meurig Williams was so actively engaged in the research project throughout allowed for “reflexive interpretation” as he had an in depth knowledge relating to the history of the company and the Welsh Highland Railway project, with the oral history passed down through three generations of the family supporting the project. Reflexive interpretation research is challenging and it keeps the researcher focused on the structure of the research project through reflection resulting in the creation of an original research project. The feedback obtained from “reflection” highlighted the strengths and weaknesses identified within the project which required attention but it also allowed the project to develop and evolve as a result of this process.

#### **4.6. Delphi Technique.**

The Delphi technique was selected as a supporting methodology for the ethnographic case study as it facilitated the collection of the opinions of a group of experts in their field who could comment on the impact of the research project. The Delphi methodology is used extensively within the heritage, tourism and hospitality industries as a forecasting tool used to identify future trends.

The Delphi technique is a research method used to:-

*“Structure a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem”.*

*(Linstone and Turoff: 1975:3).*

The origins of the Delphi technique can be traced back to the Cold War s (1950's) when the Rand Corporation was employed by the American Air Force to try and identify how and when the Soviet military planners might attack key facilities located within the United States of America. Today, it is used to establish as objectively as possible a consensus of opinion, seeking resolution to complex problems where accurate information does not exist, or when the information was too expensive to obtain. The Delphi technique allows for a certain degree of anonymity in terms of individuals as their contributions are not identified during the process. The Delphi method is used extensively in the United Kingdom, the National Health service uses it identify how resources should be used as demand for these resources usually outstrips demand. The Delphi technique was used in the Brunswick project to obtain feedback from a group of selected experts with a questionnaire created which aimed to obtain their opinions relating to the six objectives set for the project.

### **Advantages/ Disadvantages of the Delphi Technique.**

The Delphi technique has its advantages and disadvantages. One of its strengths is that it is a flexible research method that facilitates answers to difficult questions by getting beneath the surface of the issues without the potential to influence outcomes due to personality .The overarching aim of the Delphi technique is to achieve consensus. It also generates a body of data which can be used to evaluate a range of opinions. A strength of the Delphi technique is that it should be applied alongside other research methods thus reducing the negative criticisms levelled against it, ranging from the clarity of the questions to the time required to complete it. The Delphi technique should not be seen as a main tool of investigation but rather as a means of supporting/extending studies, the selected members of the panel should be recognized experts in their field and the panel should comprise a balance of different disciplines and areas of expertise.

The respondents require sufficient time to think about their replies and the experts selected must believe that the Delphi technique is a valid methodology. The most important aspect of the Delphi technique is that full anonymity must be preserved at all times between the panellists and their identity should not be disclosed. Goodman 1987 stressed the role of the Delphi technique to guarantee anonymity in responding to individual questions that is likely to encourage opinions free from the influence of others, and therefore most likely to be true. The Delphi exercise was selected for the research project as it was identified that only one round would be required. The aim of the questionnaire was to obtain the views from the selected experts relating to how effective the research had been in raising the profile of the company.

*“The Delphi technique should not be seen as a main tool of investigation but a means of supporting/extending studies which better established and more reliable methods of investigation”.*

*(Garrod 2000:17)*

The use of questionnaires provided the opportunity to capture a wide range of inter-related variables. Snyder-Halpern (2002) stated that the advantages of the Delphi technique:-

*“ Are its adaptability to diverse data collection strategies, decreased peer pressure secondary to anonymity and the ease of condensing opinions of many and varied experts in a few precise statements”.*

*(Snyder-Halpern; 2002:185).*

The Delphi questionnaire consisted of one round and was a supportive data method selected to produce qualitative evidence for the research project and was used to support/extend the findings of the research project. The experts were selected based on their area of expertise relating to the six objectives identified for the research project, each panel member having expertise in one or more of the areas covered within the research project. The panel members included archivists, museum curators, local government officials, members from the Welsh Assembly and academics in the field of heritage and tourism. The Delphi technique supported the research as the replies received from the respondents would be frank and honest. The method was selected as it ensured anonymity for the respondents an essential feature in order to reduce bias and generate individual replies to the questions not hindered by peer pressure, financial or political constraints.

However, Powel (2003) cited that the Delphi technique has a range of problems ranging from:-

*“The use of consensus approaches can lead to a diluted version of the best opinion and the result represents the lowest common denominator. The selection panel members and the number of rounds, questionnaire development can influence the credibility of the study”*

*(Powell 2003:378).*

The problems associated with undertaking a Delphi survey as part of the research methodology were reduced as the questions created for the survey focused on the outcomes of the project. The comments and ideas which were obtained from the respondents related to the impact of the project in terms of bringing the history of the company to the attention of the public through the work undertaken during the course of the project. It also sought ideas for the future development of the research project

### **Creation of the Delphi Questionnaire.**

The questions designed for the Delphi questionnaire were based on the six objectives identified for the project, with an additional set of questions relating to how the research could be developed and implemented with special reference to the creation of a Brunswick Heritage Trail for the area. The questionnaire was supported by an introduction which explained the context of the project and set the scene in terms of highlighting the importance of the work undertaken by the company over the past century. The use of qualitative and quantitative methodologies within the research project; enabled the research to develop and evolve during the duration of the project, ensuring that each phase of the research was supported by evidence generated from either quantitative or qualitative methods employed in the research project. This overlapping approach to the research

project aided in the identification of how heritage specific to the Brunswick Ironworks was developed in order to raise its profile.

	Quantitative	Qualitative
Brunswick Ironworks	Statistics from the web site.	Brunswick Archive. Documentation generated from the Unknown Warrior case study. Delphi questionnaire.
Comparative case studies	Visitor numbers from the selected locations.	Site Visits. Documentary evidence.

**Table 4.1. Sources of evidence used in the research.**

The selection of a research methodology for the Brunswick project emerged as the project developed and evolved, revealing it as a journey which charted the history of the company but also illustrated the transition from history to heritage and how the documented history of the company could be utilised to guide its future development. The resulting ethnographic case study is in fact a journal of the work undertaken with the company over the three year period charting the growth of the researcher in terms of the acquisition of new skills required for the project fostering a deep understanding and admiration of the skills of the art metal blacksmith. This resulted in a project which charted how the past was developed to support not only the present but the future development of the company.

**4.7. Supporting Documentation for the Ethnographic case study.**

It was evident during the early stages of the research project that additional supporting documentation would be generated during the project as a result of the Brunswick case study. A detailed heritage assessment of Caernarfon was undertaken as part of the project in order to identify where the heritage of the Brunswick Ironworks would fit into the current level of interpretation on offer within Caernarfon. This was supported by a number of visits to Southern Ireland which illustrated how each location had developed its heritage in order to encourage visitors to explore and appreciate its history. Ireland was selected as the location for the comparative case studies because research conducted during the early phases of the research project indicated that Ireland had an active Government led programme which focused on encouraging visitors to Southern Ireland to explore the area through its unique heritage. Also the population base is similar and they have heritage attractions similar to those of Caernarfon.

The Irish case studies revealed the importance of a theme as the tool through which the story is told supporting the active adaptation of the area’s history and heritage which is used as a mechanism through which the profile of the area is raised. The role of a theme within this process



is discussed below, the creation of a theme should be supported by the use of a detailed inventory of the heritage associated of the site achieved through a systems heritage inventory as advocated by Veverka (1994) and Brochu (2003) this assists in the identifies themes and stories for the heritage interpretation of the site. This methodology was used to support the ethnographic case study as it assisted in the identification of a sense of place for the Brunswick heritage within Caernarfon as identified through the detailed heritage assessment carried out as art of the project. The findings of the assessment are contained within the appendices.

#### **4.7.1. Themes.**

The development of a theme within interpretation is a key ingredient in ensuring that the story is concise, structured and accurate in terms of the content of the material on display. Ham (2007) previously acknowledged as an expert within the field of interpretation and the development of themes.

Ham advocated that “people remember themes they forget facts” (1992:39) a theme should contain:-

- One idea.
- Reveal the overall purpose of the presentation.
- Be specific.
- Be stated as short complete sentences.
- Be worded creatively.

Themes are transmitters in terms of explaining the message or ideas linked to the subject matter; a theme has a main idea or message which is supported by sub themes which reinforce the main theme. The theme triggers associations in terms of past experience and knowledge applied to the experience which is enriched and developed through the medium of interpretation. The theme provides structure and focus for the subject material which encourages people to make connections with the site. Ham (1992) stated that effective interpretation is:-

- Organised.
- It has a beginning, middle and end.

The development and application of a theme was illustrated in the research project through the creation of the Brunswick Trail which focused on the connections within the local area which spanned the work of three generations of the Williams family.<sup>113</sup> The creation of the Brunswick trail was one of the objectives created for the research project, a result of the journey from history to heritage undertaken during the project which focused on developing the history of the company as a mechanism to guide its future. Interpretation is communication but it is communication based on an infinite number of experiences which provoke an emotional response which fosters understanding.

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<sup>113</sup> The Brunswick trail outline is contained in the appendix 6 pages 305-319.

#### **4.7.2. Systems Approach Methodology**

The creation of a theme for a location is the first step in the interpretative planning process for a location this is then supported by detailed planning which identifies the potential of the heritage asset and where it fits into the current level of provision on offer. This was important for the research project as it created a sense of place for the Brunswick heritage in terms of identifying where it fitted into the current level of interpretation on offer within Caernarfon.

Veverka (1994) and Brochu (2003) advocated the importance of detailed planning for effective interpretation but with promoting a different philosophy pertaining to the importance of detailed planning. Brochu stated that:-

*“A planning tool that helps to define a vision and mission statement for an organisation”.*

*(Brochu 2003:9)*

Whilst Veverka stated that the systems approach methodology functions as:-

*“Simply a way of looking at the entire system of interpretive agencies, sites and facilities”.*

*(Veverka 1994:p87).*

Both Veverka (1994) and Brochu (2003) were referring to the planning processes involved when developing interpretation for a site. Veverka grouped together the different types of systems approach/planning involved; whereas Brochu (2003) identified five targets for effective planning. The 5 M's identified below which form the basis of interpretative planning regardless of the size of the exhibit, these were translated for the Brunswick Project as:-

- Management:-the aim of the project was to raise the profile of the company through its heritage achievable by creating a working partnership with the company with the research project assessing the current level of interpretation on offer in Caernarfon.
- Message:-the heritage of the Brunswick Ironworks is the thread that joins the attractions together as a result of the work of the company carried out in the town and the local area.
- Market: to encourage the local community and visitors to explore the area via the heritage of the Brunswick Ironworks and the proposed Brunswick Trail.
- Mechanics:-the realisation of the six objectives identified for the project by Mr Williams and the researcher.
- Media:-the development of links with the local press and TV companies on local and national levels as a mechanism through which the Brunswick Project was brought to the attention of the general public.

Brochu (2003) advocated that the 5M's were a practical approach for interpretive planning which ensured that the resulting plan was complete covering all aspects of the planning process for the selected location. Brochu (2003) and Veverka (1994) both advocated the importance of careful planning which focuses on the whole picture rather than isolated sections. Both Brochu (2003) and Veverka (1994) stressed the value of all agencies working together to create a holistic experience for visitors to the sites. Veverka (1994) stressed the importance that all agencies involved in interpretation should work together to deliver a quality experience for visitors. The

systems approach methodology focuses on the “whole” picture and plans for inclusion but these plans are usually short term and require constant updating. They are a short term measure created to identify links and strengths of the selected location and should once the plans are in place be replaced by a detailed interpretive plan that has short, medium and long terms objectives created specifically for the site. Nevertheless in terms of identifying the potential of the site, the systems approach methodology is the first stage of the interpretive planning phase assisting in the identification of where the Brunswick Ironworks would fit into the current level of provision within Caernarfon<sup>114</sup>.

#### **4.7.3. Irish Heritage Inventory.**

Ireland has an integrated approach to heritage which actively supports the maintenance and creation of heritage products across the country benefitting the local community and encouraging links to be created which connect different attractions within each area. The six sites were visited in Ireland as part of the research project and prior to the visits taking place the web sites for each location were reviewed and a copy of the data on the web site was obtained to ensure that all the heritage attractions on offer at each location were visited.

<b>Features of the Site.</b>	<b>Comparative Aspects linked to research objectives. Brunswick Ironworks</b>
Cobh	
Self Guided Heritage Trail	Brunswick trail.
Stories and themes linked to people place and events.	Heritage inventory of the plaques located within Caernarfon.
Youghal	
Guided and Self Guided Trails.	Brunswick trail.
Utilisation of Buildings.	Link to historic building via history of the company and Caernarfon Castle.
Athenry	
Built heritage Keep and Town Walls.	Caernarfon castle and town walls.
Irish Walled Towns	Walled Towns Friendship Circle
Aughrim	
Battlefield Heritage.	Tentative links to Unknown Warrior in terms of raising the profile of the company.
Aillwee Caves	
Development of a heritage asset to raise the profile of the local area.	Heritage of the Brunswick as a mechanism to raise its profile.
Clonmachnoise and West Offaly Railway (Bog Railway).	
Heritage Railway development of a heritage asset.	Link to the Welsh Highland Railway project and the Brunswick project via the bridges for the WHR.

**Table 4.2. Showing the links between the Irish case studies and the Brunswick Ironworks.**

The Aughrim Centre does not have a website, so the Battle of Aughrim was researched prior to the visit taking place. The locations visited are listed in chronological order and when possible

<sup>114</sup> The detailed heritage inventory conducted for the research project is contained in the appendix 2 pages 250-277.

photographs were taken to illustrate how the heritage was developed. The areas were selected as they illustrated how each location had developed its heritage for the benefit of the local community by utilising its past history as a heritage attraction which signposted its future development, by creating attractions which would encourage visitors to the area. Once the visits had been completed it was evident that the material generated from the visits to Ireland would play a subsidiary role. The main focus of the research project was the Brunswick Ironworks, but the data generated from the visits to Ireland was collated to illustrate how the evidence generated from the visits could be developed to signpost the objectives identified for the Brunswick project by learning from the Irish experience

The observations made during the visits to Ireland are contained in the appendices, but in order to appreciate their contribution to the case study, an overview of each location is provided. The above table was created to identify how the data obtained from the visits to Ireland could be developed to assist in the realisation of the six objectives created for the Brunswick project.

#### **4.7.4.1. The Cobh Heritage Centre Visited July 2006**

**Cobh**

**County Cork**

**Eire.**

**Website: <http://info@cobhheritage.com>**

Notes:-Located in County Cork, the Cobh was also known as Queenstown and has one of the deepest natural harbours in the world. The Cobh Centre was developed to commemorate the role that the town played during the Great Famine and the resultant exodus of one million people from Ireland. The Cobh has developed its heritage to encourage visitors to the area through its links with the Titanic and the sinking of the Lusitania.

#### **4.7.4.2. Youghal Visitor Heritage Centre Market House Visited July 2006**

**Market Square**

**Youghal**

**County Cork**

**Eire**

**Website: <http://youghaltourism@eircom.net>**

Notes:-Youghal a town located in County Cork which is similar in size to Caernarfon and which is a member of the Irish Walled Towns Network which is affiliated to the Walled Towns Friendship Circle of which Caernarfon was a founding member. Youghal is a Heritage Town the Heritage Town initiative was created by the Irish Government in order to encourage visitors and members of the local community to appreciate the diverse aspects of Ireland's heritage. Youghal has developed its maritime and historical heritage through the creation of a number of town walks which encourage visitors to explore the town either on their own or via a guided tour organised and booked from the Visitor Centre.

#### **4.7.4.3. Athenry Arts and Heritage Centre Visited July 2008**

**The Square**

**Athenry**

**County Galway**

**Eire**

**Website: <http://info@athenryheritagecentre.com>**

Notes:-Athenry has developed its heritage around the town keep, town walls and abbey which date from medieval times. The town is a member of the Irish Walled Towns which is affiliated to the Walled Towns Friendship Circle. Athenry is also an Irish Heritage Town and is currently undergoing an extensive restoration programme funded by the Irish Government aimed at developing its heritage as a mechanism for increased visitor numbers to the town.

#### **4.7.4.4. Aughrim Interpretive Centre Visited July 2008**

**Aughrim Ballinasloe**

**County Galway**

**Eire**

**No website contact telephone number: 00353 673939**

Notes:-Aughrim Visitor Centre recounts the events that took place during the Civil War Battle at Aughrim. The centre has been affected by the global recession and as a result of cut backs in its funding it has reduced its opening times to June-September the peak tourist times for this part of Ireland. However, the locations for the battles can be seen throughout the year and are clearly sign posted within the area around Aughrim. The Centre does not have a web address but it can be contacted via telephone.

#### **4.7.4.5. Aillwee Caves Visited July 2008**

**Ballyvaughn**

**County Clare**

**Eire**

**Website: <http://barbara@aillweecave.ie>**

Notes: - Aillwee caves were visited as they provided a different visitor experience which had been developed within the landscape of the Burren. The caves provided a guided tour linking to objective six of the research project the creation of the Brunswick trail allowing the researcher to experience a guided tour.

#### **4.7.4.6. Clonmachnoise and West Offaly Railway Visited July 2008**

##### **Shannonbridge**

##### **County Offaly**

##### **Eire.**

Notes: - The “Bog Railway” as it was known closed down at the end of 2008 as it was affecting the extraction of peat from the site, used to fuel the Shannonbridge Power Station which shares the site. Fortunately the site was visited before it closed. It was a fascinating tour on board a diesel locomotive which travelled through the landscape of a working peat bog. The guide on board the train pointed out key aspects of the landscape, the tour illustrated how the land was restored after the peat extraction process

#### **4.8. Conclusions drawn from the methodology.**

The data generated as part of the research project relating to the Irish case studies, the heritage inventory of Caernarfon and the documentation that was generated during the research project providing additional supporting evidence was relegated to the appendices as the main focus of the project emerged as the Brunswick Ironworks case study. The Brunswick project utilised an ethnographic case study methodology allowing the work to develop and evolve throughout the duration of the case study. This approach identified that the central core of the research project was the history of the company and this was then developed during the project to illustrate possible future paths for its development.

The Irish case studies whilst important initially to the project in terms of understanding the evolving fluidic nature of heritage during its journey from history to heritage resulted in the material generated from the Irish case studies providing a supporting role to the main body of the research project. The immersion experienced during the visits to Ireland illustrating how their history had been transformed into a heritage tool which through the active promotion of its past history provided a future for local communities.

The ethnographic case study methodology had two distinctive categories, namely quantitative evidence generated from the Brunswick website statistics and the data obtained from Ireland in terms of visitor numbers to the site, and qualitative evidence provided through the creation of the Brunswick archive, the documentary and photographic evidence generated during the project relating to the Unknown Warrior and the evidence obtained from the Delphi questionnaire. This mixed methodology approach was advocated by Yin (1984) as a tool for ensuring the validity and verification of evidence generated during case studies. Thus reducing the criticisms aimed at it by academics in other fields that this type of research has in the past been accused of lacking quantifiable evidence. This dual methodology was adapted for the Brunswick project to reduce this risk and to hopefully create an explanatory model which demonstrates the transferability of the approach used within the Brunswick project.

# **5. Chapter Five. Findings.**

## **5.1. Introduction.**

This chapter charts the experience of the researcher as the project developed and reveals how it came about in terms of the working relationship with Mr Meurig Williams and the staff of the Brunswick Ironworks over the duration of the project. The history of the project is discussed in terms of how it emerged as an ethnographic case study. The case study utilised skills that the researcher already possessed but also necessitated the acquisition of new skills ranging from photography, to how to create an archive of the company's work, to how to design a web site for the company. The ethnographic case study identified how heritage evolved during the project to become a fluid dynamic process revealing how the past history of the company was developed to guide its future development. The research project was in fact a "journey" undertaken by the researcher which necessitated reflection and flexibility as the project evolved this aided in the creation and identification of a transferable model which demonstrated the transferability of the methodology created for the project and its future use by other researchers.

## **5.2. The Brunswick Project.**

The areas that needed to be explored to understand the Brunswick project emerged following a lengthy discussion with Meurig Williams the current owner of the company and the third generation of the Williams family to own and manage the business. The conversations focused on how the history of the Brunswick Ironworks could be utilised to raise the profile of the company on a local and national level. In order to appreciate and understand the depth and breadth of the company's heritage the discussion spanned several months, focusing on how the history of the company could be developed to guide its future. An action plan based on the outcomes of the discussion focused the direction of the project through the identification of the six objectives for the project.

The discussions focused the case study in terms of expected outcomes, which emerged following the assimilation of the conversations with Mr Williams. The six objectives for the project were agreed with Meurig Williams and the attainment of each objective which once completed would point the way towards the future development of the company. The six objectives were ambitious and in order to ensure that they could be achieved a detailed timeline and phased approach for the research project was developed:-

*"If we only achieve the creation of the web site and the history of the company is completed that would be a huge step. I would like to take it further and publish a book, but that is only an idea."*  
(Meurig Williams December 2006).

## **Objective One.**

The creation of a website for the company was an essential tool which had the potential to raise the profile of the company on the worldwide web, through the utilisation of its heritage. Detailed

discussions took place to identify the content and structure of the website as a result of these discussions it was agreed that the website would have a dual function;- serving as a marketing tool for the company and also as a historical record that focused on key commissions undertaken by the company since its inception in 1906. The aim of the research project was to illustrate the journey from history to heritage and how its past could be developed to guide its future. It was evident at this stage of the research project that their heritage was extensive and impressive linking the company to key events over the past one hundred years. It was obvious that if the research was to reach its objective (using a company's past to guide its future) the company required maximum exposure to a worldwide audience; at this early stage of the research project the company did not even have an e-mail address. The creation of an e-mail by "putting the company on the net" was the first task completed as part of the research project in late 2006 with the e-mail address functioning as an important tool for the company by providing the company with access to the world-wide web.

### **Objective Two.**

This objective focused in raising the profile of the company through the utilisation of its history with special reference to the work undertaken by the founder of the company DJ Williams on the ironwork for the coffin of the Unknown Warrior in Westminster Abbey. The research project took place from 2006-2010 during which time three major commemorative events took place that enabled the work created by DJ Williams to be utilised as a tool which would raise the profile of the company.

### **Objective Three.**

This was the creation of the Brunswick Ironworks archive detailing the work undertaken by the company from 1909 to 1950<sup>115</sup>. The archive consisted of photographs, letters and original drawings created by DJ Williams and those of architects and artists that the company had worked with on key commissions. The archive was discovered during the early stages of the research project and was found at Peblig Mill Caernarfon in a number of very dirty and dusty boxes. It was evident that these documents were an important historical record of the company's history and that they required storing in a safe location. The documents were extensive containing detailed drawings of work completed by DJ Williams for architects, HM Office of Works, local County Councils and artists. It was evident that these documents required cataloguing and storing as they were a detailed record of the work of the company that spanned seventy five years. The dialogue with Mr Williams continued for several weeks focusing on how to store and preserve the archive. Contact was made as part of the research project with Gwynedd Archives and a meeting was set up between the Head Archivist( Mrs L. Francis), Mr Williams and the researcher (April 2006) when the storage and cataloguing of the documents was discussed. The outcome of the meeting was that the documents once they had been thoroughly sorted as part of the research project would

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<sup>115</sup> The archive covers the period 1909-1950 the rest of the documents were lost when Harold Williams died and his family destroyed the documents.



be collected by the Archive service from Peblig Mill and transported to Gwynedd Archives in Caernarfon.<sup>116</sup>

The documents, letters, photographs and artefacts had been stored in cupboards, boxes, and various cabinets and had been transported from the slate quay to the new premises at Peblig Mill undisturbed and unopened. It took several weeks to search through the documents, this was followed by another discussion with Mr Williams during which time the contents of the various boxes were disseminated. This led to the identification of letters and photographs that would be kept by the Williams family as part of their personal private record of the work of three generations of the Williams family. The other documents were transported to Gwynedd archives and the researcher was taught how to catalogue the items creating the Brunswick archive.

*“ I knew that my grandfather (DJ Williams) kept a photographic record of key commissions and that he also kept letters relating to them, but I had no idea how detailed they were. The boxes have not been opened for years”.*

*(Meurig Williams March 2006).*

#### **Objective Four.**

This sought to promote the work undertaken by the company relating to the construction of five new railway bridges for the extension of the Welsh Highland railway from Caernarfon to Porthmadog. This objective provided the opportunity for the company to develop their skills as metal fabricators to guide its future development by expanding its work into the heritage steam railways business sector.

#### **Objective Five.**

Researching the history of the company with the long-term aim identified as the publication of a book recounting the history of the Brunswick Ironworks from 1909-2010. This objective formed the basis of the case study which charted the journey from history to heritage as illustrated by the Brunswick Ironworks case study.

#### **Objective Six.**

The creation of a heritage trail for Caernarfon showcasing the skills of the company linking other heritage attractions located within the area. The aim of the trail is to showcase the work of the company within the local area. The creation of the heritage trail demonstrating how the past was developed to guide the future development of the company charting the journey from history to heritage as witnessed by the visual record of the company within the local area. The data collected from the visits to Southern Ireland assisted in the identification of this journey and aided in the creation of the trail based upon similar trails that had been explored by the researcher whilst in Southern Ireland. The data generated from these sites visits to Ireland are contained within the

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<sup>116</sup> Some of the documents discovered at the works were retained by the Williams family and form part of their family archive. It is hoped that these documents will eventually be added to the Brunswick Archive.

appendices, with relevant sections being used throughout the case study to illustrate specific aspects of the research project.

### **5.3. Translating the objectives into targets for the project.**

The objectives created for the project were ambitious and if they were to be achieved within the timescale of the research a detailed phased plan would need to be created. Using the objectives as the starting point they were then broken down into smaller sections, this was a deliberate strategy on the part of the researcher instigated to ensure that realistic achievable targets were set, thus reducing pressure which resulted when viewing the project as a whole. Instead it was seen as a large jigsaw puzzle that when completed would result in the Brunswick case study.

<b>PHASE 1</b>			
<b>DATES</b>	<b>OBJECTIVE 1</b>	<b>OBJECTIVE 3</b>	<b>OBJECTIVE 5</b>
<b>March 2006</b>	CREATION OF A COMPANY WEBSITE Create a web site for the company as a tool for raising its profile.	CREATION BRUNSWICK ARCHIVE _Catalogue the documents from the Brunswick Ironworks via support from Gwynedd Archives. This involved negotiations with Gwynedd Archive Service relating to the creation of a Brunswick archive from the documents found at the Brunswick works relating to work undertaken by the company from 1909 to the late 1950's	HISTORY OF THE COMPANY Research the history of the company to create a case study for the research project charting the history of the company over the past one hundred years, to identify key commissions that could be developed in order to raise the profile of the company.
<b>March 2006</b>			Granted access to the extensive Brunswick Ironworks archive by Mr Meurig Williams which was stored at Peblig Mill Caernarfon, the current location for Brunswick Ironworks.
<b>April 2006</b>		Discussions with Mr Meurig Williams and Gwynedd archives head archivist Mrs Lynn Francis; regarding the documents, photographs and artefacts held by the company. An agreement was reached agreeing that the extensive archive required preserving.	
<b>June 2006</b>		The documents held at Peblig Mill were sorted (by Pam Smith); as part of the research project, organised and made ready for collection by Gwynedd archives for transportation to the archives at Victoria Dock Caernarfon, in preparation for the creation of a Brunswick Archive. The archive was to be catalogued (by Pam Smith) under the guidance of the head archivist Mrs Lynn Francis.	
<b>July 2006</b>			Researching the location of the company's work and creating a photographic record of the work for use in the case study relating to the history of the company.

<b>September 2006</b>	Brunswick Ironworks web site created <a href="mailto:djwilliamsandson@aol.com">djwilliamsandson@aol.com</a>		
<b>October 2006(a)</b>			Discussions with Gwynedd Council concerning the erection of a plaque for Caernarfon to commemorate the work undertaken by DJ Williams on the ironwork for the coffin of the Unknown Warrior, to coincide with National commemorative events taking place marking the 90 <sup>th</sup> Anniversary of the Somme Offensive.
<b>October 2006(b)</b>			Unknown Warrior artefacts taken to London (by Pam Smith); loaned to Westminster Abbey for the 90 <sup>th</sup> Anniversary of the Somme offensive, taking place over the Remembrance weekend November 2006.
<b>November 2006</b>			
<b>December 2006</b>	Draft web site created following detailed discussions with Mr Williams concerning its content and structure.		
<b>January 2007</b>	Review of the content and structure of the web site.		Display relating to the history of the Company over the past 100 years at Caernarfon library for six weeks, to raise the profile of the company amongst the local community.
<b>February 2007</b>	The content of the web site was agreed.		
<b>May 2007</b>	Brunswick Ironworks web site launched.		
<b>September 2007</b>	Web site content reviewed and updated with a news section created.		Working on the photographic catalogue of the company's work requiring numerous visits to locations identified from the case study relating to the history of the company.
<b>October 2007</b>			Visit to London photographing the work of the company at the Tower of London and the Houses of Parliament.
<b>November 2007</b>	The updating of the news section of the web site allocated as part of the research project.	Instruction from Gwynedd archives on how to commence work on the creation of the Brunswick archive.	
<b>December 2007</b>		Following instruction from Gwynedd archivist Mrs Lynn Francis work started on cataloguing the documents collected from the company.	
<b>February 2008</b>		Instruction from Gwynedd archive on how to catalogue the extensive photographic section of the archive.	
<b>November 2008</b>		Work on the Brunswick Archive completed, catalogue proof read (Pam Smith),	

		introduction to the archive written (Pam Smith).	
<b>January 2009</b>		Brunswick Archive and a draft and final copy were created for inclusion in the research project.	
<b>February 2009</b>			Collation of all the photographs taken by (Pam Smith) on the work of the company over the past 100 years.
<b>June 2009</b>			History of the company draft document given to Mr Williams to read and comment on.
<b>Feb 2010</b>			Second draft of the history of the company completed.
<b>November 2010</b>			History of the company finalised with the inclusion of the work for the Kent and East Sussex Railway.
<b>April 2011</b>	Discussions with Mr Williams relating to the structure of the web site. The site to change its focus from heritage to marketing with the creation of a news archive and archive section for heritage. The new structure of the web site to be implemented by July 2012.		

**Table 5.0. Illustrating Phase One the creation of the time line.**

<b>PHASE 2</b> Raising the profile of the company through presentations, newspaper articles and local television coverage.		
<b>DATES</b>	<b>OBJECTIVE 2</b>	<b>OBJECTIVE 4</b>
	THE UNKNOWN WARRIOR HERITAGE	WORKING WITHIN THE HERITAGE RAILWAY SECTOR NOTABLY THE WELSH HIGHLAND RAILWAY
<b>August 2006</b>	Wedi 7 programme on Brunswick Ironworks	
<b>October 2006</b>	Presentation Caernarfon Civic Society of the research project. The Presentation is located in the appendix.	
<b>December 2006</b>	Celebration of the Centenary of the Company (1906-2006) a display of artefacts and photographs created for the event at the Celtic Royal Hotel Caernarfon with invited guests.	
<b>January 2007</b>	Display relating to the History of the Company over the past 100 years at Caernarfon library for six weeks, to raise the profile of the company amongst the local community	
<b>March 2008</b>	Talk to Lloyd George Society re the Two Men from Caernarfon and the link between Mr David Lloyd George and Mr DJ Williams.	
<b>April 2008</b>	.	Creation of a Railway booklet joint project with Mr Meurig Williams it was sent out to all the heritage railways in the UK. The booklet highlighted the work carried out by the company on the bridges for the WHR Project
<b>May 2008</b>		Creation of an industry booklet for the company sent out to all local and national companies.
<b>May-June 2009</b>		Planning for the Scrap to Steam Event the display of steam locomotive NG15 number 133 on the

		Maes Caernarfon.
<b>August 2009</b>		Scrap to Steam Event on the Maes raising funds for the restoration of steam locomotive NG 15 134 which when restored will run on the WHR from Caernarfon to Porthmadog crossing over the bridges built by the Brunswick Ironworks.
<b>November 2010</b>	Wales Tonight Programme Warrior artefacts in the RWF Museum Caernarfon.	

**Table 5.1. Illustrating Phase 2 the creation of the time line.**

<b>PHASE 3</b>						
<b>Detailed heritage assessments of Caernarfon to identify where the heritage from the Brunswick Ironworks fits into the current level of heritage provision.</b>						
<b>Development of the Unknown Warrior story with other heritage attractions.</b>						
<b>DATES</b>	<b>OBJECTIVE 1</b>	<b>OBJECTIVE 2</b>	<b>OBJECTIVE 3</b>	<b>OBJECTIVE 4</b>	<b>OBJECTIVE 5</b>	<b>OBJECTIVE 6</b>
	CREATION OF COMPANY WEBSITE	THE UNKNOWN WARRIOR HERITAGE	CREATION BRUNSWICK ARCHIVE	WORKING WITH THE HERITAGE RAILWAY, NOTABLY WELSH HIGHLAND RAILWAY	HISTORY OF THE COMPANY	CREATION OF A HERITAGE TRAIL FOR CAERNARFON
<b>July 2006</b>					Researching the location of the company. Creating a photographic record of the work of the company.	
<b>October 2007</b>						Heritage assessment of the RWF Museum Caernarfon.
<b>February 2008</b>						Heritage assessment of Segontium Roman Fort.
<b>November 2008</b>		Unveiling of two plaques at the Peace Garden Gwynedd County Council Caernarfon. Recounting the story of DJ Williams and marking the 90 <sup>th</sup> Anniversary of the end of WW1.				
<b>September 2009</b>		The Imperial War museum returns the Unknown Warrior artefacts to Caernarfon.				

<b>October 2009</b>		Negotiations with the RWF Museum re a permanent home for the Warrior artefacts in Caernarfon.				
<b>November 2009</b>		Filming for the Priceless Antiques programme at Kenwood House London. Follow up to the Bodnant Gardens show.				
		The Unknown Warrior artefacts go on display at the RWF Museum. Mr Williams unveils the display the event is recorded by ITV Wales.				
<b>December 2009</b>				Contact made with the Kent and East Sussex railway re the Cavell van project.		
<b>January 2010</b>		Priceless Antiques programme broadcast by the BBC				
<b>February-August 2010</b>				Discussions with the Kent and East Sussex railway re the Cavell van project.		
<b>September 2010</b>		Replica coffin brought to the works by Norman Brice of the Kent and East Sussex railway. The handles, iron bands, plaque and sword are attached to the coffin.				
<b>November 2010</b>				Cavell Van project completed it was unveiled at the Kent and East Sussex railway on November 10 <sup>th</sup> The Cavell van		

				contained the replica coffin displaying the work of the company.		
<b>March 2011</b>		Mr Jack Thorpe contacts the Brunswick Ironworks re assistance for the museum at Erquinghem sur -Lys re plaque to David Railton.				
<b>April 2011</b>		Photographs of the coffin are sent to France for the display in June.				
<b>May 2011</b>		The replica slate plaque and a replica handle made by Mr Williams are loaned to Mr Thorpe for the plaque ceremony for David Railton in June 2011.				
<b>May 2011</b>		Contact made with Brunswick Ironworks by the BBC relating to a Special Finds programme. A follow up to the Antiques Road Show. To be filmed in November 2012.				

**Table 5.2. Illustrating Phase 3 the creation of the time line.**

<b>PHASE 4. Case study visits to Ireland to assess how they utilise their heritage as a mechanism for raising the profile of the area. The visits to Ireland facilitated the creation of a number of case studies which were used to assess the different approaches to heritage compared between Ireland and Caernarfon.</b>						
<b>DATES</b>	<b>OBJECTIVE 1</b>	<b>OBJECTIVE 2</b>	<b>OBJECTIVE 3</b>	<b>OBJECTIVE 4</b>	<b>OBJECTIVE 5</b>	<b>OBJECTIVE 6</b>
	CREATION OF COMPANY WEBSITE	THE UNKNOWN WARRIOR HERITAGE	CREATION BRUNSWICK ARCHIVE	WORKING WITH THE HERITAGE RAILWAY, NOTABLY WELSH HIGHLAND RAILWAY	HISTORY OF THE COMPANY	CREATION OF A HERITAGE TRAIL FOR CAERNARFON
<b>August 2007</b>						First visit to Ireland. Visiting Youghal and the Cobh County Cork, to create a series of case studies

						that demonstrate how these locations utilised their heritage as a means of raising their profile.
June 2008						Second visit to Ireland to Athenry and Aughrim County Galway, Aillwee Caves County Clare and the "BOG Railway" County Offaly.
May 2009						Writing up the research relating to the Irish Case studies.

**Table 5.3. Illustrating the creation of phase 4 for the project.**

**5.4. The Journey begins. History to Heritage.**

The Brunswick Ironworks case study was initially confined to researching the history of the company but it soon became evident that it was a much larger project, encompassing the future development of the company through the utilisation of its past. This was transformed to point the way to present and future developments for the company in terms of employing their skills as metal fabricators to expand the business into new sectors such as the steam heritage railways sector within the United Kingdom.

The discovery of the extensive archive kept by DJ and Harold Williams illustrated the history of the company through original drawings, photographs, documents and correspondence identified the importance of the archive in terms of preserving for posterity the skills of the art metal blacksmith as the work discovered illustrated how to create designs in metal ranging from gates to staircases to electric light fittings, fire grates and fire irons. In order to create the catalogue skills had to be learned which involved creating an archive and how to catalogue accurately the various items which would form the Brunswick Archive. The creation of the archive with hindsight was a huge task to undertake (and could in reality have formed a separate research project) but at the time it was seen as an integral part of the whole project and had been identified as such by Meurig Williams.

In order to photograph the work identified during the research undertaken into the history of the company it was necessary to develop skills as a photographer so that the pictures used within the research project were of an acceptable clarity and quality. This took some time to master even with a digital camera but by the end of the project the photographs produced were of an acceptable quality. The creation of a web site for the company involved a great deal of research in terms of identifying the web host and completing the paper work in order to obtain a Gwynedd Council grant towards the cost of purchasing a computer and printer for the company. The paper work involved in obtaining the grant was undertaken as part of the research project.

The journey experienced during the project demonstrated that the skills of the art metal worker are still highly respected and the fact that the project was enriched by being able to authenticate the provenance of the fire grates for Hampton Court Palace and the Admiralty Board rooms. This served to enrich the project in terms of utilising the project to assist other heritage attractions to



provide answers to questions relating to the origins of their artefacts. The travelling involved during the project also highlighted the fact that the skills of the company were not just confined to Caernarfon but that their skills were on view at various locations across the length and breadth of the United Kingdom.

This demonstrated that whilst this project was focused within Caernarfon the home of the Brunswick Ironworks for over one hundred years the company had in fact through its work with HM Office of Works and various construction companies successfully exported their skills to locations which utilised their skills as art metal workers but which also visually demonstrated the flexibility of their skills across a broad spectrum of projects ranging from metal structural steelwork to ornate gates and railings for historic buildings.

The Brunswick project created a working partnership with the company facilitated by the immersion of the researcher into the daily running of the company which created connections with the heritage of the company on a personal level. This indicates that the academic research presented within the literature review of the project had a practical application making connections between what was written and what was actually experienced during the project. This showed that research in the form of an ethnographic case study whilst not initially trying to replicate other researchers' findings did in actual fact reveal connections between the research in terms of the emotional and aesthetic qualities of this type of research. It illustrated that academic research is not an isolated journey but one that can reach out to others by sharing the experience. The Unknown Warrior artefacts opened a door through which the researcher (Pam Smith) walked providing insights into the transition of history to heritage<sup>117</sup>. A journey which not only brought the history of this unique company to the attention of the public but which pointed the way for its future development.

### **5.5. The history of the project.**

The phased approach for the research project identified a timescale for the case study which resulted in documentary evidence both visual and written being created which recounted the journey taken during the project by the researcher and the company.

#### **5.5.1. Objective 1. Creation of a website for the Company.**

The creation of the website took over fourteen months to achieve due mainly to the fact that the history of the company needed to be thoroughly researched prior to the content of the website being identified. Initial discussions were held with the selected web host Delwedd (a local company located in Caernarfon) during October 2006. It was intended to launch the website in December 2006 to coincide with the Centenary celebrations of the Company 1906-2006. A rough draft was created based on the initial findings revealed from the work undertaken on the history of the company following a discussion with Mr Williams. A draft document was created which acted as a discussion document relating to the structure and content of the site. The document was then developed by Delwedd the web designers, who created a draft version of the site showing various options available for the content and structure of the site. Following this initial meeting it was evident that the site needed to have two distinct parts, section one marketing, and the other

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<sup>117</sup> The work conducted on the Unknown Warrior is located in appendix 9 pages 362- 386.

heritage. The web site was constructed as a dual functional site, acting as both as heritage resource and a marketing tool for the company with the drop down menu enabling visitors to the site to navigate their way through the site. Several meetings took place between Delwedd and Brunswick Ironworks relating to the content of the web site. A number of options were shown during a visual display of possible web site designs given by Delwedd in late November 2006. A lengthy discussion followed and it was agreed that the web site would have a drop down menu located on the left hand side of the site which would consist of a number of headings.

### **Structure of the Brunswick website.**

**Language.** The web site is only in English as the cost of translating the text into Welsh is currently not an option for this small family business. The company conducts the majority of its business through the medium of English.

**News.** This section highlights current commissions undertaken by the company.

**Centenary.** This was broken down into quarter sections dating from 1906-1931 1931-1956 1956-1981 1981-2006. Each section highlights key commissions completed by the company supported by photographs and documentary evidence identified during the research project relating to the history of the company.

**About Us.** This section explained the work of the company and was co- written by the researcher and Mr Williams as part of the research project with the company.

**Portfolio of our work.** This section contained photographs of the current work undertaken by the company and was broken down into separate sections:- gates, railings, bridges and a gallery section highlighting current work under construction/completed by the company.

**Contact details.** This section contained the details of the company, an on line inquiry form, contact details and a map showing the location of the company.

The structure for the web site was created with the site divided into two distinct sections marketing and heritage. The site was further supported by the inclusion of articles relating to the history of the company including the presentation for the David Lloyd George Society entitled Two Men from Caernarfon. This was the story of the collaborative working partnership established between Mr David Lloyd George and Mr David John Williams of the Brunswick Ironworks. An industry booklet was created as a marketing tool for the company which showcased their skills for the heritage railway sector.<sup>118</sup> Work on the web site was delayed due to the building of the bridges for the Welsh Highland Railway, deadlines had to be met and Mr Williams did not have the time to devote to the web site as it was essential that the bridges for the project were delivered on time. Whilst the structure of the site had been agreed the content of the site required worked which had to be agreed by Mr Williams before the site could become active. Work continued on the content of the site during this period and Mr Williams was provided with drafts outlining the content of the site, his alterations were then passed onto Delwedd.

The website was launched May 2007 ([www.brunswickironworks.co.uk](http://www.brunswickironworks.co.uk)), from its launch the number of hits to the site has been recorded using the 'Webalizer' this is the system used by the

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<sup>118</sup> Copies of these documents are contained in the appendix 7 under the heading marketing material pages320-332.

web host Delwedd to track the success of the web site. The Webalizer records the number of hits to the site over the course of a month and as the table below demonstrates the website has functioned successfully as a mechanism for raising the profile of the company through the utilisations of its heritage, as well as a marketing tool promoting the skills of the company.

**Functions of the Webalizer.**

Delwedd was asked for an explanation of how the Webalizer generated data for the monthly statistics produced as part of the service provided by Delwedd.

*“The Webalizer is a statistical analysis tool, available to our web hosting customers that reads the log files generated by their website and produces a detailed report on who has accessed their website over the past day/month/year. Webalizer is accessed using your web hosting site admin panel.*

**Hits:** *Any request made to the server which is logged, is considered a 'hit'. The requests can be for anything... html pages, graphic images, audio files, CGI scripts, etc... Each valid line in the server log is counted as a hit. <http://www.mrunix.net/webalizer/>.*

The data generated from the website during the period 2007-2010 has been recorded and the number of hits per month to the website illustrates how key events linked to the work undertaken during the research project can be identified via the number of hits to the site, providing statistical evidence which supports the outcomes of the research project. However, these figures are not wholly accurate as the Webalizer cannot guarantee the accuracy of the data generated, it does not record who visited the site and how frequent that visit was, nor does it recorded the length of time spent on the site, so there is a margin of error in terms of people visiting the site by mistake and leaving immediately. The Webalizer would still record the hit. Therefore the data presented below is indicative of the success of the web site from May 2007- August2010.

**Table 5.4. Illustrating the number of hits to the web site from its launch in May 2007 until August 2010.**

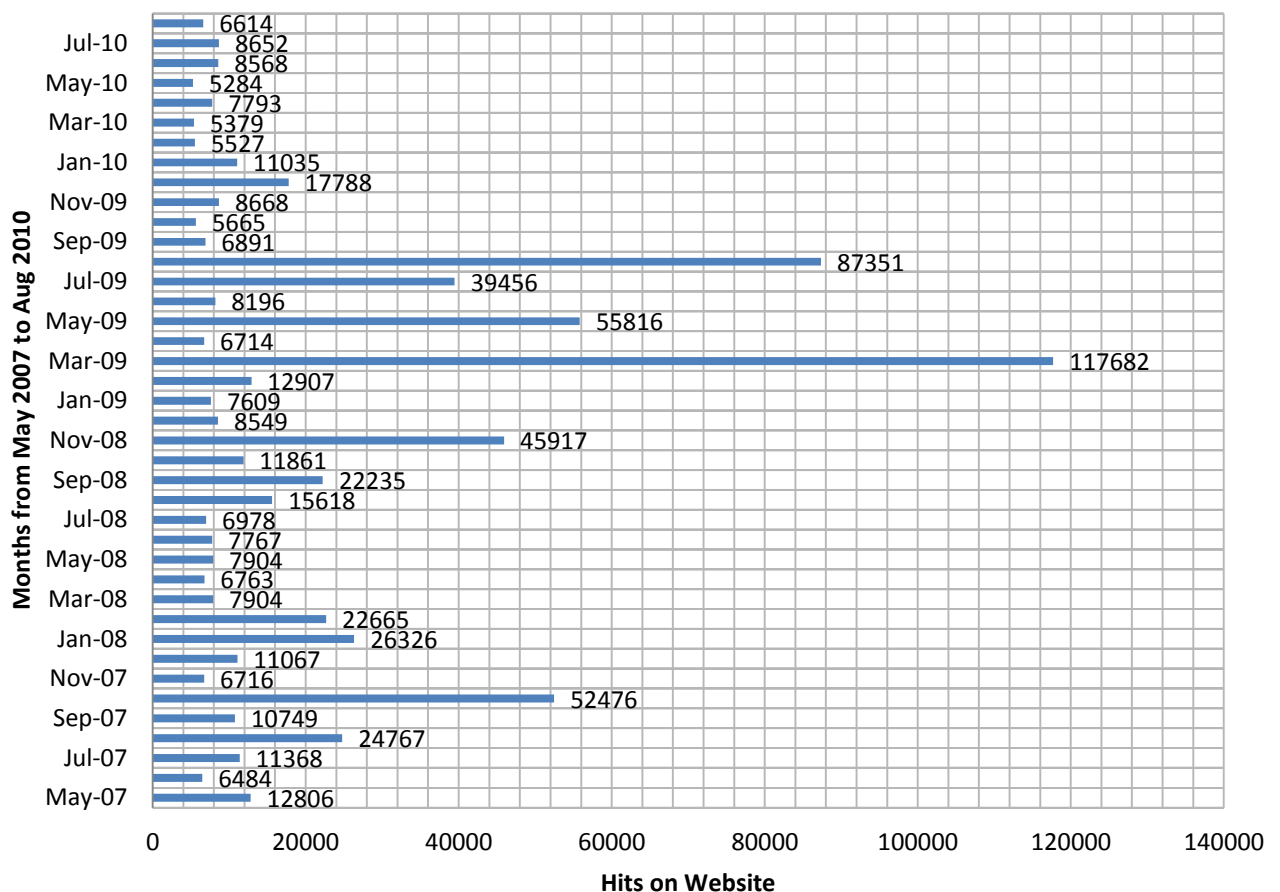
Date	Number of hits on the web site.	Work conducted during the research project.
May 2007	12806	Launch of the web site. The web site was linked via the Welsh Highland Railway Project.
June 2007	6484	
July 2007	11368	
August 2007	24767	Welsh Highland Railway opened the line from Caernarfon to Rhyd Ddu Station. Link Brunswick Bridges constructed for this section of the line, Nantmor and Dylif bridges.

September 2007	10749	
October 2007	52476	National Memorial Arboretum opened by Queen Elizabeth II.
November 2007	6716	
December 2007	11067	
January 2008	26326	Croesor bridge installed. Built by the Brunswick Ironworks.
February 2008	22665	Special sponsor trains for the Welsh Highland Railway crossed the Pont Croesor Bridge.
March 2008	7904	Water crane built by the Brunswick Ironworks installed at Beddgelert Station.
April 2008	6763	
May 2008	7904	
June 2008	7767	
July 2008	6978	
August 2008	15618	Filming of the Antiques Road Show at Bodnant Gardens Conwy. Article in the local press.
September 2008	22235	Official opening of the Imperial War Museum Exhibition featuring the artefacts from the Brunswick Ironworks. Exhibition commemorating the end of WW1.
October 2008	11861	
November 2008	45917	Memorial plaques in Caernarfon commemorating the work undertaken by DJ Williams on the ironwork for the coffin of the Unknown Warrior. Local press coverage. Launch of the Great war Archive by Oxford University containing copies of the photographs and documents from the Brunswick Ironworks re the Warrior.
December 2008	8549	
January 2009	7609	

February 2009	12907	
March 2009	117682	BBC Programme Antiques Road Show broadcast, re the story of the Brunswick Ironworks and the coffin of the Unknown Warrior.
April 2009	6714	
May 2009	55816	Opening of the line between Rhyd Ddu and Beddgelert, for the Welsh Highland Railway project link to the Brunswick Bridges.
June 2009	8196	
July 2009	39456	Re run of the Antiques Road show, featuring the Brunswick story. Welsh Highland Railway opens from Beddgelert to Hafod y Lyn.
August 2009	87351	NG 15 NUMBER 133 on display on the Maes Caernarfon. Local press coverage. Featured on U tube.
September 2009	6891	George Gibby Special Award for Sustainability from the Institute of Civil Engineers for the work by the WHR. Brunswick Ironworks listed as steel fabricators.
October 2009	5665	
November 2009	8668	Official opening of the Warrior display at the RWF Museum Caernarfon, with local press and Welsh TV coverage.
December 2009	17788	Priceless Antiques BBC broadcast, recounting the story of DJ Williams in more depth.
January 2010	11035	Re run of the BBC Antiques Road Show link to Brunswick and the Unknown Warrior. The British Urban Regeneration Association Award 2009. Welsh Highland Railway (Brunswick Ironworks

		contribution).
February 2010	5527	
March 2010	5379	
April 2010	7793	
May 2010	5284	
June 2010	8568	
July 2010	8652	Welsh Highland Railway runs steam locomotive Lyd at Beddgelert, with water tanks and cab fabricated by the Brunswick Ironworks.
August 2010	6614	Interest generated over the sourcing of a sword for the top of the coffin for the Kent and East Sussex Railway.
	Total hits=512240	

### Number of hits on Brunswick Website.

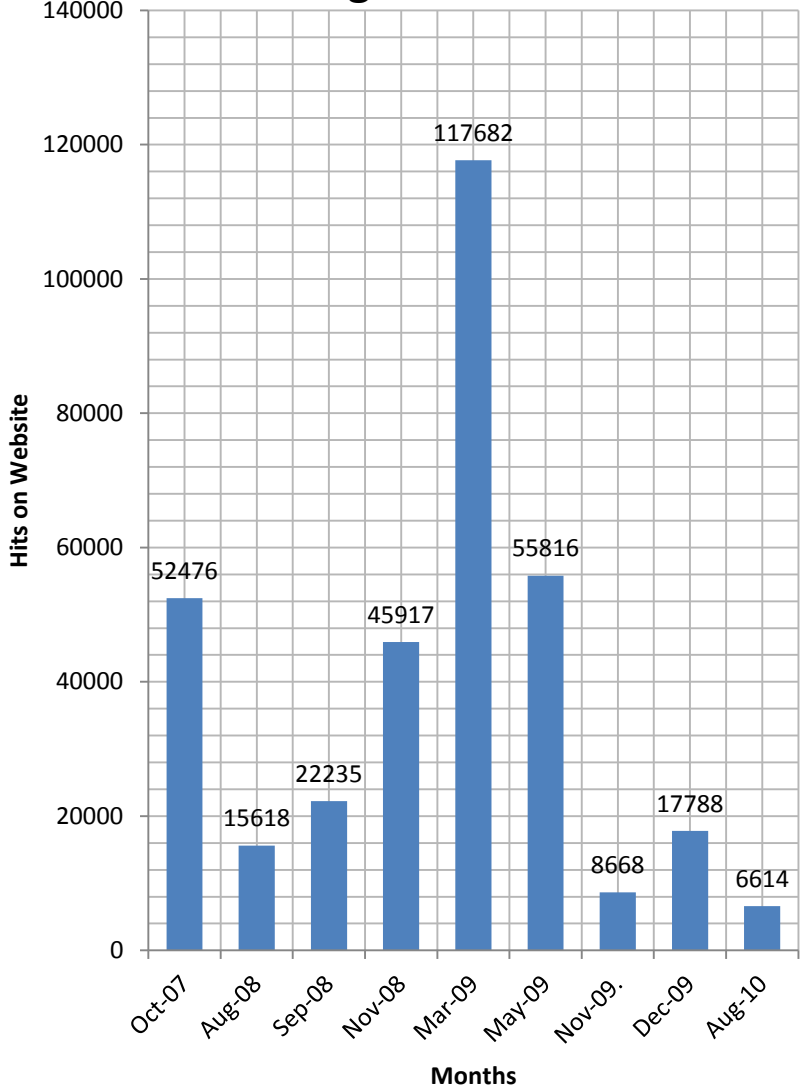


**Graph 5.0. Illustrating the number of hits to the website from May 2007 to July 2010.**

The results obtained from the statistical data relating to the web site would suggest that the site was successful in functioning as a heritage tool in terms of raising the profile of the company. However, whether or not it attracted new customers for the company cannot be substantiated, for

in order to assess the effectiveness of the site in terms of generating new business it would require that all new customers were questioned about how they selected the Brunswick Ironworks and this was not undertaken as part of the project. The data obtained from the hits to the web site was further broken down into two additional categories, in order to assess the impact of the work undertaken during the research project relating to the Unknown Warrior and the Welsh Highland Railway.

**Hits on website relating to the Unknown Warrior**

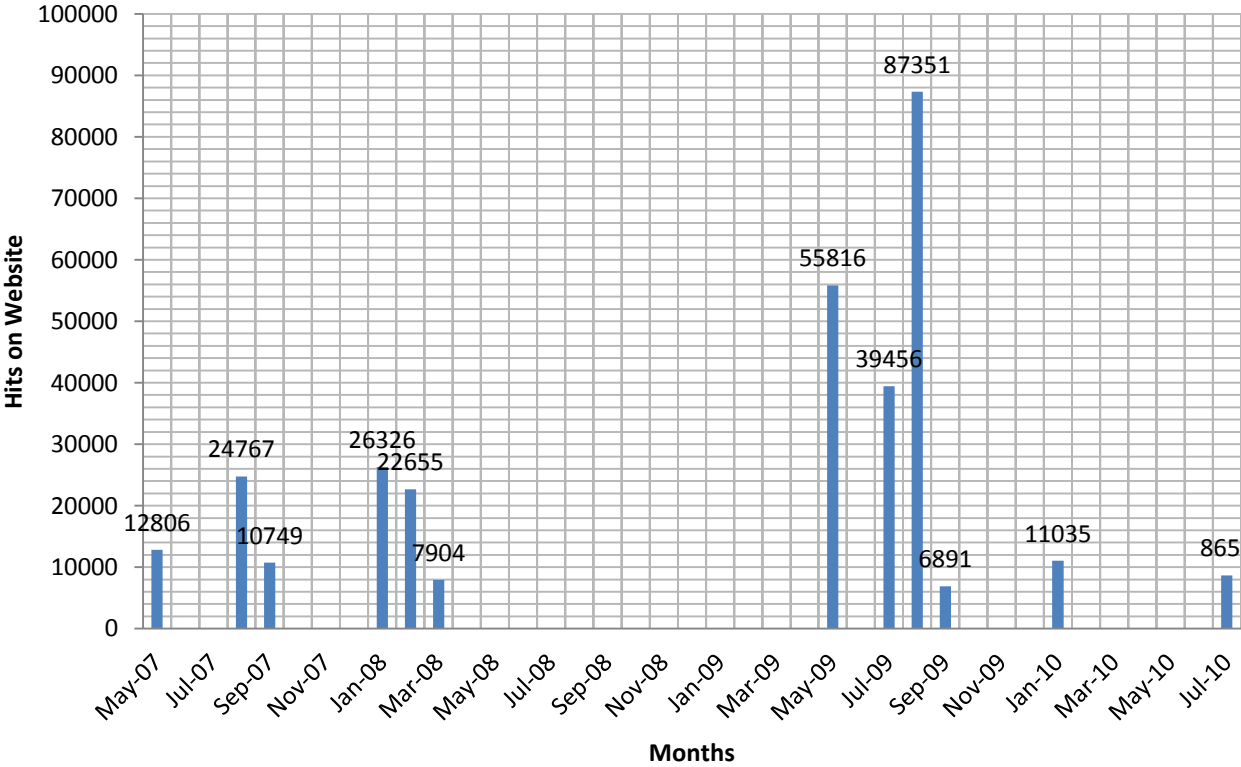


**Graph 5.1. Illustrating hits on the web site for the Unknown Warrior.**

The data generated from the number of hits to the web site relating to the work conducted during the research on the Unknown Warrior and its link to the Brunswick Ironworks indicates that it was successful in terms of making people aware of the link between the company and the ironwork for the coffin of the Unknown Warrior. The data generated by the web site does not include the 90<sup>th</sup> Anniversary of the Somme Offensive when the artefacts were displayed in Westminster Abbey as the web site was not active. The results from October 2007 were included within the data relating

to the Unknown Warrior because this was when the new National Memorial Arboretum was opened by Queen Elizabeth II. This possibly accounts for the large number of hits made to the web site during this period it was possible that people were researching the story of the Unknown Warrior and Remembrance via the search engines which list the Brunswick site.

### Hits on website relating to the Welsh Highland Railway



**Graph 5.2. Illustrating hits on the website for the Welsh Highland Railway Project.**

The number of hits recorded on the web site relating to the link between the Brunswick Ironworks and the Welsh Highland Railway project generated interest amongst members of the heritage railway sector who followed the project via the WHR dedicated website and various articles which were published in the heritage railway magazines recording the progress of the project. The Brunswick web site was linked to the WHR at <http://www.isengard.co.uk>. The WHR projects web site allowed visitors to both sites to read related articles on each web site, this cross fertilisation was evident when looking at the results for the Brunswick site in terms of hits; as the construction and installation of the bridges by the Brunswick Ironworks can be plotted via the web site which is illustrated in the above graph.

**Search Engines.**

Delwedd provided the information relating to the search engines which list the Brunswick web site. A search engine functions as a sorting mechanism which sifts through the data available on the world- wide web by looking for a specific piece of information, in this instance the links with



the Unknown Warrior and the construction of the bridges for the Welsh Highland Railway. The latest data provided by Delwedd relating to the number of search engines listing the site was twenty eight, the activation word search for the search engines ranged from ironwork, unknown warrior, bridge construction, Welsh Highland railway, gates and railings, railway tenders and water cranes, indicating that the work of the company can be viewed by a world -wide audience. On this basis the web site is functioning as both a marketing tool and a heritage site, however how much business these search engines generate for the business is unknown and requires monitoring by the company.

### **5.5.2. Objective Two.**

#### **Unknown Warrior in Westminster Abbey November 2006.**

This aspect of the Brunswick's heritage contributed significantly to the raising of the company's profile through the utilisation of this aspect of their history, visually demonstrating the journey from history to heritage through the utilisation of the artefacts relating to the Unknown Warrior. Demonstrating how one identified aspect of their heritage was developed as a tool for showing the journey from history to heritage. Fortunately, during the course of the research project key commemorations occurred that linked the Unknown Warrior to major events that occurred during the Great War (1914-1918). This is a detailed account of the journey undertaken during the research project which visually demonstrates how the history of the company was transformed into heritage through the utilisation of one specific aspect of its heritage the link to the Unknown Warrior.

#### **90<sup>th</sup> Anniversary of the Somme Offensive 1916-2006.**

November 2006 marked the 90<sup>th</sup> Anniversary of the Somme Offensive (1916), during this offensive 20,000 British soldiers were killed on the first day with over 40,000 casualties. In order to remember the fallen a service of Remembrance was held in Westminster Abbey over the Remembrance weekend in 2006. The artefacts relating to the ironwork created by DJ Williams for the coffin of the Unknown Warrior were taken to London in August 2006. Contact had been made with Westminster Abbey as part of the research project at the request of Mr Williams. An image of the coffin detailing the work of DJ Williams was sent and as result of this contact a meeting was arranged with the Receiver General of the Abbey; Sir Stephen Lamport and Dr Tony Trowles<sup>119</sup>. This was the first time that the artefacts had been seen by anyone in Westminster because Abbey the story of DJ Williams and the Brunswick Ironworks was unknown. As a result of this meeting, the spare handle, second plaque and original photographs of the coffin were displayed at the foot of the tomb of the Unknown Warrior in Westminster Abbey over the Remembrance weekend November 11<sup>th</sup> 2006.

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<sup>119</sup> Dr Tony Trowles is Head Librarian at Westminster Abbey.



**Photo 5.0. Brunswick Ironworks Artefacts displayed at Westminster Abbey November 2006. Reproduced with the kind permission of Westminster Abbey.**



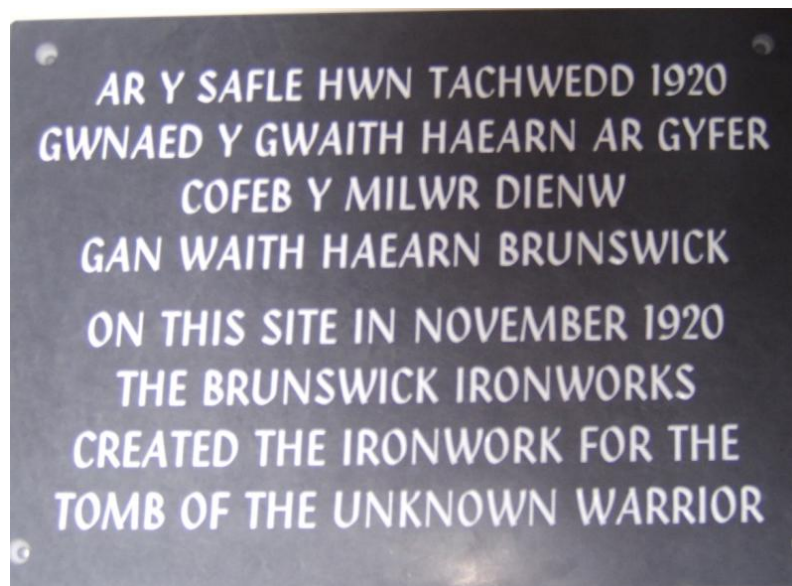
**Photo 5.1. Unknown Warrior Artefacts from Brunswick Ironworks displayed at Westminster Abbey. Photograph reproduced with the kind permission of Westminster Abbey.**

#### **5.5.2.1. Plaque erected by the Brunswick Ironworks to commemorate the Unknown Warrior.**

The role played by DJ Williams in the creation of the ironwork for the coffin of the Unknown Warrior was commemorated in Caernarfon in November 2006 by a plaque paid for by Mr Meurig Williams which was unveiled at the Peace Gardens at Gwynedd Council's headquarters. The plaque recorded the location of the Brunswick Ironworks in 1920, where the ironwork for the coffin of the Unknown Warrior was created in November 1920. The plaque was unveiled by the Chairman of Gwynedd Council Mr Sol Owen, in the presence of Meurig Williams and invited members of the Town Council, the Royal British Legion and the Royal Welch Fusiliers. The plaque was unveiled on November 7<sup>th</sup> 2006 at eleven o'clock; the Last Post was played by Mr Mike Thomas from the Llanrug Silver Band.



**Photo 5.2. Mr Meurig Williams erecting the plaque November 2006. Photographed by Pam Smith.**



**Plaque 5.0. The Plaque prior to installation November 2006. Photographed by Pam Smith.**

### **5.5.2.2. Creation of the Great War Archive data base by Oxford University.**

Prior to the artefacts going down to the Imperial War Museum (2008) the plaque, handles, photographs and letter of thanks from the Ministry of Works to DJ Williams were scanned in to the digital data base under construction by Oxford University at Caernarfon Castle in 2008. The Great War Archive was created to commemorate the end of the First World War and can be viewed at [www.oucs.ox.ac.uk](http://www.oucs.ox.ac.uk), it was activated in November 2008 to coincide with the 90<sup>th</sup> Anniversary of the end of the Great War 1918-2008.

The Great War archive brought the link between the coffin of the Unknown Warrior and the Brunswick Ironworks into the public realm. The Great War archive was taken into Europe in 2010, following an agreement between the German National Library and Europe's digital archive Europeana. This collaboration will enable the stories of the British soldiers contained within the Oxford University site to be displayed alongside their German counterparts from the Great War. The creation of the European digital archive will provide the opportunity for the work undertaken by DJ Williams on the ironwork for the coffin of the Unknown Warrior to be brought to the attention of a wider European audience. This link has extended the reach of the research way beyond the United Kingdom.

### **5.5.2.3. Brunswick Ironworks and the Antiques Road Show 2008.**

The artefacts from the Unknown Warrior were due to be collected by a team from the Imperial War Museum in early September 2008 in preparation for the opening of their exhibition commemorating the end of the Great War. However, Mr Williams saw an article in the local press mentioning that the Antiques Road Show would be recording a programme from Bodnant Gardens, Conwy and they were interested in seeing unusual items. Mr Williams requested that contact was made with the researcher from the show regarding the story of his grandfather relating to the ironwork for the coffin of the Unknown Warrior. Contact was made with the Imperial War Museum to explain the situation and it was agreed that the items would be taken down to London after filming, by Mr Williams.

At Bodnant Gardens a brief discussion was had with their expert Mr Graham Lay (Militaria); who was very interested in the link with the Unknown Warrior and Brunswick Ironworks, and then an interview was recorded for the story of DJ Williams to be recounted. The programme containing the interview was broadcast by the BBC in March 2009.



**Print Screen 5.0. Mr Graham Lay Mr Meurig Williams and Pam Smith during the recording of the BBC Antiques Road Show programme 2008 from Bodnant Gardens Conwy. Photograph reproduced with the kind permission of the BBC.**

#### **5.5.2.4. Brunswick Ironworks and the Imperial War Museum.**

November 2008 marked the 90<sup>th</sup> Anniversary of the end of the Great War and to commemorate the event the Imperial War Museum London created a special year long display focusing on people affected by the conflict and their contributions made during the war. The plaque and handle belonging to the Brunswick Ironworks were displayed at the Imperial War Museum in their exhibition entitled “In Memoriam Remembering the Great War.”



**Print Screen 5.1. Brunswick Ironworks artefacts on display at the Imperial War Museum London. Photograph reproduced with the permission of the BBC 2010.**

## Brunswick Ironworks and Priceless Antiques Show.

Following on from the Antiques Road Show programme in August 2008; Brunswick Ironworks were invited in November 2009 to participate in a follow up programme entitled 'Priceless Antiques'. It was filmed in London at Kenwood House; with the link between DJ Williams and the ironwork for the coffin of the Unknown Warrior recounted in more detail. The programme was broadcast on BBC Two in 2010 and was a compilation of the original filming from 2008 and the new material supplied by the company in the form of original photographs of the work of DJ Williams supported by the interviews conducted during the filming of the programme. The programme also explained and highlighted the link to his grandson Meurig Williams a gifted art metal worker in his own right who is continuing the family tradition.

### 5.5.2.5. Brunswick Ironworks and the end of the Great War 1918-2008

To coincide with the 90<sup>th</sup> Anniversary Celebrations of the end of the Great War, Brunswick Ironworks unveiled two plaques at the Peace Garden, Gwynedd Council Offices Caernarfon. The plaques recounted the story of how DJ Williams worked for two days and nights without sleep to complete the commission for the ironwork for the coffin of the Unknown Warrior in November 1920. Two plaques were erected with the story told in both English and Welsh; the plaques were created by Indigo Jones Slate works Caernarfon. The plaques were located underneath the 2006 plaque.



**Plaque 5.1. Unknown Warrior Peace Garden Caernarfon. Photographed by Pam Smith 2008.**

### **5.5.2.6. Brunswick Ironworks and the Royal Welch Fusiliers Museum Caernarfon.**

The artefacts which had been on loan to the Imperial War Museum were returned to Caernarfon in September 2009, and Mr Williams requested that as part of the research project a new home for the artefacts needed to be found in Caernarfon. Contact was made with the Curator of the Royal Welch Fusiliers Museum located inside Caernarfon castle. Fortuitously King George V had been Colonel in Chief of the Regiment during the Great War 1914-1918. The Museum has the coat that was worn by King George V at the unveiling of the Cenotaph November 1920, so there was a tentative link between the Warrior and the Museum. The Museum agreed to display the Brunswick artefacts in the same display case as they created a natural link with the ceremony from 1920. Mr Meurig Williams created a special display stand for the handle and plaque the stand was painted and covered in green baize by Pam Smith prior to Mr Meurig Williams attaching the plaque and handle to the display stand. The artefacts were unveiled by Mr Meurig Williams at the Museum on November 10<sup>th</sup> 2009 and the event was recorded by HTV Wales and the local press.



**Photo 5.3. Warrior artefacts at the RWF Museum displayed on the stand created by Mr Meurig Williams. Photographed by Pam Smith 2009.<sup>120</sup>**

<sup>120</sup> The photograph above is slightly out of focus due to the lighting in the Medal Room at the Museum which shines directly onto the display case.



### **5.5.2.7. Llangollen Railway Project. Patriot Class Steam Locomotive Unknown Warrior.**

The creation of the ironwork for the coffin of the Unknown Warrior is a significant heritage asset for the company and one that has been developed during the course of the project for the benefit of other heritage projects linked to the story of the Unknown Warrior. Llangollen Steam Railway is currently building a replica Patriot Class Steam Engine this class of locomotive did not survive into preservation following the Beeching cuts of the 1960's. A nationwide competition was advertised in the Steam Railway Magazine which invited its readers to submit a name for the new locomotive. The name selected was "Unknown Warrior"; this was an appropriate name for the new replica Patriot engine because this class of steam locomotive had two engines named after holders of the Victoria Cross from the Great War.



**Picture reproduced from Llangollen Photo 5.4. Patriot Class 45501 St Dunstan's at Carnforth 1962 Railway with their permission.**

Llangollen Railway launched their appeal to build a Patriot class engine in 2008 and Brunswick Ironworks granted permission for the railway to utilise the link between the company and the Unknown Warrior to assist with the fund raising appeal for the new steam locomotive. Brunswick Ironworks commissioned the creation of a replica slate plaque, along with copies of the original photographs detailing the ironwork on the coffin, which were loaned to the railway as promotional material. A replica coffin handle made by Ben Smith a sixth form Design Technology student at Ysgol Friars who was commissioned by Meurig Williams as part of his final design piece for his A2 examination, it was loaned to the team at Llangollen Railway for the launch of the Patriot Engine appeal.



**Plaque 5.2. Slate replica plaque created for Llangollen railway by Indigo Jones Slate Works Caernarfon. Photographed by Pam Smith 2008.**

#### **5.5.2.8. Cavell Van Project Kent and East Sussex Railway.2010.**

##### **Edith Cavell and the Cavell Luggage Van.**

The Cavell Van was so named because it carried home the body of Nurse Edith Cavell who was executed by the Germans in October 1915 for helping British soldiers return to Allied lines during the conflict. Edith Cavell was brought home to England in May 1919 and was carried to London in the Cavell Van. Kent and East Sussex Railway launched an appeal to restore the van to commemorate the 90<sup>th</sup> Anniversary of the burial of the Unknown Warrior in Westminster Abbey (1920-2010). Mr Meurig Williams read an article about the appeal in Steam Railway magazine and requested that contact was made and the offer of assistance be made to the railway through the link with the Unknown Warrior. The on line correspondence continued for several months with Mr Norman Brice, the Chairman of the Railway. The e-mails requested measurements for the replica coffin no exact dimensions were kept of the coffin<sup>121</sup>. The photographs belonging to the company were enlarged ensuring that the replica coffin resembled the original as much as possible. The replica coffin was built by a team of volunteers from the Kent and East Sussex railway, and was brought to the Brunswick Ironworks at Caernarfon by Mr Norman Brice in September 2010, for the fitting of the replica iron bands, handles and plaque for the coffin. The photographs of the coffin taken in the workshop at the Brunswick Ironworks are dark due to the fact that lighting in the workshop is minimal otherwise the lighting interferes with the welding operations that take place within the workshop.

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<sup>121</sup> Contact was made by the researcher with Westminster Abbey requesting measurements of the coffin. They did not have this information.



**Photo 5.4. The plain replica coffin at Brunswick Ironworks Photographed by Pam Smith 2010.**



**Photo 5.6. The studs used for securing the handles, plaques and iron bands to the coffin were hand made at the Brunswick Ironworks. Photographed by Pam Smith 2010.**



**Photo 5.7. Making the replica handles for the coffin. Photographed by Pam Smith 2010.**

The creation of the ironwork for the coffin presented two major problems:-

- Sourcing a craftsman who could reproduce the second plaque belonging to the Company.
- Sourcing a sword that would be fitted underneath the plaque.

### **Sourcing the plaque.**

. The plaques that were supplied to DJ Williams in 1920 had been hand carved by an unknown copper smith<sup>122</sup>, and were given to DJ Williams so that he could antique hammer the plaques in order to create an antique finish. However the process of antique hammering distorted the text so it was not carried out on the plaque attached to the coffin buried in Westminster Abbey.

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<sup>122</sup> Information provided from Meurig Williams as part of the oral history of the Williams family.



**Plaque 5.3. Replica plaque created for the coffin. Photographed by Pam Smith 2010.**

The replica plaque had a “high gloss” finish because the chemicals which were used to finish the plaque would allow it to age once it was on the coffin, thus creating the appearance of an antique plaque.

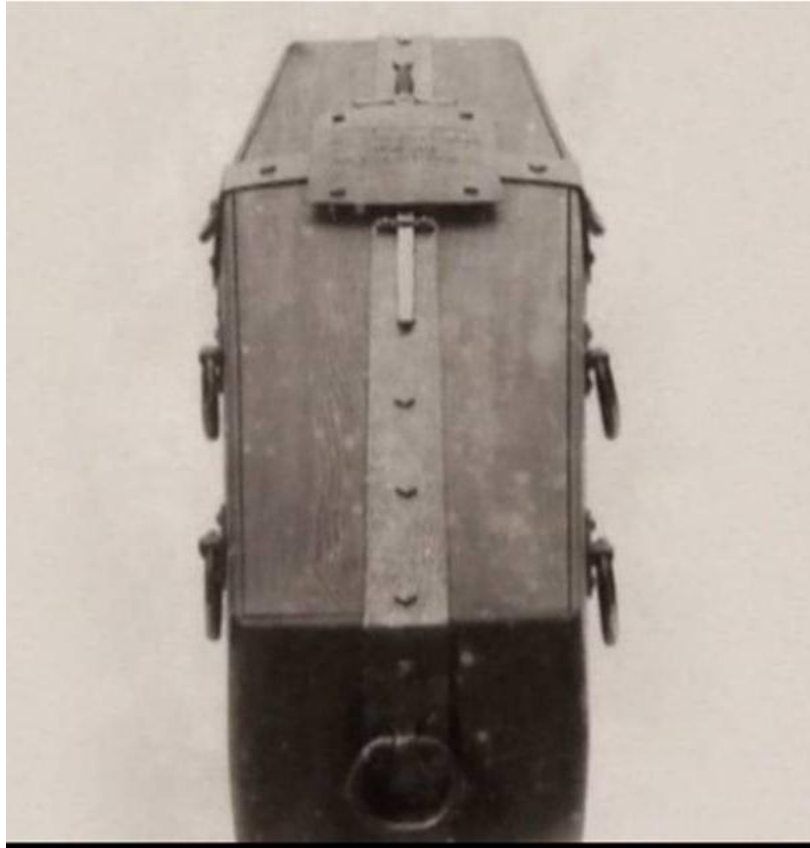
### **Sourcing the Sword.**

The original coffin carried a sword given by King George V to the Unknown Warrior from his private collection at the Tower of London. A great deal of time was devoted as part of the research project in trying to source a sword which resembled the original. The search was conducted over the internet for companies that manufactured swords; the Knight Shop in Conwy was identified as a stockist for replica swords. An appointment was made and a copy of the original photograph of the coffin showing the sword was taken to the meeting. They required some time to identify the sword and would research the exact design of the sword by consulting experts about the style and period of the sword. The sword is cited in the literature as a Crusader sword (Oliver 2005 and Gavaghan 2005) this reference was possibly attributable to the frequent references made to the Great War as a “Crusade”. This was a term frequently used by David Lloyd George when referring to the war. The date and style of the sword given by King George V to the Unknown Warrior was not mentioned in any of the documents relating to the burial. Goebel in his book “The Great War and Medieval Memory” stated that:

*“The working papers of the committee in charge of the funeral in the Abbey neither identify it as a Crusader sword nor specify its age or origin”.*

*(Goebel 2007: p87).*

The sword was given by King George V to the Unknown Warrior as a mark of respect to ensure that the coffin carried a sword as befitted his status as a warrior. The commemoration service for the Unknown Warrior was held in Westminster Abbey where many Knights from the Crusades were buried this coupled with the term Warrior instigated the myth of the Crusader sword.



**Photo 5.8. Photograph of the original 1920 coffin showing the placement of the sword which portrayed the image of a cross. Photograph reproduced from the Williams Family Collection reproduced with their kind permission.**

The sword eventually selected for the top of the replica coffin was a modern copy of a Lion-heart sword similar in design to the sword used by Richard the Lion-heart during the Crusades. It was essential that a sword was placed underneath the plaque on the replica coffin as:-

*“Both the sword and the bands make the sign of the cross on the coffin”.*

*(Goebel 2007:87)*

Whether or not this was an intentional design feature cannot be verified as no reference to it was made in the records relating to the burial. However, the fact that the coffin had carried a sword was important as it was part of the status attributed to the Unknown Warrior.

**Photo 4.4.8. The replica Lancelot Crusader Sword. Photographed by Pam Smith 2010.<sup>123</sup>**



<sup>123</sup> The replica sword for the coffin generated a filial interest with my two sons purchasing the sword as their gift to the project as the Kent and East Sussex railway did not have sufficient funds left to cover the cost of the sword.

The edges of the sword were blunted by the craftsmen at the Brunswick Ironworks prior to its insertion underneath the plaque; the sword was held in place by small metal clips that had been hand made by Mr Meurig Williams these were designed to hold the sword in place and also to prevent its removal. The bands, handles, plaque and sword were fitted onto the replica coffin at the Brunswick Ironworks during September 22<sup>nd</sup>/23<sup>rd</sup> 2010.



**Photo 5.9. Completed replica coffin at the Brunswick Ironworks September 23rd 2010. Photographed by Pam Smith.**

The official opening of the Cavell Van exhibition took place on November 10<sup>th</sup> 2010 at 10.59 am the exact time that the Unknown Warrior left on his final journey from Dover to London on November 10<sup>th</sup> 1920. The ceremony took place at the Kent and East Sussex Railway, Tenterden, Kent and the unveiling was carried out by the Admiral the Lord Boyce, Lord Warden and Admiral of the Cinque Ports.



**Photo 5.10. Members of the Territorial Army dressed in the Uniforms worn by their counterparts in 1920 guarding the coffin inside the Cavell van. Photograph reproduced with the kind permission of the Kent and East Sussex Railway 2010.**

#### **5.5.2.9. Sharing the Heritage. Mr Graham Lay.**

Mr Lay the expert from the BBC television's "Antiques road-show" was contacted in June 2010 as a detailed valuation was required for insurance purposes for the Warrior artefacts currently on loan at the Royal Welch Fusiliers Museum Caernarfon. Mr Lay very kindly undertook the valuation pro gratis, all the necessary documentation was sent to him over the internet. A few weeks later Mr Lay contacted the Brunswick Ironworks to seek permission to recount the story of DJ Williams and the creation of the ironwork for the coffin of the Unknown Warrior. Mr Lay explained that in his free time he raises funds for Help for Heroes and the Royal Air Force Benevolent Fund by giving after dinner speeches. The suggestion was discussed with Mr Williams and permission was granted on the strict understanding that all monies raised would go to those two charities. It was also requested by Mr Williams that the material supplied by Pam Smith was copyrighted to the Company and should only be used in the after dinner speeches. Mr Lay confirmed that this would indeed be the case and his fee for the after dinner speeches would also be donated to the Charities.



Mr Meurig Williams created a replica coffin handle that could be used as a visual exhibit that demonstrated the work undertaken by his grandfather on the original coffin. The handle was initially made from mild steel, but as the handle was going to be used as an exhibition piece and as such was a visual record of the skills of the company in the 21<sup>st</sup> century Mr Williams decided to recreate it from wrought iron. The replica handle was therefore constructed from wrought iron the same material that his grandfather had used. It was made by hand with the metal being heated and struck with the same hammers used by DJ Williams it was then antique hammered and polished by Mr Williams who made the handle in two days commenting that:-

*“I do not know how my grandfather managed to make nine of these handles in just two days and nights as well as the bands for the coffin. He really was a very gifted metal worker, and I hope that my handle would have met his stringent standards”.*

*(Meurig Williams November 2010).*



**Photo 5.11. Replica coffin handle hand made from wrought iron, antique hammered and polished by Mr Meurig Williams for Mr Graham Lay. Photographed by Pam Smith 2010.**

### **5.6. Objective Three.** **Welsh Highland Railway.**

Brunswick Ironworks were awarded the contract for the building and renovation of the railway bridges for the extension of the railway line from Caernarfon to Porthmadoc, the work on the refurbishment and the construction of the new bridges commenced in 2005.<sup>124</sup> The building of the

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<sup>124</sup> The building of the bridges was chronicled on the website created by the WHR [www.isnegard.co.uk](http://www.isnegard.co.uk) which is linked to the Brunswick Ironworks website.

bridges for the Welsh Highland Railways project raised the profile of the company on a national and international level through articles written in various railway magazines which reproduced photographs of the bridges during their construction and installation. Articles were written for the Steam Railway Magazine by Mr Peter Johnson, a frequent visitor to the Brunswick Ironworks during the construction of the bridges for the railway. The articles in the magazine coincided with the number of hits made to the web site during this period (September 2007 and February 2008). The Welsh Highland Railways project is chronicled within the history of the company it was evident that the work conducted by the company on the construction of the bridges for the WHR raised its profile within the Heritage Railway sector. This work was supported by the creation of a Railway booklet created as part of the research project, which was sent out to all the Heritage Railways in the United Kingdom. The booklet highlighted the skills of the company in terms of bridge construction and the building of water cranes, water tanks and coal bunkers for steam locomotives.<sup>125</sup>



**Photo 5.12. Bryn y Felin Bridge installation Brunswick Ironworks. Photograph from the Brunswick archive reproduced with their kind permission.**

The majority of heritage railways within the United Kingdom were aware of the work carried out by the Brunswick Ironworks relating to the construction of the bridges for the WHR project, however, they were not aware of the fact that the Company also built water tanks, tenders, water towers and water cranes. The railway booklet resulted in three commissions being obtained:-

- The construction of a saddle tank for a steam locomotive Bala Lake railway.
- A static water tank for the Vale of Rheidol railway
- The construction of saddle water tanks for the Embassy and Bolton railway.

The publicity generated from the construction of the railway bridges for the WHR project raised the profile of the company in terms of bringing their skills as metal fabricators to a wider audience, resulting in the creation of work for the company such as the building of a new bridge for the Ffestiniog Railway, and the fabrication of water tanks for the steam locomotive Lyd. The creation of these items demonstrated the journey from history to heritage through the use of as a visual artefact (the railway bridges) which highlighted the modern skills of the metal fabricator supported by the use of hand- made rivets used on the finished product a skill from the past.

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<sup>125</sup> The Railway booklet is contained within the appendix 7 pages 320-332.

### **5.6.1. Scrap to Steam August 2009.**

In order to show his appreciation for the work received from the WHR and to support the railway, Mr Williams funded a month long event on the Maes in Caernarfon 2009 entitled Scrap to Steam. The aim of the event was to raise funds to support the restoration of steam locomotive NG15 number 134, which when restored to full working order will run on the railway from Caernarfon to Porthmadoc. The planning for the event took two months to complete, and was undertaken as part of the research project, it involved extensive negotiations with Gwynedd Council and the Welsh Highland Railway.

Permission to place a steam locomotive on the Maes in Caernarfon had to be obtained from Gwynedd Council also permission to borrow the steam locomotive from the Welsh Highland Railway was required. The engine was transported to the Maes by Mr Robert Francis; the engine was located in front of the fountain on the Maes. The aim of the event was two-fold, one to raise funds for the restoration of the locomotive to full working order, the second to raise awareness amongst the local community and visitors to the town relating to the Welsh Highland Railway project and the Brunswick Ironworks role within the project.



**Photo 5.13. Steam locomotive NG 15 on the Maes August 2009. Photographed by Peter Johnson and reproduced with his kind permission.**

The event was supported by the Town Mayor Mr Hywel Roberts who started the fund raising event by making the first donation, Mr Alun Ffred Jones Welsh Assembly Minister for Caernarfon and Heritage Minister for the Welsh Assembly (2007-2010) also supported the event.



**Photo 5.14. Mr H. Williams Mayor of Caernarfon (2009-2010) with NG 15 August 2009. Photographed by Peter Johnson and reproduced with his kind permission.**

## Heritage minister lends a hand

**HERITAGE** Minister Alun Ffred Jones has turned up to lend a hand for the scheme to raise £1m in a month to help restore two old steam engines.

Rail enthusiasts from Caernarfon want to restore two derelict (NG15) locomotives, one of which will be located on Y Maes, Caernarfon throughout August to drum-up support for their appeal.

Brunswick Iron Works, owner Meurig Williams and researcher Pam Smith were inspired to raise the astonishing sum in 30 days if they can, by a mathematical equation they discovered in the puzzle section of a national newspaper.

According to the formula, starting with 1p, and doubling it on day two, and again on day three, they should have raised 64p by the



1	2	3	4	5	6	7	8	9
1p	2p	4p	8p	16p	32p	64p	128p	256p
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
Cylfanswin / Total £1,342,177.28								

**STEAMING AHEAD:** Brunswick Iron Works researcher Pam Smith with Heritage Minister Alun Ffred Jones. zygl100809train-1

end off the week.  
That figure jumps to £81.92 by week two.  
Weeks three and four might be a bit more tricky as they need to have raised £10,485.76 and £1,342,177.28.  
To sponsor the fundraising effort or make a donation

contact NG15 Appeal c/o Brunswick Iron Works; Peblig Mill, Caernarfon LL55 2JE. Cheques and payments to be made out to NG15 appeal. To find out more log on to [www.brunswickironworks](http://www.brunswickironworks) or call Kate on (01286) 673254.

**Article 5.0. From the Herald Newspaper August 2009.**

The Scrap to Steam Event achieved two aims;

- It generated a great deal of interest in the Welsh Highland Railway and the NG 15 Project promoting indirectly the work of the company.
- It raised £20,000 through donations and sponsorship support.

### **5.6.2. British Urban Regeneration Awards 2009.**

The Welsh Highland Railway was entered for a British Urban Regeneration Award (BURA) in 2009, for the extension of the WHR from Caernarfon to Porthmadog. The WHR project was entered in the heritage category for their work on the railway line from Caernarfon to Porthmadoc. The selection process is rigorous involving an informal visit to the nominated project, which is followed up by an official visit supported by detailed interviews with all relevant parties. The Brunswick Ironworks were invited to attend the interview section held at Dinas Yard Caernarfon, relating to the impact/benefits for the company of the WHR project. Meurig Williams suggested that this should part of the research project for the researcher. The interviews were informal and the questions asked ranged from the impact of the project on the company in terms of maintaining the highly skilled workforce to the economic benefits gained from being involved with the project. The outcome of the selection process was announced in December 2009. The WHR project was recognised for its contribution to the construction of the railway an example of best practice in regeneration through a combination of support from the public, private and community sectors.

Mr Leighton Andrews then Deputy Minister for Regeneration stated that:

*“This project illustrates the importance of the third sector to the local economy and how enthusiasm and hard work can be channelled to bring real benefits to local communities. Tourism is an extremely important sector in Wales and this provides a particularly attractive and sustainable way for visitors and residents to enjoy the scenic beauty of the area. It is an ambitious project but the potential rewards are significant with Wales having the longest heritage railway in Britain”.*

*(<http://www.bura.org.uk/Awards/Current+BURA+AWARDS/BP+AWARDS+2009.>)*

The BURA award for the Welsh Highland Railway acknowledged the contributions made by the numerous local companies involved in the project this recognised the work of the Brunswick Ironworks.

### **5.7. Objective Four.**

#### **Creation of Brunswick Archive.**

It was evident during the initial assessment of the documents belonging to the company that the material relating to the history of the company was extensive and that it had the potential to form an archive chronicling the work of the company. The first task was to sift through all the evidence and to discuss with Mr Williams which items would be kept<sup>126</sup>. Negotiations took place in late 2006 at Gwynedd archives Caernarfon when the documents belonging to the company were

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<sup>126</sup> The items forming the Brunswick Archive were discovered at the Brunswick Ironworks in early 2006.

offered on loan “to the archives”, they were delighted to accept the articles, and agreed that as a condition of the loan the archive would remain sealed until after this research project had been completed. The archive service would be notified when the research project was completed and the archive would then be opened up to the public. As part of the project, instruction would be given by the head archivist Lynn Francis on how to catalogue and record the items. This was particularly significant given that the remit relating to the funding for the ESF funded project was that the participants should develop new skills. In order to understand the processes involved in archiving the collection, a copy of the document created by Gwynedd archive service outlining the methodology involved in creating a catalogue was provided as part of the instruction process prior to the commencement of the actual cataloguing process. The key to creating a successful archive lies in providing sufficient detail about the content of the document, it needs to be accurate and precise, with a clear detailed (short) description of its content. As with so many elements of this research project this was a new skill. The information contained within the Gwynedd archive document was followed and the cataloguing process commenced using a simple guiding principle:-

*“The best rule is if in doubt include”.*

*(Gwynedd Archive Document P1).*

Adoption of this approach ensured that the resulting catalogue was an accurate representation documents archived. Gwynedd archives stressed the importance of accurate and precise cataloguing;

*“It should be remembered that the document concerned will not change. Its contents have remained the same from the day it was written to the present day, and will still remain so a hundred years from now”.*

*(Gwynedd Archive P1).*

Part of the process of creating an archive for Brunswick ironworks involved deciding upon the type of catalogue that was to be created. The Gwynedd Archive guide identified five options these are reproduced in the appendix. After discussions with Lynn Francis the head archivist it was decided to create a catalogue that would contain an index it would contain a sub section dividing the archive into specific areas relating to the work undertaken by the company.

*“It is essential that the Archive’s Service Catalogue is consistent in style and format so that the researcher can acquaint himself/herself with the standard degree of detail and method of cataloguing”.*

*(Gwynedd Guide p2).*

Creating the archive raised a number of issues as many of the documents to be archived were original drawings or designs created by DJ Williams or and from architects and artists with whom Mr Williams worked. The archive also contained a large number of photographs relating to work completed by the company. It was decided after further discussions with Lynn Francis that a slightly different approach for the Brunswick archive would need to be developed the archive

would consist of a number of separate sections relating to various aspects of the work undertaken by the company, clearly identifying the source of all documents and ensuring that dates were given for all documents when possible. The work created by Mr DJ Williams required safe guarding in terms of ensuring that any future reference to the archival documents by other persons was fully acknowledged and its source credited.

*“The copyright is an automatic right and arises whenever an individual or company creates a work, to qualify, a work should be regarded as original, and exhibit a degree of labour, skill or judgement.*

*(<http://www.copyrightservice.co.uk/copyright>).*

The fact that the archive would function as a resource for private research and academic study and that it would be protected by the strict copyright restrictions imposed by Gwynedd Archives ensured that the work created by the Brunswick Ironworks would only be used for educational and research purposes.

### **5.7.1. Creating the Archive.**

The first step was to go through every box and starting at number 1 numbering all the document working through all the boxes, this was done so that the extent of the Brunswick Archive was identified in terms of the number of items it contained<sup>127</sup>. The next stage was to list all the documents and write a brief description of each document identifying dates and companies, individuals and Government departments with whom the company had worked, this was followed by repeating the process with the photographs, and finally with the large books and framed pictures. The process took several months to complete, once this task was finished all the index cards were collated into distinct categories which would form a clear structure for the archive. The categories were then discussed with Lynn Francis and were altered where necessary resulting in the creation of the following categories that would form the Brunswick archive.

1. DJ Williams designs for various clients, this was sub sectioned in to eight listings.
2. Various DJ Williams designs were sub sectioned in to twelve categories.
3. Work for other designers undertaken by DJ Williams was sub sectioned into six groups.
4. Catalogues displaying the work of the company sectioned into two groups.
5. Client’s correspondence.
6. Miscellaneous documents.
7. Publications
8. Photographs of the work created by DJ Williams were sub sectioned into five groups.
9. Work under taken at various locations was sectioned into thirteen areas and further sub sectioned again into work in England/ Wales and Abroad.
10. Photographs showing various examples of his work sub sectioned into ten groups.

Once these areas had been identified all the documents were re-numbered and re-written using the correct index number for example:

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<sup>127</sup> The creation of the Brunswick archive took three years to complete as the work had to be fitted into the demands of the whole research project.

- DJ Williams Designs with the prefix XD135/1 for the University College of North Wales.

The Brunswick Archive took three years to complete, the work required for the archive had to be fitted into the demands of the research project and it took time to master the new skill of archiving. However, the history of the company has been recorded for posterity and in time it is hoped that the Williams family papers will supplement the archive, but that decision rests with the Williams family.

### **5.8. Objective Five.**

#### **History of the Company.**

This was one of the six objectives identified by Mr Williams at the commencement of the research project. The reason for the objective was that Mr Williams was considering the possibility of co-authoring the history of the company. Mr Williams would provide the anecdotal evidence for the book, for example; the story of how his grandfather DJ Williams lost his tool bag in the Menai Straits when returning to Caernarfon from Anglesey on the ferry. The research project has provided the material which would facilitate the creation of a book detailing the history of the company supplemented by further information provided by Mr Meurig Williams. It is envisioned that the book could be created as part of a follow up study with the company at the end of the current research project. The funds raised by the sale of the book would be placed in a charitable trust with to support a centenary celebration in 2020 commemorating the link between the Unknown Warrior and the Brunswick Ironworks. Any additional funds would be available for restoration projects linked to heritage railways, for example the restoration of steam locomotive NG15 Number 133 the sister engine to NG15 Number 134 which is currently undergoing restoration with the Welsh Highland Railway Society at Dinas Yard Caernarfon<sup>128</sup>.

### **5.9. Objective Six.**

#### **Brunswick Heritage Trail.**<sup>129</sup>

The heritage trail was identified in 2006 as one of the six objectives set by Mr Williams at the commencement of the project. The objective focused on how the heritage of the company could be developed as an additional tourist attraction for the town. The theme for the trail was self evident the skills of the art metal workers illustrated through the work created by the Brunswick Ironworks within the town and surrounding location<sup>130</sup>. The insights gained from the “Bog Train” tour (Ireland) and Aillwee caves assisted in the creation of the Brunswick trail as it highlighted the importance of structuring the proposed trail so that it would provide the opportunity for the audience to appreciate the content of the proposed Brunswick trail this was seen as:-

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<sup>128</sup> The Ng 15 project has a projected completion date of 2015. The fundraising project is located on pages 181-183.

<sup>129</sup> The Brunswick Trail emerged as one of the objectives for the research project but it was also linked to the work undertaken by the researcher with the Civic Society and Gwynedd Council. Gwynedd Council invited the researcher to be a member of the consultancy group looking at interpretation in Caernarfon and the development of the Slate Quay the former home of the Brunswick Ironworks. The researcher worked with the Council for three years, providing the opportunity for the researcher to establish a close working relationship with the Council.

<sup>130</sup> The draft version of the Brunswick Trial is located in the appendix 6 pages 305-319.



- The skills of the art metal blacksmith via his work in Caernarfon Castle.
- The engineering involved in actually erecting the bridges constructed by the Brunswick Ironworks in terms of the inaccessibility of the line in relation to the road access.
- The ability of the art metal blacksmith (DJ Williams) to translate a design on paper by Clough Williams Ellis and reproduce the design in metal (grave, gates and monogram for David Lloyd George).
- The modern day skills of the art metal worker blacksmith to create replica artefacts (water tanks along the route of the WHR) using modern 21<sup>st</sup> century skills but by hand finishing the product it resembles a water tank of the 19<sup>th</sup> century<sup>131</sup>.

#### **5.10. Lessons learnt from the Brunswick Case study in terms of research and heritage.**

##### **Research.**

The Brunswick project illustrated in a visual way the journey taken during the research relating to how history was transformed into heritage through the development of the link with the Unknown Warrior. Thus demonstrating in a practical way how history was transformed into heritage during the Brunswick case study. The grave for the Unknown Warrior was created in 1920 to commemorate for the fallen from the Great War, however with the passage of time the event has passed from history into heritage as the Tomb for the Unknown Warrior became a visual reminder of the sacrifices made by a generation of young men.

The experiences gained from the Brunswick case study illustrated that ethnographic research requires the researcher to be focused and flexible in terms of the outcomes of the research; in the case of the Brunswick case study there were no prescribed patterns or outcomes for this type of research as long as it has a clearly defined structure the outcomes revealed themselves as the research progressed. Initially the focus was on creating the history of the company but with the identification of the six objectives for the project it became a much larger study which demonstrated how the past history of the company was transformed as a tool for the present and future development of the company. The research project indicated that ethnographic research evolves and develops overtime utilising the unique “spirit” of the material under review. That each project needs to be viewed as a separate unknown quantity which requires its own combination of tools, developed during the project which in the case of the Brunswick project illustrated the journey from history to heritage as experienced throughout the research.

The creation of a phased approach for the project created a visual representation of the structure of the research which was viewed by the researcher as a series of interconnected pieces that when completed resulted in the Brunswick case study. The immersion which took place into the working life of the Brunswick Ironworks opened a window on the skills of the art metal worker and their innate ability to rediscover and recreate their skills to meet the challenges of their profession. Showing that research creates new avenues of discovery not visible at the start of the research project, ethnographic research is akin to peeling an orange, remove the skin and a complex series of interconnected pieces are revealed which together form the substance of the

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<sup>131</sup> Pictures of the water tank are contained in the History of the Company under the section relating to Heritage railways page 118.

orange but taken as individual segments they can reveal insights into the whole which had not been considered.

The research changed the image of the art metal blacksmiths; they are a manual occupation which takes place in noisy and dirty forges and workshops requiring a great deal of strength to complete their commissions but it is also a highly skilled profession requiring a five year apprenticeship to master the basic skills. It is a profession which is never “truly mastered”, as new challenges have to be met requiring the adaptation of existing skills or the acquisition of a new skill base. The art metal workers from the Brunswick Ironworks are highly skilled craftsmen who create unique examples of their work visually demonstrating the skills of the art metal blacksmith. In terms of the Brunswick project the researcher learnt a great deal about the benefits and pitfalls of research, as a process it is constantly evolving and developing. The lessons learnt from the project meant that the goal posts would move as new aspects of the project were revealed. It became evident that an explanatory framework could be created which identified the processes and method developed in the Brunswick ethnographic research and it was clear that “one size does not fit all”. The methodology needs to be suited to the needs of the research, it needs to be flexible and adaptable each project is unique in terms of fulfilling the needs of the research project.

The Brunswick project revealed the importance of developing a close working relationship with the company which was one of mutual respect and the sharing of outcomes requiring the ability to reject certain items and to include others. The creation of the objectives for the project gave it substance in terms of providing a working timeframe for the project it also highlighted the needs to change paths within the research when necessary and to be open to the positive and negative outcomes of the research project. The research project needs to be approached with an open mind with an acceptance that it has infinite possibilities, based on sound background reading and thorough detailed research supported by verifiable evidence in this case the archive and history of the company. The research project with the Brunswick Ironworks was not about proving an established theory but a shared journey which along the way revealed the transition from history to heritage and how the past history of the company was developed to identify future paths for the company based on their heritage as art metal blacksmiths. The Brunswick project was demanding in terms of learning new skills which were required for the successful completion of the project<sup>132</sup>; it also provided the opportunity for the researcher to experience the rich and diverse heritage of the Brunswick Ironworks and how it was developed and transformed by the researcher and the company to identify future opportunities for the company.

### **5.10.1. Heritage.**

The research project with the Brunswick Ironworks revealed that heritage is a fluid process which is not set in stone and that it is most effective when it relates directly to each location and that ideally there should not be a standard approach to heritage as each site is unique. It is a process that has to be worked with it is not something that just emerges it requires value judgements to be made in terms of what is preserved for posterity with an acceptance that heritage means many

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<sup>132</sup> A set of diverse skills ranging from creating the Brunswick archive, to designing and developing the website and photographic skills. The skill of archiving took time to master and the creation of the Archive took three years. The acquisition of these new skills would not have been possible without the funding provided through the ESF Ph D research programme.

things to many people, one man's rubbish is another man's treasure. Heritage is multi-layered, the whole story needs to be told so that people can make their own judgements about the past and that the lessons learnt from the past can help to shape the future but heritage is a process that has to be handled with care. The Brunswick case study and the supporting work undertaken in Ireland indicated that the development of heritage needs to be tailored to fit the needs of each individual location/subject. Heritage can be a force for change, building bridges from the past to the present and future, but it requires carefully detailed research to ensure that the heritage presented for each location is truthful and reflects the experiences of the people from the past and that it remains true to their cultural roots. The past has been shaped by the people and events that touched their lives and which through the transition from history to heritage can touch our lives making it a living felt heritage which promotes an emotional response. The emotional connection to the Brunswick project was a powerful force in terms of reaching out to the wider community through its connection with the Unknown Warrior. The artefacts from the Unknown Warrior displayed at various locations during the project and the journey experienced whilst facilitating these connections demonstrated in a visual way how heritage can reach out to touch people's lives across the years promoting a "felt shared" experience through the artefacts of the Unknown Warrior.

Heritage as revealed through the Brunswick project is a shared experience which can be used effectively to support other heritage attractions, as in this case the Llangollen project<sup>133</sup> and the Scrap to Steam project<sup>134</sup> undertaken as part of the Brunswick project. Heritage is not about ownership, it belongs to all it was created from past experiences (history) which over time evolved to become valued heritage assets which reflect the past which in turn provides a shared sense of identity which through their preservation creating a heritage which celebrates the past but which provides a future through its preservation. Heritage is not perfect all aspects have to be shown "good and bad." It is not an easy subject but the truth needs to be told, the past was not ideal people had their problems which they overcame. Heritage is a tool which provides window on the past sometimes it is cloudy window sometimes it is a clear reflection on the past the secret is to present the whole picture and encourage people to make their own personal connections. History and heritage are effective learning tools in the case of the Brunswick project it brought the skills of the Williams family to a wider audience demonstrating in a visual way the journey from history to heritage and how the past can be developed to guide its future.

### **5.10.2. Lessons learnt from the research project a personal perspective.**

The Brunswick project was challenging and demanding in terms of time and achieving the objectives set for the case study. As the project developed and evolved it became evident that this was about more than producing the history of the company it was in actual fact a journey which charted the transition from history to heritage and showed in a visual practical way how the past can be utilised to point the way to the future. It changed 'my'<sup>135</sup> understanding of history and heritage they were not separate areas in actual fact they were inter connected fields with it difficult to identify where one stops and the other begins. History in the context of the Brunswick

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<sup>133</sup> The building of a Patriot class steam locomotive named Unknown Warrior.

<sup>134</sup> The restoration of steam locomotive Number 134 for the WHR.

<sup>135</sup> For the immediacy of the projects reflection I have used the 1<sup>st</sup> person narrative here.

project was seen as the building block with the past which was transformed through the passage of time into heritage a tangible medium which provided insights into the past which projected into the present with ramifications for the future. The Brunswick project revealed that visualising the problem through the use of diagrams and detailed plans identified the possibility that the framework created for the project had the potential to be transferable across other heritage projects providing a starting point for projects which could then be tailored to suit the needs of each project. Conducting ethnographic research required a different set of research tools in terms of understanding how this type of research grows, alters and evolves throughout the duration of the project. It was evident at a very early stage that this was a unique opportunity to experience first-hand how immersion in the daily working life of the company provided an insight into the skills of the art metal blacksmiths that could not be experienced from simply reading about it. It was a shared journey which spread out and touched many different people through its links with the Unknown Warrior and the Welsh Highland Railway project allowing people to touch “history”<sup>136</sup>. Ethnographic research requires flexibility, an open mind and courage to change the route of the research as it progresses, an acceptance that the outcomes of the research project would not be identified until all the objectives set were achieved and that the finished case study might be something completely different.

As the research progressed it became evident that whilst the Irish case studies were important in terms of experiencing first-hand how other countries had developed their history into heritage, they were in fact a supporting section to the research and as such are, referenced in the main body but relegated to the appendices<sup>137</sup>. However, the visits to Ireland were an essential part of the journey opening my mind to different adaptations of heritage which in their own way had been designed to suit the needs of each location, highlighting the individual aspect of heritage in terms of working with a community and creating a sense of place. The lessons learnt from Ireland helped to shape the Brunswick Trail, aiding in an understanding of the journey from history to heritage and the role that these two concepts can fulfil in terms of creating a present and future for an area.

With hindsight looking back at the research project as a whole it would have been possible to concentrate on either the history of the company or the creation of the Brunswick archive as the Brunswick case study. However, the research project was focused firmly in achieving the identified objectives for the project resulting in a journal of the work carried out during the project which has been beneficial in terms of creating a transferable framework for other researchers to adapt and amend to suit the needs of their project. The history of the company has generated information which supported by the oral history from Mr Williams has the potential to provide the basis for a post doctoral follow up research project which would result in the publication of the history of the company. The research project demonstrated in a personal way that ethnographic research is a learning process which challenges your existing research skills and demands the acquisition of new skills which broaden your experience providing insights into the ongoing process of research as a continuing process which enriches both the researcher and the research.

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<sup>136</sup> The artefacts from the Unknown Warrior- allowing people to touch the past.

<sup>137</sup> Irish case studies are located in appendix 1 pages 230-249.

# **6. Chapter Six. Discussion.**

## **6.1. Introduction.**

This section of the research project discusses the impact of the research project based on the evidence generated during the project based on the six objectives created for the case study. Their significance will be discussed in relation to the literature discussed in the literature review sections which will start to identify the contribution of the research project to the heritage debate in terms of illustrating the journey from history to heritage, and how the heritage of the Brunswick Ironworks can reveal or open a door to all other aspects of heritage. The creation of an explanatory model is predicted as one of the outcomes of the discussions relating to the outcomes of the research project. One of the unexpected outcomes of the research project was the economic benefit of the project for the company acquired through the work undertaken during the research which resulted in connections being re-established with Cadw.<sup>138</sup> Commissions generated from the heritage railway booklet and the active promotion of the link with the Unknown Warrior these were unexpected outcomes and are discussed at the beginning of this section.

### **6.1.1. Economic Outcomes of the research project for the Brunswick Ironworks.**

The research project provided a number of marketing opportunities for the company created as a result of the link with the Unknown Warrior, the construction of the bridges for the Welsh Highland Railway project and the articles which appeared in the local press (Caernarfon Herald) and the company's web site. The work obtained as part of the research project assisted in ensuring the continued employment of the skilled craftsmen from the Brunswick Ironworks during a period of economic uncertainty as a result of the global recession.

### **6.1.2. Reconnecting with Cadw.**

The research project also successfully re-established the working partnership with Cadw which had been lost when the company relocated to Peblig Mill in 2000<sup>139</sup>. Cadw assumed that the company had ceased trading as it was no longer located on the slate quay. An Industry booklet was hand delivered to the local Cadw Office in Caernarfon<sup>140</sup>, resulting in the commission for new railings in Caernarfon Castle (Granary Tower) and essential ironwork carried out during the recent updating of its facilities (2008-2009).

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<sup>138</sup> This ESF funded project has enabled the development of a small company in West Wales. This was one of the projected outcomes for the project that the ESF funding would support the local business community. The research project fulfilled and exceeded these expectations. The project encouraged the company to be more proactive in their dealings with business contacts.

<sup>139</sup> Cadw the historic environment service of the Welsh Government.

<sup>140</sup> The booklet was hand delivered by the researcher to the Cadw offices on Ciblyn Industrial Estate Caernarfon.



**Photo 6.0. Railings at Caernarfon Castle created and installed by Brunswick Ironworks 2009. Photographed by Pam Smith.**

The Scrap to Steam event in 2009 resulted in the commission for the new tender for steam locomotive NG15 number 134. The tender was constructed at Brunswick Ironworks.<sup>141</sup>



**Photo 6.1. Tender for NG15 Number 134 constructed at Brunswick Ironworks June 2011. Photographed by Pam Smith.**

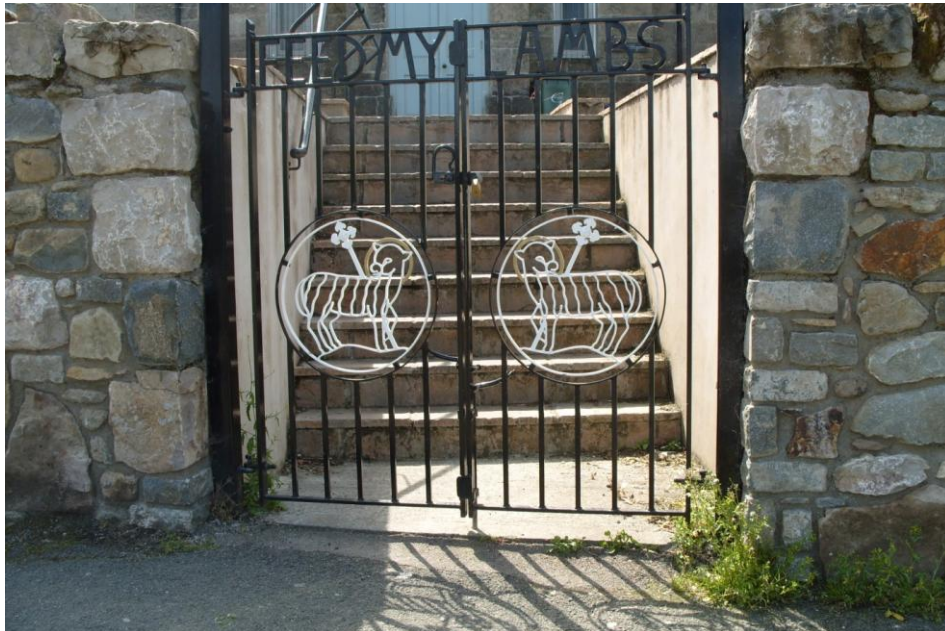
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<sup>141</sup> The Scrap to Steam Event results are discussed in the chapter five. Findings pages 181-183.

### **6.1.3. From History to Heritage the Unknown Warrior and Brunswick Ironworks.**

The utilisation of the link with Brunswick Ironworks and the ironwork for the coffin of the Unknown Warrior resulted in the commission from the Kent and East Sussex railway to recreate the ironwork for a replica coffin that was displayed inside the restored Cavell Van in November 2010. This link was important as it brought the story of DJ Williams and his contribution to the burial of the Unknown Warrior to the attention of a national audience via the media interest generated by the Cavell Van project<sup>142</sup>.

The media interest generated as a result of the research project resulted in the company receiving the commission for new entrance gates for “Feed My Lambs” Caernarfon<sup>143</sup> the work was obtained as a result of the article which appeared in the local press in 2006<sup>144</sup> which mentioned the project and detailed the history of the company as art metal workers.



**Photo 6.2. Feed My Lambs Gate Caernarfon created by Brunswick Ironworks 2007. Photographed by Pam Smith 2010.**

Restoration of Sir O. M. Edwards Gate “The Resurrection” designed by R.L. Gapper translated into metal by DJ Williams.<sup>145</sup> The commission to restore the gate originated via the web site and it was not until Mr Meurig Williams went to collect the gate that the Trustees of Sir O.M. Edwards realised that it was made by his grandfather.

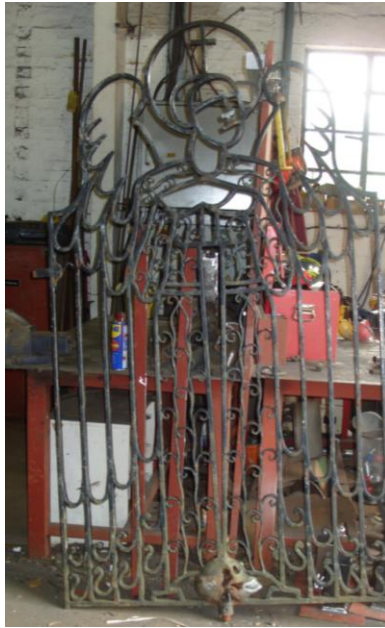
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<sup>142</sup> The Cavell Van project is discussed in the results chapter under the heading of the Unknown Warrior.

<sup>143</sup> Feed My Lambs was originally an Infant School (1839) it was restored in 2008 and re-opened to the public as a Community Centre. The restoration project was supported by National Lottery Heritage Fund.

<sup>144</sup> Article in the Caernarfon and Denbigh Herald recounting the story of the company in 2006.

<sup>145</sup> The creation of the gate is detailed in the case study on the history of the company pages 105-106.



**Photo 6.3. Sir O.M. Edwards gate awaiting restoration at Brunswick Ironworks June 2011. Photographed by Pam Smith.**

The creation of the Railway booklet for the company resulted in three commissions for the company as a result of the research project.<sup>146</sup> The work obtained by the Brunswick Ironworks as result of the research project identified and established new marketing opportunities for the company. The skills of the company as art metal worker blacksmiths and metal fabricators have been brought to the attention of a wider market especially the heritage railway sector which is a niche market- but it is important in terms of obtaining commissions for the company contributing significantly to its economic viability.

### **6.2. Outcomes of the Research. The Delphi Questionnaire Replies.**

However, in order to assess the overall impact of the research project and obtain feedback from specialist within the fields of heritage and interpretation, a Delphi questionnaire was designed and distributed to fifteen specialists who had consented to take part in the Delphi survey. Replies were received from ten specialists and their comments and suggestions are discussed in detail within this chapter. This enabled reflection on what had been achieved by the research project. The Delphi was constructed to obtain feedback from the specialists relating to the six objectives set for the research project with a final question relating to the future development of the research project. This section discusses the replies obtained from the Delphi respondents relating to their views on the impact of the research project the specialists consulted were selected from a broad cross section of expertise in the fields of heritage including independent consultants, academics, archivists, and museum curators<sup>147</sup>.

The Delphi questionnaire was created in order to overcome one of the inherent problems associated with case study research the lack of verifiable and documentary evidence as cited by Yin (1994). This was further supported by Huberman et al (1994) who warned against the pitfalls

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<sup>146</sup> The Railway booklet and marketing booklets are contained in appendix 7 pages 320-332.

<sup>147</sup> The replies received from the respondents to the Delphi survey are contained in the appendix 5 278-287.



of qualitative research methods and recommended the inclusion of other research tools within this type of research. However, both Yin and Huberman advocated the value of this type of research as providing insights into ordinary events in natural settings which provide insights into real life situations and their impact on people and places.

### **6.2.1. Objective One. The creation of a website for Brunswick Ironworks.**

The Delphi questionnaire requested feedback relating to the web site, this consisted of a question which focused on the creation of the website and its role in the research project.

#### **Question.**

*“A website was created as part of the research. How do you see it developing in the future? Is there anything else that needs to be developed/added to the web site?”*

#### **6.2.1.1. Discussion of responses.**

The responses received from the specialists consulted indicated that the website was a useful tool for the company, but that it required further development. Some of the suggestions made required a large financial investment by the Brunswick Ironworks in terms of creating interactive games for visitors to the site; whilst this is a welcome comment in reality this type of site design is expensive and whilst it might encourage visitors to the site it does not necessarily generate work for the company which was one of the reasons why the website was created.

The fact that the website is not bi-lingual was due to financial constraints, the cost of translating the text for the website into Welsh would be prohibitive and Mr. Williams was not sure if the costs involved would generate any business for the company, because many of his customers speak “Welsh” but prefer to conduct their business in English. Ideally the web site does need to be bi-lingual but in the current economic climate this expense cannot be justified. The suggestion that the website should be clearly divided into two specific sections, one heritage the other commercial has been taken on board and the web site is currently under redevelopment so that the site is restructured into two clearly defined areas a heritage section and a commercial section. The future development of the website has been discussed with Mr. Williams who commented that:-

*“It has worked really well in terms of raising the profile of the company through its heritage which is a positive outcome for the research project. Prior to the start of the research project we did not have an e-mail address never mind a website! However, it is now a case of updating the site so that it earns its money as a marketing mechanism for the company which will generate new business”.*

*(Mr Williams April 2011).*

### **6.2.2. Objective Two. Unknown Warrior.**

This objective focused on connecting the past to the present through the creative use of the link to the Unknown Warrior which raised the profile of the company. This previously unknown link

between the Unknown Warrior and the Brunswick Ironworks was a crucial component within the research project in terms of raising its profile.<sup>148</sup>

The Delphi questionnaire focused on whether or not the media coverage generated throughout the research project relating to the Unknown Warrior had been viewed or read by any of the specialists consulted.

### **Delphi Questions Unknown Warrior.**

#### **Questions.**

*“Were you previously aware of the link between the Brunswick Ironworks and the coffin of the Unknown Warrior? If so please explain?”*

*Question Three.*

*“Have you seen any of the media coverage generated as a result of the link between the Unknown Warrior and the Brunswick Ironworks?”*

#### **6.2.2.1. Discussion.**

The replies obtained from the Delphi questionnaire indicated that the work undertaken on the link between the Brunswick Ironworks and the Unknown Warrior had been instrumental in bringing the story to the attention of local, national and international audiences due to the fact that the Antiques Road Show is broadcast in America Australia and New Zealand.

The media interest generated by the Antiques Road Show programme from Bodnant Gardens is still impacting on the company. The BBC contacted Brunswick Ironworks again in April 2011 seeking permission to feature the artefacts from the Unknown Warrior and the story of David John Williams in a special BBC Antiques Road Show “Special Finds” programme due for transmission in autumn 2012<sup>149</sup>. The fact that some of the specialists consulted had not been aware of the media coverage generated from the work undertaken during the research project was possibly due to the fact that they do not read the local press, and they might not watch the Antiques Road Show programmes. The link between the company and the Unknown Warrior generated interest on an international scale. The Curator from the Royal Welch Fusiliers Museum Caernarfon whilst on holiday in France (2011) visited some of the sites associated with the battlefields of the Great War this included a small museum at Erquinghem sur Lys near Lille. The museum contained a display recounting the link between David Railton and the burial of the Unknown Warrior in Westminster Abbey (1920). The Curator of the RWF mentioned that the artefacts made by the company were currently on loan to the museum and that the company was located in Caernarfon. As a result of this conversation an e-mail was sent to the company.<sup>150</sup> The museum was sent copies of the photographs of the coffin detailing the work of the company and the story of DJ Williams. Meurig Williams created a replica handle and the replica slate plaque

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<sup>148</sup> The publicity generated during the course of the research project is presented in the appendix 9 Unknown Warrior pages 349-390.

<sup>149</sup> The BBC did not follow this up.

<sup>150</sup> This would not have been possible before the commencement of the research project.

was lent to the museum for the unveiling ceremony in June 2011 recording the contribution made by David Railton to the burial of the Unknown Warrior in Westminster Abbey.

The sharing of the heritage of the Brunswick Ironworks with other locations associated with the story of the Unknown Warrior illustrated the importance of history creating the story and of heritage ensuring its survival for the benefit of present and future generations. This aspect of the research project supported the findings of Waterton (2011) relating to the Staffordshire potteries. The Unknown Warrior connection touched people in a personal way allowing real physical connections to be made with the Brunswick Ironworks and the Unknown Warrior through family associations from history possibly through the loss of a member of their family during the Great War. The work undertaken on the Unknown Warrior demonstrated that heritage is the link with the past the present and the future generating what Waterton (2011) termed “experience counters” which provoke a personal response by stimulating the mind and body. The fact that the artefacts created by DJ Williams in 1920 were handled provoked an emotional connection which spanned time as witnessed by the Receiver General of Westminster Abbey. The creation of the auto-ethnographic case study on the Brunswick Ironworks created a bridge between words and images that enriched the subject matter resulting in an experience which according to Pink (2007)<sup>151</sup> encapsulates the senses. The Brunswick project was a visual auto-ethnographic study that emerged as a fusion of observation and first-hand experience that was subsequently shared through photographs and documentary evidence which allowed connections to be made.

### **6.3. Objective Three. Creation of a Brunswick Archive.**

The Brunswick archive was created as one of the research objectives set for the project; the archive contains the pictorial, photographic and documentary evidence relating to the work undertaken by the company over a 70 year period. The archive provides essential evidence which can be used to verify the findings of the research in terms of the extensive work undertaken by the company on a local and national level during this period. This was important for the project as it was used as a reference tool to illustrate the journey from history to heritage experienced during the research project which was supported by the responses obtained from the Delphi survey. The Delphi questionnaire focused on obtaining the views of the specialists consulted in the survey relating to the creation and future development of the archive.

### **Question.**

*“As a result of this research an archive of the work undertaken by the company has been created and catalogued under the guidance of Gwynedd archives. Do you think that this will be a valuable asset for Caernarfon? How do you see it being developed?”*

### **6.3.1. Discussion.**

The responses received indicated that the Brunswick archive was a valuable addition to the historical material already catalogued relating to the industrial heritage of Caernarfon. The development of the archive as an educational resource through the Unknown Warrior would provide an interesting curriculum resource for secondary schools within the area and further afield. The archive highlights the skills of the company and its ability to diversify thus ensuring

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<sup>151</sup> Pink 2007:21 in Scarles 2012 article.

the future of the company, in the 21<sup>st</sup> century.<sup>152</sup> The catalogue provides an insight into how the skills of the art metal worker have been utilised and developed demonstrating how the art metal workers of the Brunswick Ironworks have worked with architects and artists, local Councils and Government bodies to create unique pieces of art metal work. A selection of extracts from the completed archive are contained in the appendix; the archive was not stored on a disc due to the fact that material stored in this way has a limited life span whereas a paper archive has a longer life expectancy. The comments obtained from the specialists supported the importance of the creation of a Brunswick archive as a valuable tool for researchers and interested members of the public, highlighting how this local company became involved in key events and how their work impacted events on a National and International level.

#### **6.4. Objective Four. The Welsh Highland Railway and the Brunswick Ironworks.**

Objective four focused on the link between the Welsh Highland Railway project and the Brunswick Ironworks in relation to the re-opening of the railway between Caernarfon and Porthmadoc. The Delphi questionnaire sought to obtain information from the respondents relating to the impact of the work on the Brunswick Ironworks in terms of raising its profile, and how the project might encourage more people to visit the town.

#### **Questions.**

*“Brunswick Ironworks has recently completed the construction of the railway bridges for the Welsh Highland railway project. This will create a link between Caernarfon and Porthmadoc. Do you think that this work has raised the profile of the company? Please explain?”*

Second question:-

*“Do you think that the work carried out by the company on the Welsh Highland railway project will encourage more visitors to the town? How do you see this developing? Are there any other ways in which this link could be developed?”*

#### **6.4.1. Discussion.**

The replies received from the respondents to these questions indicated that the work on the bridges for the Welsh Highland Railway project had indeed raised the profile of the company amongst heritage railways and highlighted the skills of the company amongst the railway community. This fact was evident when visiting the Kent and East Sussex railway in November 2010, the staff of the railway were aware of the skills of the company in building railway bridges and essential railway components for steam locomotives such as water tenders, coal tenders and static water tanks<sup>153</sup>.

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<sup>152</sup> Extracts from the Brunswick archive catalogue are contained in the appendix 6 pages 296-304 under the heading Brunswick Archive.

<sup>153</sup> Following the visit to the railway for the opening of the Cavell van the company obtained the tender for two new railway bridges from the Kent and East Sussex railway.

The replies received indicated that whilst the work conducted by the Brunswick Ironworks on the Welsh Highland Railway project has not directly encouraged visitors to Caernarfon, its involvement in the project has raised the profile of the company amongst other heritage railways within the United Kingdom and as far afield as South Africa. The South African link is possibly attributable to the fact that Brunswick Ironworks supported the restoration of NG 15 number 134, a steam locomotive that spent its working life in South Africa.<sup>154</sup>

The fact that one of the respondents identified the importance of the link between the David Lloyd George Museum, Caernarfon Castle and the railway as a possible connection to be developed that would encourage visitors to explore the area through the heritage of the Brunswick Ironworks. This identified a sense of place for the company in terms of where their work could fit into the heritage of Caernarfon, highlighting the importance of locality and the role it plays in terms of fostering an understanding of the industrial heritage of Caernarfon. The work undertaken by the Brunswick Ironworks on the Welsh Highland project has raised its profile amongst other heritage railways within the United Kingdom. Whilst the role of the Brunswick Ironworks in relation to the re-opening of the railway from Caernarfon to Porthmadoc would not be known amongst visitors to the railway, hopefully the proposed “Green route” Brunswick Trail will inform people of the contribution made by the company to the re-opening of the railway<sup>155</sup>.

Mr. Williams was questioned about the impact of the Welsh Highland Railway project and how it had impacted upon the company:-

*“The building of the bridges for the Welsh Highland Railway project has most certainly raised the profile of the company amongst the railway fraternity. But it also developed our skills in bridge building. Our skills were adapted to construct a number of pedestrian foot bridges for local councils, who were aware of our work on the WHR project. Thus enabling the skills developed for the construction of the railway bridges to be used for the future development of the company”.*

*(Mr M. Williams April 2011).*

### **6.5. Objective Five. History of the Brunswick Ironworks.**

The history of the Brunswick Ironworks was an unknown part of Caernarfon’s heritage a “forgotten history” forming an important link to major events of the past century most notably the burial of the Unknown Warrior in Westminster Abbey in 1920 and through the Kent and East Sussex railway project connecting the past to the present and future through the creation of the replica coffin for the railway in 2010. The Delphi questionnaire asked three specific questions relating to the history of the company the replies received from the respondents have been grouped together so that a detailed assessment of the impact of the research project in terms of raising the profile to the company through its history could be ascertained.

### **Questions.**

- *Are you aware of the history of the Brunswick Ironworks? How?*

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<sup>154</sup> See the Scrap to steam event contained in the results chapter pages 181-183.

<sup>155</sup> The Brunswick Trail created as objective six for the project is contained in the appendix 6 pages 305-319.

- *Do you know the present location of the company?*
- *How important do you consider the history of the Brunswick Ironworks to the rich and diverse heritage of Caernarfon?*

### **6.5.1. Discussion.**

The history of the company was known amongst the academic researchers although the scope and breadth of its involvement in key events was unknown. Most of the respondents knew the location of the company on the Slate quay but were either unaware that it had relocated to Peblig Mill or thought that it had ceased trading. The history of the company is an integral part of the story of the town linking its past industrial heritage to the present through the work of the company. The history of the company “tells the story of our past” Hooper-Greenhill (2000) providing a visual record of work of the art metal blacksmith supported by archival documented evidence unearthed during the project which authenticated the “story”. The history of the company contributed significantly to the transition from history to heritage conveying through the use of photographs the work of the company providing documentary evidence supporting the view Waterton (2011) that heritage is a fluid evolving process which touches people in different ways which enriches our lives and through the experiences gained during the research project provides a bridge between the past, present and future development of the Brunswick Ironworks.

### **6.6. Objective Six. Heritage Trail Brunswick Ironworks.**

#### **Questions :**

*“The research project aims to create a Brunswick trail for residents and visitors to use. How should it be developed in order to maximise its potential”?*

*Should it be guided/self guided trail? Please explain your reasons behind the selection?*

### **6.6.1. Discussion.**

The replies received from the respondents indicated that Caernarfon should develop its heritage through the creation of a number of heritage trails which would promote the history of the town and that the trails could provide an alternative focus for those tourists who did not wish to visit the Castle. Creating the Brunswick Trail will connect the heritage of the company with other heritage attractions in the local area. The cheapest option is a self guided trail this will allow people to take the tour at their own pace the trail would be a welcome addition to the town. Perhaps the trail could be offered as a guided tour during the summer months?

*“It is important that the heritage of the company is shared as the heritage attractions in town are not very willing to work together each one guarding its heritage for its own monetary gain. Hopefully the creation of the Brunswick Trail will encourage people to work together for the good of Caernarfon”*

*Meurig Williams 2011. (Commenting on the potential value of the Brunswick Trail for Gwynedd).*

It was evident that the experts consulted in the Delphi questionnaire were supportive in terms of creating a Brunswick trail and that the trail should focus on the whole of the town using the heritage of the company as the thread that would bind all the sites together. The most economically viable option was the self guided trail, it was the least expensive to set up and would provide an additional activity for visitors and the local community to appreciate. The feedback from the panel of experts consulted as part of the Delphi survey indicated that the creation of two tours was possible; one focusing on work undertaken by the company within the town; whilst the driving tour encourages visitors to explore the area through the heritage of the company. The replies received to the questions were discussed with Meurig Williams the outcome of the discussion was that ideally both tours should be created but that it was sensible to start with the driving trail as this could be set up quickly in terms of not requiring planning consent for plaques; and it would encourage visitors to explore the area.

*“By starting at the Castle it would encourage people to go into the Castle this would highlight our work in the castle and the artefacts of the Unknown Warrior on display at the Royal Welch Fusiliers Museum. Also the Peace Garden where the commemorative plaques to the Unknown Warrior are sited is just across the road from the Castle so they could be included. The link with the WHR might encourage people to travel on the railway crossing over the bridges made by the company, and hopefully they would stay in town overnight before exploring the other locations; so everyone benefits”.*

*(Meurig Williams May 2011).*

Hooper-Greenhill (2000) acknowledged the importance of connections as utilising visual aspects of heritage which through the use of photographs and artefacts are embedded with their own history rich in personal experiences which are encoded in the artefacts created. In the case of the Brunswick Ironworks the heating, hitting, shaping and cooling of the metal embedding the finished product with the spirit of the art metal worker. Hooper-Greenhill 2000 commented that:-

*“Objects can become invested with deeply held feelings and can symbolise powerful connections through which life is led”*

*(Hooper-Grenhill2000:109)*

The Brunswick trail will enable visitors and members of the local community to appreciate the contribution of the Brunswick Ironworks to key events in history, and to make them aware of the rich and diverse heritage of this local company through a visual appreciation of their skills as art metal blacksmiths

### **6.7. Final Question. Future Development.**

The final question on the Delphi questionnaire focused on how the research project could be developed in the future.

#### **Question.**

*“How do you see the work developing in the future?”*

### **6.7.1. Discussion.**

It is evident from the replies received in relation to the Delphi questionnaire that the research project could be developed in a number of ways, ranging from the creation of a series of self guided heritage trails, to the creation of a gateway interpretation centre for Caernarfon which highlights the work of the company linking different locations across the county; and the publication of a book on the history of the company either as a whole book or a series of short publications focusing on each generation of the Williams family as art metal blacksmiths.

### **6.8. Brunswick Project and its contribution to the Heritage debate.**

The journey from history to heritage was illustrated through the use of the visual heritage of the Brunswick Ironworks. The research project demonstrated that heritage is moving away from its reliance on objects (Smith 2006) and the inherent value judgements which reflect upper and middle class values; to viewing heritage as a process shared by all. The powerful images generated within the research project in relation to the Unknown Warrior demonstrating in a visual way the power of the image to convey meaning linking the past to the present. The Brunswick case study illustrated through its history as art metal blacksmiths the fluid dynamic relationship between the subject (Brunswick Ironworks) and the visual heritage object (photographs and artefacts from the Brunswick Ironworks) demonstrating the transition from history to heritage.

The Brunswick research project revealed that heritage is not elitist but rather a shared heritage owned by all which is not restricted by preconceived views of heritage but rather a fluid dynamic process which is rooted firmly in the present through the active celebration of a remembered past bridging the ages connecting the past, present and future. The Brunswick project demonstrated that with the passage of time the commissions undertaken by the company (history) are now appreciated as heritage with the artefacts created by the company valued as visual examples of the skills of the art metal blacksmith. However, as indicated in the literature review chapter history and heritage are not separate concepts but are interconnected through the material selected for preservation with interpretation relating to their use providing the glue that binds history and heritage allowing the spirit and story of their origins to be appreciated and understood.

Smith (2009) advocated that heritage is not always about the past but that it is possible to create one's own heritage through maintaining old traditions and introducing new ones and that their continuation results in a future heritage. This aspect of heritage was demonstrated within the Brunswick case study through the building of the bridges for the Welsh Highland Railway which has resulted in a present and future heritage for the newly reinstated railway which connects the past to the present through the use of sections of the original slate railway an integral part of the history of the area. Heritage as revealed in the Brunswick project was seen not as a set of predetermined outcomes based on accepted views of the past but rather as a multilayered process which allowed heritage to be viewed from different perspectives (Waterton 2010). Heritage when viewed as a process interacts with every day experiences meaning that heritage can no longer be taken for granted, it is a living evolving process that opens windows onto the past for everyone to appreciate recounting the whole story which connects not only the past but the present and provides windows of opportunity for future development based on the heritage asset.



The Brunswick project identified the importance of locality in terms of placing the heritage within its original setting this was illustrated through the application of the systems approach methodology advocated by Veverka (1994) and Brochu (2003) which grounded the research project in terms of identifying where the heritage from the Brunswick Ironworks “fitted” into the heritage of Caernarfon. The site inventory conducted as part of the project identified a number of memorial/commemorative plaques located in the town which recounted the stories behind key people and events associated with the town’s history. The background research carried out on these plaques indicated that there were a number of heritage trails which established connections to the past through the people and events commemorated but also linked it to the present through the possible development of the heritage trails. Whilst this material has been relegated to the appendices as it was not directly relevant to the main case study on the Brunswick Ironworks it assisted in identifying how the heritage of the company fitted into the heritage of Caernarfon and how this connection could be developed through the creation of the Brunswick Trail. The material generated during the heritage inventory conducted as part of the systems approach methodology identified how the past history of the town had evolved into heritage through the passage of time allowing the proposed heritage trails to recount different aspects of the town’s past through a visual journey created through the utilisation of the plaques.

The work conducted whilst in Ireland supported the importance of locality and how it was developed to generate a sense of place through the interpretation of the history and heritage associated with each location. A sense of place is a crucial component when viewing heritage as a process as it places the visitor firmly within the heritage experience encouraging connections to be established linking the past to the present. The evidence generated from the Irish case studies is located within the appendices and demonstrates how the unique history and heritage of each location visited developed its past to create a future in terms of creating a heritage attraction for visitors illustrating in a visual way the role of heritage as a process which encourages connections by linking the past to the present. The “locality” of heritage is part of the process of heritage encouraging an acceptance and awareness of the importance of locality which assisted in the transformation of heritage into a living process which is constructed in the present but which also connects the past Waterton (2010). The importance of locality was demonstrated within the Brunswick case study through the creation of the replica ironwork for the Kent and East Sussex railway which recreated the role of the restored Cavell luggage van and its connection to the Unknown Warrior. Whilst the replica ironwork was created in Caernarfon its original point of origin, it was also connected through the Cavell van to the Kent and East Sussex railway illustrating in a visual way the role of locality in terms of connecting the past (1920) to the present (2010) through the restoration of the Cavell van.

The Brunswick case study established a sense of place for its unique heritage amongst the heritage of Caernarfon, identifying its contribution to key events over the past one hundred years, These ranged from the Investitures of the Princes of Wales (1911 and 1969) to revealing the untold story of its connection to the Unknown Warrior and its contribution to the build visual heritage of the town through its work as art metal blacksmiths. The Brunswick case study represented in a visual way how expectations can colour peoples understanding of the past, with the skills of the art metal blacksmith associated with a manual occupation viewed by some as an unskilled occupation. The

case study revealed the true extent of their skills developing an understanding of their role as master craftsmen who might work with their hands shaping and heating metal but the production of their artefacts requiring a very high level of skill. Whilst the skills of the art metal blacksmith stand them apart from the “navvies” who toiled to build the canals and railways of the industrial revolution their joint skills identified the importance of viewing heritage as a “building block process” which stands or falls based on the strengths of its foundations the contribution of the working classes to the history of the United Kingdom. The elitist upper middle class views of heritage advocated by some heritage bodies Hale (2001) actually distances sectors of the population from their roots leading to a feelings of alienation. The Brunswick case study demonstrated the importance of the skilled manual worker and their contribution to the history and heritage of the United Kingdom. The Brunswick case study illustrated how one piece of heritage from the Ironworks (Unknown Warrior) opened a door on the journey from history to heritage. Showing in a visual way through the artefacts created by DJ Williams in 1920 and the subsequent replica ironwork created by Meurig Williams for the Kent and East Sussex railway linking the past to the present showing heritage as a fluid process which opens windows on the past but which can also create opportunities for the future by the creative use of their (Brunswick Ironworks) contribution to the heritage not only of Caernarfon but the Nation.

#### **6.9. The contribution of the Brunswick Case Study to the Heritage Debate.**

The Brunswick case study identified the importance of visual imagery as an integral component of heritage which can be overlooked. The contribution of visual objects as a tool for enhancing the visitor experience encouraging connections to be made which in the case of the Unknown Warrior artefacts allowed people to touch the past. Waterton and Watson (2011) cited the importance of the visual aspect of heritage as having the ability to impart meaning to objects. Heritage as revealed through the case study is not about objects but rather a process requiring an understanding of the construction of meaning imparted to heritage objects by people. The artefacts from the Brunswick Ironworks were an integral aspect of their skills as art metal blacksmiths spanning three generations of the Williams family which built bridges from the past to the present through the visual representations of their work. The project through the creation of the Brunswick archive fulfilled the “construction of meaning” aspect of heritage (after Smith 2006) providing a verifiable data base which acted both as a resource for the skills of the company as art metal blacksmiths but also as a historical record of the development of their skills. Viewing heritage as a process communicates meanings embedded within heritage providing tangible connections between the subject and the visitor to take place enriching the experience in a personal way. The idea of viewing heritage as a process was advocated by Smith (2006) and Waterton (2011), the Brunswick project has illustrated through the creation of the visual account of its history that the journey taken during the project revealed heritage as a fluid evolving process.

The case study is an ethnographic case study charting the journey from history to heritage through the visual representation of the work of the company as art metal blacksmiths revealing how the past work of the company was developed to guide its future by utilising the adaptability and versatility of the skills of the Williams family as art metal blacksmiths. The Brunswick project showed heritage as a fluid dynamic process which was explored and developed through

the course of the project to identify paths for its future development building on the company's skills and reputation as skilled art metal fabricators in the 20<sup>th</sup> and 21<sup>st</sup> century.

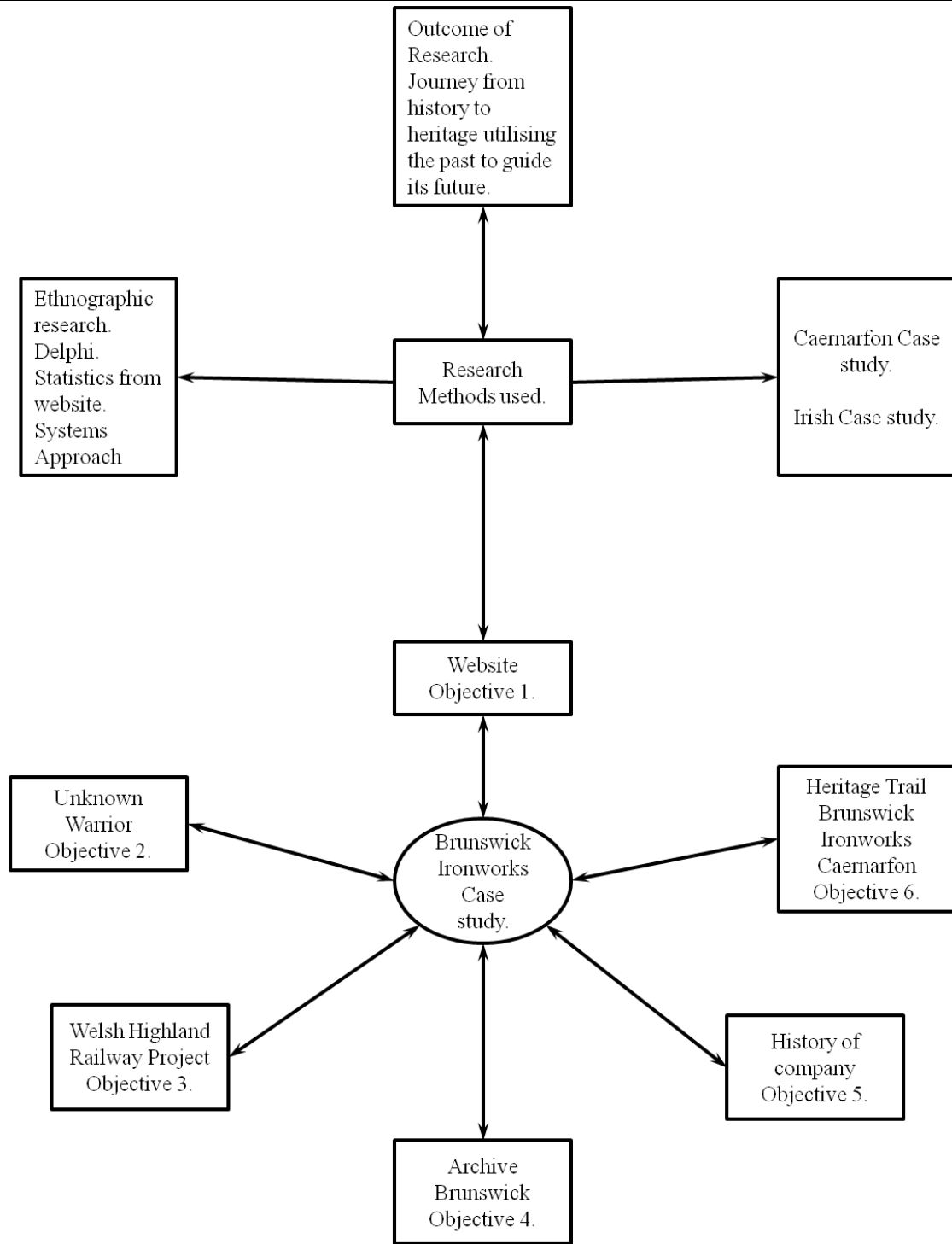
The research project illustrated in a visual way the connections between the past (history) and the present and future (heritage and interpretation) through the development of the six research objectives created for the project and how their attainment resulted in the creation of the Brunswick case study which contributed to the understanding of heritage as a process. This supported the emerging view Smith (2006); Waterton (2011) that heritage is a process that can transform the past through a deeper understanding of the contribution of all sections of the population past and present which have contributed to a shared heritage.

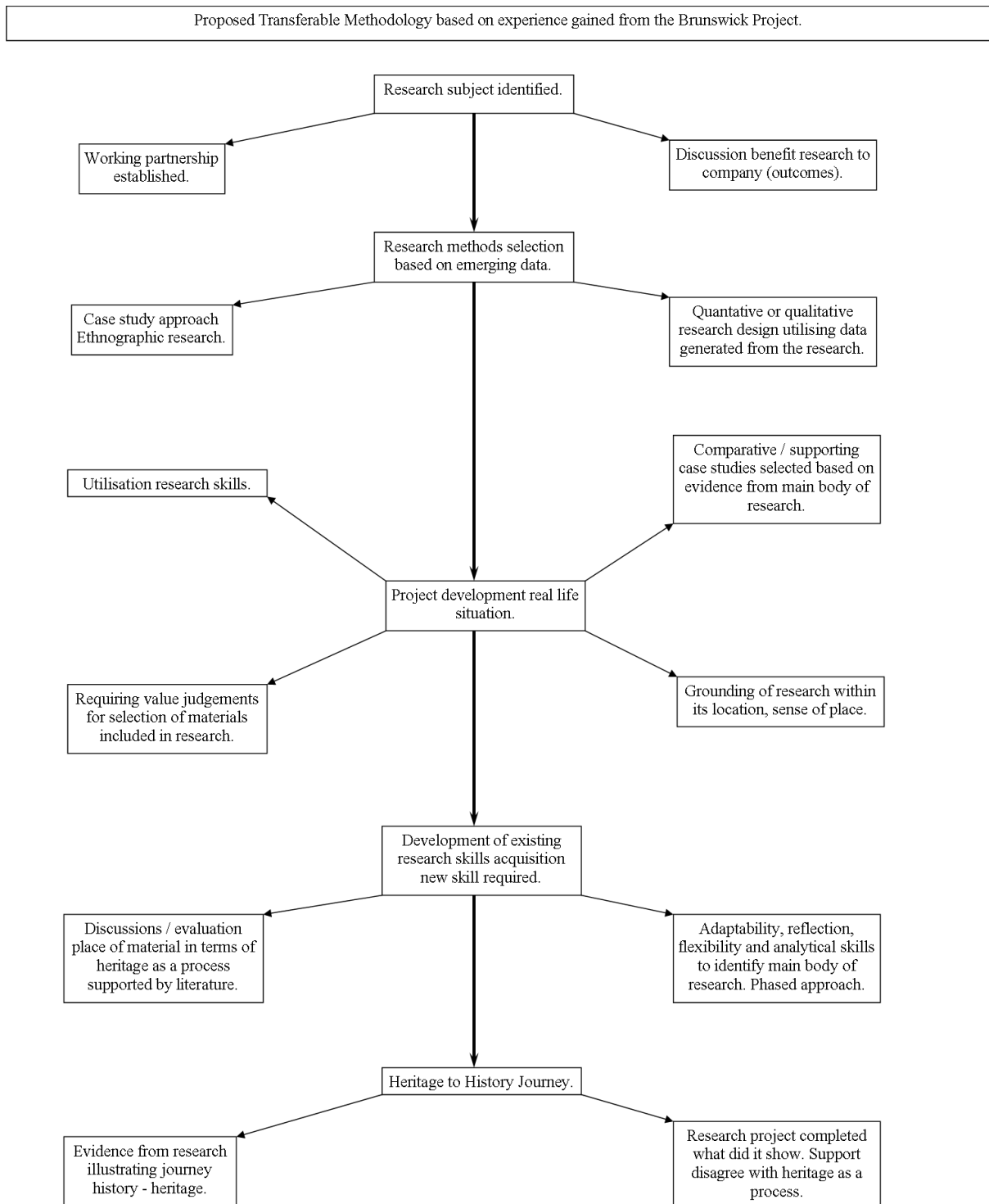
#### **6.10. Explanatory Model.**

The creation of an explanatory model which could be utilised by other researchers in order to explore heritage as a fluid evolving process was an unexpected outcome of the research project. The model which emerged is transferable in as much as it can be used as a starting point adapted and modified to suit the individual needs of the subject matter under review. It is not intended as a model that "fits all requirements or expectations" but rather as a guide to illustrate the importance of the visual aspect of heritage which can be used to depict the changing nature of heritage when viewed as a process. The visual model which emerged illustrates the steps taken during the research process highlighting the various aspects of the Brunswick project which contributed to the completed case study. The model shows how the history of the company was transformed into heritage and how it was developed to guide its future through the adaptation of their skills as art metal blacksmiths spanning three generations of the Williams family.

The explanatory model requires further testing in order to confirm its transferability acting as a starting point for similar studies using an ethnographic methodology allowing the research to develop and evolve and hopefully demonstrating the potential of heritage to be viewed as a process. The model should be viewed alongside the visual model which was created in the methodology section of the research project which is reproduced below as this assisted in the creation of the proposed transferable model. The visual model created as part of the research project aided in the creation of the proposed transferable model showing the steps taken during the project which resulting in the journey from history to heritage illustrating how the heritage of the Brunswick Ironworks was developed to guide its future.

**Diagram 6.0. Model developed as part of the Brunswick Project. Smith 2012.**





**Diagram 6.1. Illustrating the proposed transferable model. (Smith 2012).**

In order to test the validity and reliability of the proposed model it would require further testing using a company with a similar background to the Brunswick Ironworks in order to assess the transferability of the model. Following the identified research steps which run down the centre of the model supported by the methods and skills required throughout the project, it is envisioned that the results obtained by another research project would support the view that heritage should be viewed as a process linking the past to the present and guiding its future development through the creative use of the heritage of the company.

# **7. Chapter Seven.**

## **Conclusions.**

### **7.1. Conclusion and Recommendations**

The journey taken during the Brunswick case study identified the changing nature of heritage, in this instance its roots were firmly planted in the past through the history of the company but this was developed during the research to affect changes in the present for the company through its heritage. Heritage as a process can either be linked to past events or can emerge from events which occur in the present showing the duality of heritage as a fluid evolving process that connects the past to the present. In the case of the Brunswick project this was achieved by the acknowledgement of their contribution to key events in history through their work as art metal blacksmiths. The Brunswick project utilised a specific aspect of their history the work undertaken on the coffin of the Unknown Warrior to demonstrate how one piece of history was transformed into heritage. The active sharing of the heritage by the Company in order to support other events through the heritage of the Unknown Warrior showed that it resulted in a shared valued heritage fostering understanding on a personal level which connected the past to the present. It also showed the value of a visual heritage and its inherent ability to encourage connections between the past to the present allowing people to touch the past through the artefacts associated with the Unknown Warrior. The Brunswick case study attempted to illustrate how research relating to the origins of specific artefacts created by the company aided other sites to complete missing gaps within their own knowledge in terms of identifying where their artefacts originated from.<sup>156</sup>

The main conclusions and contributions to the heritage debate identified through the Brunswick case study illustrated in a visual way how a company's past can be developed to guide its future.

- The explanatory visual model which emerged from the methodology employed during the project showing how the history of the company was transformed over time into heritage and how its connections to the Unknown Warrior aided its future development.
- The research project was extensive and ambitious requiring detailed planning to ensure that the six objectives set for the project were achieved within the time scale set for the project. With hindsight the creation of the history of the company and the Brunswick archive providing sufficient material for separate detailed studies in their own right. However, the six objectives provided a cohesive plan for the project which when combined celebrated the skills of the company over the past one hundred years identifying their contribution to key events over that period.
- The journey experienced during the case study allowed immersion within the daily working lives of the company developing a personal understanding of their skills as art

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<sup>156</sup> In this case the Admiralty Board Rooms and Hampton Court Place who had fire grates, irons and fire dogs created by the Brunswick Ironworks.

metal blacksmiths which opened a window on the past which led to a deep appreciation of the skills of three generations of the Williams family.

- The development of the link with the Unknown Warrior illustrated in a visual way the fluidic aspects of heritage when viewed as a process demonstrating how one piece of heritage (Unknown Warrior) connected the past to the present.
- The research project touched many people either by providing connections via artefacts in their possession by providing evidence relating to the origins of the artefact, to allowing people to touch the past via the artefacts from the Unknown Warrior.
- The research project is presented as an ethnographic case study charting not only the passage from history to heritage but also the journey experienced by the researcher and the company. The journey enriched our lives allowing the path to the future development of the company to be signposted as a result of the information which emerged during the project.
- The project demonstrated the adaptability and longevity of the skills of the art metal worker highlighting the ability of the Brunswick Ironworks to “weather” the fluctuations in the economic climate of the country.
- The research project contributed to the heritage debate by illustrating the importance of the visual aspects of heritage which necessitates viewing heritage as a fluid process which evolves to suit the needs of the subject rather than making it fit into preconceived notions of heritage. Heritage as a process allows the subject to be grounded in the present but facilitates links to the past by recounting the story associated with each asset.
- Heritage is an active living process which touches people’s lives in that it spans the ages making connections between the past, present and future which can as in the case of the Brunswick case study be developed to guide its future. The Brunswick project achieved this through the flexibility and creativity of the Williams family as art metal blacksmiths adapting their skills to meet peoples changing tastes. This adaptability was illustrated through the Welsh Highland Railway project with the Brunswick Ironworks adapting their skills to build railway bridges. Whilst this showed their durability and flexibility it was not at the expense of their skills as art metal blacksmiths, they remained true to their skills. The replica ironwork created for the Kent and East Sussex railway used mild steel as wrought iron was not available but the finished items were produced using the tools and skills used by DJ Williams in 1920 showing how the past connected the present through the skills of the art metal blacksmith.
- The Brunswick project highlighted the skills of the Williams family as art metal worker spanning one hundred years hopefully encouraging people to view their profession not only as a manual profession but one that requires the completion of a five year apprenticeship resulting in highly skilled craftsmen who work with metal to create unique objects.
- The Irish case studies and the heritage inventory of Caernarfon whilst relegated to the appendices was an important aspect of the project as they provided essential insights into how Ireland developed its heritage to create a future for each location. The Caernarfon heritage inventory assisted in identifying where the Brunswick heritage fitted into the current level of heritage provision on offer in the town and local area. The data generated

from the Irish case studies and the heritage inventory of Caernarfon assisting in the creation of the Brunswick heritage trail.

### **7.2. The Strengths of the Brunswick Case Study.**

The strength of this type of research project was that it allowed the project to develop and grow as the story was revealed. The ethnographic case study immersed the researcher into the topic establishing a unique working partnership with the Meurig Williams who supported the project by providing information for use within the project relating to the oral family history of the Williams family. The project methodology selected for the project identified the following strengths:-

- The evidence generated from researching the history of the company and the Brunswick archive generating documented evidence thus assisting in reducing one of the shortcomings of case study research as cited by (Yin 1984) the lack of verification associated with this type of research.
- The project demonstrates the strength of the ethnographic case study in terms of the benefits gained by the researcher from being immersed into a real life situation enriching the researcher through the close working relationship which was formed with the company and the subsequent understanding of the depth of the skills of the art metal worker.
- The case study demonstrated that this type of research can be supported by the selection of other research methodologies which support and enrich the research project (statistics generated from the web site and the evidence from the Unknown Warrior).
- The selection of the ethnographic case study approach for the research project allowed it to evolve and develop throughout the duration of the project with the many twists and turns encountered along the way enriching the finished product; providing an insight into the life of past and present art metal workers as experienced through their work.
- The Brunswick case study endowed the researcher with a deep understanding of the unique contribution of the Williams family to history through their contribution and involvement in key events in history illustrated and preserved for future generations through their work as art metal blacksmiths.
- The project also revealed that research is an ongoing process one never knows all the answers but if one is open to the many influences which are encountered along the way many of the answers emerge providing that one is willing to look for them.
- The Brunswick project created a transferable methodology which could be used by other companies wishing to develop their past history to aid their future development.
- On a personal level it was an honour to work with a company which has contributed so much to “our heritage” through their work as art metal blacksmiths.

### **7.3. Weaknesses of the Brunswick case study.**

The ethnographic case study also had a number of weaknesses associated with this type of research, but the use of multiple sources of evidence within the research project assisted in minimising this. The following weaknesses were identified:-

- The results generated from the project would be difficult to replicate with another researcher conducting the same line of inquiry as a new researcher might encounter a different working relationship with the company possibly resulting in different outcomes.



- The outcomes of the research project need to be evaluated within the context of the Brunswick project understanding that the link with the Unknown Warrior provided a unique heritage asset which was developed throughout the project to illustrate the journey from history to heritage.
- When undertaking this type of ethnographic research, caution needs to be exercised to ensure that the work is completed on time and that it does not continue past the cut off point for writing up the research. Once the project has been completed the researcher can continue to support the company as in this case updating the web site.
- The outcome of the project whilst demonstrating the changing view of heritage as a process the evidence generated needs to be viewed within the context of the findings of the Brunswick case study.

#### **7.4. Possible Applications of the findings of the Brunswick Project to future research utilising the explanatory model.**

The creation of the explanatory model which emerged from the project was an unexpected outcome from the project. The creation of the model was possibly attributable to the ethnographic methodology selected for the project which allowed it to develop and evolve as new aspects of the research were revealed throughout the course of the project. The factors which facilitated the creation of the explanatory model are outlined below:-

- The restructuring of the Brunswick web site to shift the emphasis from heritage to its development as a marketing tool.
- The creation of a working partnership between the Brunswick Ironworks, the Welsh Highland Railway and Gwynedd Council as the owners of the Lloyd George Museum in order to create the Brunswick Heritage Trail “Walking in the Footsteps of the Art Metal Worker”.
- The co-authoring of a book with Mr Williams which focuses on the history of the company and which develops the family stories associated with the work under taken by the company.
- The creation of a series of interpretation panels located at major halts along the Welsh Highland Railway from Caernarfon to Porthmadoc that highlights its contribution to the railway.
- The continued sharing of the heritage of the Unknown Warrior to support other heritage events which would benefit from the heritage, 2014 marks the commencement of hostilities of the Great War 1914-2014.
- The history of the company needs to be opened up to a wider audience possibly through the creation of a series of small pamphlets focusing on key events contained within the history of the company in the area. A second booklet could focus on key commissions across the country such as; the Crown of Thorns for the Roman Catholic Cathedral in Liverpool and the work created in London for the Tower of London and Hampton Court Palace.
- Brunswick Ironworks unique collection of examples of their work should be displayed within Caernarfon. Unfortunately the town does not have a Heritage Centre where their

work could be displayed. Hopefully the research project might be the impetus that is required to facilitate the creation of a Heritage Centre for Caernarfon.

- The Irish case studies revealed that an integrated approach to heritage and interpretation facilitated by the Irish Government and the Irish Tourist Board resulted in the creation of unique heritage attractions. The locations visited in Ireland maintained their identity through interpretation which was unique to the location this was evident in the cases of Youghal, Athenry and the Cobh. The thread which joined them together was the title “Heritage Town” each location was free to develop and interpret its heritage in its own way, thus creating a varied and interesting visitor attraction.
- The explanatory model which emerged from the Brunswick project requires verification through its application by other researcher who could verify/dispute its value as illustrating the journey from history to heritage and how the past history of a company was developed to guide its future.
- The Brunswick project supported the findings of Smith (2006); Waterton (2011) who advocated that heritage should be viewed as a process, the results obtained from the case study demonstrated through the visual heritage of the Brunswick Ironworks that heritage is a process which can connect all sections of society through an understanding and appreciation of the past which can guide its future.

#### **7.5. Brunswick Project Final Words.**

Meurig Williams was interviewed in order to obtain his comments about the research project.

*“The research project achieved its objectives and succeeded beyond my expectations. The heritage of the Brunswick Ironworks has been utilised to raise the profile of the company through the creative use of its heritage for the benefit of not only the company but also other heritage attractions and projects across the country.*

*Projects such as the Llangollen Patriot Steam Locomotive Project and the Kent and East Sussex restoration project have contributed to raising the profile of the company thus securing its future through the creative use of the link between the Unknown Warrior and the work of my grandfather.*

*I am honoured to be a member of the Williams family and through our work as art metal workers for over 100 years we have touched so many lives and events. The past history of the company has aided in guiding our future through the development of our skills as art metal workers. I wonder if my grandfather had foreseen the future and that was why he kept such detailed records and photographs of the work he carried out. Maybe he was waiting for Pam Smith to come knocking at our door?*

*The research project has made me aware of the need to continue to keep visual and written records of the work of the company for future generations to appreciate and enjoy. The research project has raised the profile of the company pointing the way to the future; the past is already written but the future is a blank page”.*

*(Meurig Williams May 2012).*

## **7.6. Reflective postscript.**

The journey was challenging, humbling, rewarding, frustrating and invigorating. The Brunswick Ironworks research project opened a door onto an unknown story of the industrial heritage of Caernarfon. The journey from history to heritage was demonstrated through the research project showing that ethnographic research is not straight forward that the twists and turns encountered along the way should not be seen as negative or restrictive but rather as part of the journey enriching the research pointing the way to unexpected outcomes.

The research project revealed that through the work undertaken by the company within the town and the local area that three key aspects of the towns heritage; the Castle, the Welsh Highland Railway and the David Lloyd George Museum identified the opportunity to unite these three attractions through one coherent theme the Brunswick Ironworks Heritage Trail illustrating the journey from history to heritage providing a visual record of the work of the company.

The research project has touched not only my life but also that of my two sons. Ben was commissioned by Meurig Williams to design and make a display stand for the replica coffin plaque and a replica coffin handle. The display case was created to ensure that the plaque was secure during transit from location to location and to ensure that the plaque could not be removed whilst it was on display. Ben and Sam then purchased and donated the sword for the Kent and East Sussex Railway project.

The research project has been a journey of discovery. I have mastered new skills ranging from photographic skills to the creation of an archive this was an essential component of the ESF funding that allowed the project to take place. Hopefully the award of a PhD as a result of the research project which has provided a unique insight into the skills of the Brunswick Ironworks and their contribution to the heritage of Caernarfon and the Nation.

It was an honour to be allowed such unrestricted access to the daily working life of the company and their unique collection of photographs and documents. The development of the story of the Unknown Warrior created the opportunity to visit and meet people who were inspired by the story. The skills passed down through three generations of the Williams family as master art metal workers created a rich tapestry that spread out from Caernarfon like the “sparks from their forge” igniting to create a lasting legacy for future generations to appreciate and enjoy.

(Pam Smith March 2013).

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# APPENDICES

Case studies were an important component of the project assisting in the case of the Irish studies in understanding the journey from history to heritage. The heritage assessment of Caernarfon undertaken during the project aided in understanding where the heritage of the Brunswick Ironworks fitted into the project. The work relating to the marketing booklets and presentations made throughout the project are included as they assisted in raising the profile of the company.

The utilisation of one specific piece of the Brunswick heritage, their contribution to the burial of the Unknown Warrior is recounted in terms of telling the whole story from the letter written to the Dean of Westminster Abbey by the Reverend David Railton to the burial of the Unknown Warrior on November 11<sup>th</sup> 1920. This section also illustrates how the heritage of the company was shared with other heritage attractions connected through their link with the Unknown Warrior.

The creation of the Brunswick Archive was one of the six objectives identified for the project and the creation of the archive provided the opportunity for the researcher to learn how to archive a collection. The resulting archive provided a lasting record of the work of this local company, the archive contains original drawings and photographs creating a photographic archive of the skills of the art metal worker over a seventy year period.

The photographs used in the appendices relating to the work of the Brunswick Ironworks have in some instances been duplicated; this was due to the fact that these were the best examples of their work linked to the topics covered in this section; as was the case for the Brunswick Trail and the Heritage Inventory of Caernarfon.

The appendices are extensive and some might argue that the material contained within this section of the project could be drastically reduced. However, if the proposed transferable model were to be tested it would benefit from these appendices as they reveal the whole process involved in creating the Brunswick case study.

The appendix contains the following information:-

1. Irish case studies. (230-249).
2. Heritage Assessment of Caernarfon. (250-277).
3. Delphi replies. (278-287).
4. Presentations made during the research project. (288-297).
5. Creation of the Brunswick Archive. (298-304).
6. Brunswick Trail. (305-319).
7. Marketing booklets. (320-332).
8. Correspondence linked to the project. (333-348).
9. Unknown Warrior material. (349-371).

# Appendix 1.

## IRISH CASE STUDIES

### 1.0. Creation of Heritage Trails.

The evidence generated from the work undertaken in Southern Ireland indicated that heritage trails compliment the quality of the experience on offer. The field work undertaken in Ireland provided the opportunity to assess first-hand how the heritage trails created supported the local community. It also provided the opportunity to see how guided and self guided trails offered different opportunities for visitors to explore the area. The Irish case studies indicated that both options<sup>157</sup> provided visitors with a choice relating to the selection of a guided or self guided trail which allowed flexibility for them in terms of the amount of time that they had available to spend at the location, and the level of detail that they required in terms of information relating to the heritage asset. The evidence generated from these case studies assisted in the creation of the Brunswick Heritage Trail building on the experiences gained from visiting Ireland as part of this research project. This section has been included as it will aid in the testing of the explanatory model in case heritage trails are required as part of the follow up research project.

Effective heritage trails are based around a theme Ham (1992) and both guided and self guided trails require four phases which when combined together create a successful heritage trail:-

1. Self guided and guided trails share the same structure in terms of having a developing theme which leads into creating objectives for the trail to fulfil.
2. The identification of the theme facilitates the creation of a trail.
3. An introduction, main body in terms of content and the number of stops along the tour dictating the duration of the trail.
4. A conclusion that relates back to the theme and its objectives.

The difference between guided and self guided trails lies in economics; guided trails require funding for the guide they are also limited in terms of when and how often they take place usually at set times throughout the day:-

*“Tours are commonly used to show people things that they had otherwise not seen or the untrained eye possibly wouldn't notice”.*

*(Ham 1992:13).*

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<sup>157</sup> Guided and self guided trails provided different heritage experiences for visitors to the area.

## **Guided tours.**

These allow visitors to experience the location through a visual medium requiring the visitor to become physically involved in terms of moving from one stop to another along the route. Guided tours take place at many varied locations they range from:-

- **Guided walks.**

These focus on something specific to the site visited, for example on features that illustrate a central theme that is associated with the site. They can take place in varied terrain such as a pleasant walk in the forest, to a challenging walk along the riverbank or around the lake or garden for example the Garden walks at Penrhyn Castle, Bangor Gwynedd.

- **Extended hike.**

These are more challenging and usually take place at large sites or remote areas; the hikes are linked to a theme, examples of which are illustrated throughout the hike at various stops along the route for example the guided hikes offered in the Blaenau Ffestiniog area.

- **Building tour.**

These usually take place at museums, historic locations and visitor centres, they are carefully planned tours linked by a central theme with a number of scheduled stops which demonstrate/highlight examples of the theme for example the guided tours of Westminster Abbey.

- **Facility tour.**

These tours such as the Coca Cola tour (Atlanta, America) and demonstrate production or manufacturing processes and are centred on a theme. They take place at factories, vineyards, breweries, sawmills, food processing plants and coal mines.

## **Self guided tours.**

- **Self guided trails.**

These trails are centred on a theme and the trail has been devised to illustrate the theme; they take place at various locations ranging from; towns and villages to bridleways and canals.

- **Self guided underwater tours.**

These tours take place in bays, coves and lakes where specific aspects of the marine environment associated with the location are illustrated. This type of trail has to be conducted over a short period of time to ensure visitors safety; for example, incoming tides.

- **Self guided facility tours.**

These demonstrate a profession or manufacturing process and are linked by a central theme and require careful planning to ensure the safety of the visitors during the tour and usually take place in factories, breweries, food processing plants and vineyards.

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- **Self guided site tour/driving tour.**

This type of trail is used to acquaint visitors with cultural historical and scientific aspects of the site linked to a central theme, illustrated through planned stops along the trail; they take place at historic sites such as battlefields, cemeteries and sites of historical significance associated with national or human events.

### **Common shared factors for guided and self guided trails.**

- A central theme that is illustrated throughout the duration of the tour by selected stops along the route.
- The tours are sequential with a circular tour, a figure of eight tour or a linear trail.
- Ideally the tour should not have more than 15 stops in order to maintain visitor interest.
- Trails need to have curves this creates a sense of adventure as you want to discover what lies around the next bend in the trail.

*“Curves adds mystery into the trail layout”*

*(Ham 1992:32).*

- The trails are safe ensuring that they follow three basic design shapes, circular, linear or figure of eight trails
- A circular tour or loop trail starts and finishes at the same place, allowing visitors to experience the trail without the distraction of visitors walking in the opposite direction, they also create a sense of mystery as one cannot see what is around the corner.
- A figure of eight trail is usually formed by connecting one loop or circular trail to another; this provides the opportunity for the people on the trail to either return after completing the first loop or continuing onto the next one. This type of trail offers either a theme which links both sections of the trail together or each loop is focused on separate un-related themes.
- The linear trail requires people to explore the trail and then return the same way, resulting in two way traffic along the trail. The problem with linear trails is that they are usually straight line trails which remove the sense of mystery associated with curved trails because you can see what is coming along the route.

The creation of heritage trails in Ireland illustrated the use of guided and self guided trails as identified in the case studies illustrating in their own unique way the journey from history to heritage as developed in Ireland.

#### **1.1. The Irish Experience. The Cobh County Cork July 2006.**

The Cobh has also been known as Queenstown and is situated on Great Island, an island located in Cork harbour one of the deepest harbours in the world and one of the locations from which families departed Ireland during the Great Famine of 1848-1850. The Cobh Heritage Trust was formed in the late 1980's when a local committee launched the Queenstown Project. The Cobh

was a centre for immigration from this part of Ireland during the Great Famine. The Irish left the Cobh bound for America, Canada and Australia, from 1848-1950 over six million adults and children left Ireland with approximately 2.5 million of them departing from Queenstown (Cobh Heritage Centre 2006).

The Cobh Heritage Trust was registered as a charity in 1989 and a fund raising drive was launched with the assistance of the Cork- Kerry Tourism and Bord –Failte; European Union structural funding was secured and funding was approved for the Queenstown Story. The building selected was the old Victorian railway station that was built in 1890. The project cost £2.5 million and the centre opened to the public on March 1<sup>st</sup> 1993. The centre was an instant success and annually attracts around 100,000 visitors. The interpretation at the centre covers the areas of the famine with special reference to the story of Annie Moore and the transport of convicts to Australia, the story of the Titanic and the sinking of the Lusitania. The Cobh heritage centre has become a mechanism for regeneration by developing tourism in the town. The interpretation at the Cobh heritage centre provided a starting point for understanding of the history of the town, ranging from the impact of the famine, and its consequences on the Irish people, as portrayed through the story of Annie Moore to the sinking of the Lusitania, and Titanic. Key areas of interpretation on offer at the centre and within the town were utilised to illustrate how the heritage has been developed as a tool for charting the journey from history to heritage and as a mechanism for supporting the local community.

During 1820-1920 over 4.400.000 Irish people had immigrated to America, this was a difficult journey, but with over a million people dying in Ireland because of the famine it was a chance they were willing to take rather than face starvation and death. It was estimated that the famine in Ireland killed nearly one eighth of the population. The potato crop failed for four successive years from 1846-1849:-

*“No issue has provoked so much anger or so embittered relations between the two countries (England and Ireland), as the indisputable fact that huge quantities of food were exported from Ireland to England throughout the period when people in Ireland were dying of starvation.”*

*(C. Woodham –Smith 1964:36).*

### **Annie Moore.**

On January 1<sup>st</sup> 1892 Annie Moore a seventeen year old girl from County Cork, was the first immigrant to be processed through the new American immigration centre at Ellis Island. It processed over twelve million immigrants from 1892 until 1954. Today Ellis Island is under the care and protection of the National Parks service and the main building was restored in 2010. Annie Moore lived a quiet life in New York City’s Lower East Side. She lived in the fourth ward a rough tenement in the seaport area. She married Joseph Augustus Schayer, a baker and they had ten children, five of whom survived to adulthood. Of these five children, two had families which

still survive today. Annie lived in New York City all her life she died in 1930 aged fifty five; she was buried in an unmarked grave at Calvary Cemetery, Queens, New York.



**Photo 1.1. Annie Moore and her brothers at the Cobh Heritage Centre County Cork.**  
**Photographed by Pam Smith 2006.**

The statue of Annie Moore at the Cobh Heritage Centre was unveiled by Irish President Mary Robinson on February 9<sup>th</sup> 1993.

*“Annie Moore came to America bearing little more than her dreams; she stayed to help build a country enriched by diversity. Her image will forever represent the millions who passed through Ellis Island in pursuit of the American dream”.*

*(Annie Moore Project 2010.)*



## **The Titanic Heritage Trail.**

The Titanic arrived at Queenstown (Cobh) April 11<sup>th</sup> 1912 at 11.30am; she set sail on her maiden voyage to New York at 1.40pm. The trail is marked by a picture logo marking the trail and was established in 1998.



**Image 1.0. The Titanic Trail Cobh County Cork**

**Photographed by Pam Smith 2006.**

Key locations from the trail were selected to illustrate how this approach to heritage through the creation of a Trail could be adapted and modified to suit Caernarfon. The whole trail took approximately two hours to complete. All the locations were clearly marked with the distinctive Titanic logo.

The Trail started at the Cobh Heritage Centre based in the old Victorian railway station (the railway came to Queenstown due to the increased use of the town as a trans- Atlantic port). A deep water quay was developed in 1882 which enabled luggage and mail to be loaded onto tenders for carriage out to the waiting ships that were berthed in the harbour. First and second class passengers for the Titanic were boarded on the tenders, third class passengers were boarded from the White Star Line offices in the town.

The Old Yacht Club was the headquarters for the Royal Cork Yacht Club from 1854-1965. This is the oldest Yacht Club in the world, tracing its origins back to the White Club in 1720. The new R.C.Y.C. is now located at Crosshaven across the harbour. The old yacht club now houses an art gallery, named Sirius after the first steam driven steamer to cross the Atlantic in 1838. The schooner America after whom the Americas Cup is named sailed from this harbour for many years

The Titanic Memorial, at Pearce Square was unveiled on July 7<sup>th</sup> 1998 by the Titanic Historical Society. The Cunard Line Office was located at the back of this building, and it was from here that the first survivors of the Lusitania were brought ashore.



**Photo 1.3. Titanic Memorial Cobh County Cork. Photographed by Pam Smith 2006.**

The cathedral was dedicated to St Coleman who founded the diocese in 560 AD. The cathedral was designed in the neo gothic style by Pugin and Ashlin; it took forty seven years to build from 1868-1915. The Cathedral houses the famous carillon and clock installed in 1916; the carillon the largest in Ireland consists of 49 bells. The cathedral commands an important position and it was possibly the last landmark that the crew and passengers of the Titanic saw as they departed the Cobh in 1912.



**Photo 1.4. St Coleman's Cathedral the Cobh. Photographed by Pam Smith 2006.**

## **1.2. YOUGHAL HERITAGE TOWN COUNTY CORK.**

Youghal was visited in 2006, it was designated a heritage town in 1994 and is located in County Cork; a seaside resort similar in size to Caernarfon. The town is a fine example of a Norman walled port that was built in the twelfth century. Today it has a number of guided walks that can be either self guided or guided enabling visitors to explore the town. The guided tour runs three times a day from the Tourist Office located on the Market square. The self guided tour option allows visitors to explore the town at leisure; the guided tours last approximately ninety minutes, taking in the medieval streets of the town. Four tours were available, the Northern Tour, Inner Northern Tour, Southern Tour and the Strand Tour.

The town had a number of distinctive features the most recognisable the Clock Gate. This building was erected in 1777 and was built by public subscription; the gate separates the north and south sections of Main Street. Originally it was the home of the town guard and acted as a temporary jail for those awaiting trial. In the late eighteenth century the Clock Tower was notorious as a place of execution and torture.



**Photo 2.2. Clock Tower Youghal County Cork. Photographed by Pam Smith 2006.**

### **Myrtle Grove.**

This was the home of Sir Walter Raleigh when he was Mayor of Youghal from 1582-1583. Edmund Spenser spent some time there and it was believed that he completed his poem the “Faerie Queen” whilst staying at Myrtle Grove. Sir Walter Raleigh was credited with growing the first potatoes in Ireland; he was also the first person to smoke tobacco in Youghal.



**Photo 1.3. Myrtle Grove Youghal County Cork. Photographed by Pam Smith 2006.**

### **St Mary's Church.**

A Danish church was built in the eleventh century on this site, but it was destroyed by severe storms, the remains of the church were incorporated into a new church built in the thirteenth century. Restoration and extensions to the church took place during the fourteenth century and they were paid for by Thomas 8<sup>th</sup> Earl of Desmond.

The graveyard wall contained the shape of an empty coffin fitted into a recess in the wall which was loaned out to poor families who could not afford a coffin for the burial of their loved ones. Once the service was over, the body was taken out of the coffin, buried in the earth and the coffin returned to the recess for the next burial.



**Photo 1.4.Coffin St Mary's Church Youghal County Cork .Photographed by Pam Smith 2006.**

### **Town Walls.**

These could be accessed from the graveyard behind the church. When the walls were first erected it was most probably an earthen bank topped with a wall of wood and stones to protect the settlement from enemies and wild animals. The wall was rebuilt through grants given to Youghal

by Edward 1 and James 1. The walls were repaired and maintained around the town because of its strategic importance as a port with a deep safe harbour which allowed access the south of the country.



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**Photo 1.5. Town Walls Youghal County Cork. Accessed from St Mary's Churchyard.**  
**Photographed by Pam Smith 2006.**

### **1.3. ATHENRY HERITAGE WALLED TOWN.**



**Photo 1.3.0. Interpretation board depicting the walled town of Athenry. Photographed by Pam Smith 2008.**

Athenry was established as a Heritage Town in 1994. The town's heritage centre was created under this directive and is located in the ruins of St Mary's church. The Centre recounts the history of Athenry, from the Norman invasion in the thirteenth century to the building of the town walls in the fourteenth century. It has various static exhibits of armour and weaponry dating from that period, and it provided an audio tour in four languages which visitors could use to explore the town. Town guides offered guided tours priced at € 5 for an adult and €18 for a family of two adults and two children.



**Photo 1.3.1. Mural on the entrance walls leading to Athenry Visitor Centre. Photographed by Pam Smith.**

The folk song *The Fields of Athenry* recounts the story of the plight of the Irish during the Great famine of 1846.<sup>158</sup> Athenry was one of the founding members of the Irish Walled Towns Association which held its inaugural meeting in 2005. It is linked through membership to the Walled Town Friendship Circle of which Caernarfon was a founding member. Athenry was visited during Heritage Week in August 2008. The Castle has been restored; an audio visual display recounted the main interpretation aspects of the history of the castle and the town. In 1244, Meiler de Birmingham was granted the right to hold a market at Athenry every Thursday and to hold an eight day annual fair, a tradition which still continues today. He also founded the Dominican Priory in 1241 and is buried within the church.

### **Athenry Keep.**

Athenry castle was built in the 13<sup>th</sup> century by Meiler de Birmingham and it formed part of the defences of the town. The keep was a fortified well defended structure. Very little of the original sections of the castle keep remain. However, the south corner tower survived, and the main curtain wall has been reconstructed to create the visual appearance of the tower.

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<sup>158</sup> *The Fields of Athenry* is a well known Irish folk song that recounts the story of Michael a young father fighting to feed his family during the Irish Potato Famine. He is sentenced to deportation for stealing corn to feed his family.



**Photo 1.3.2. The Keep. Athenry County Galway. Photographed by Pam Smith 2008.**

Whilst Athenry didn't have a castle on the scale of Caernarfon it had utilised its heritage to create an informative tour of the castle. The castle at Athenry was visited on a wet afternoon but even the weather did not deter the visitors as the castle was very busy.

### **Town Walls Athenry.**

The town walls are believed to have been built circa 1300 and enclose 71.25 acres. They are possibly the best surviving examples of a medieval town defence in Ireland, with over 50% of the circuit walls still intact on the west, south-west and south east sides of the town, a number of towers and the impressive north gate are still intact.



**Photo 1.3.3. Section of the town walls at Athenry. Photographed by Pam Smith 2008.**

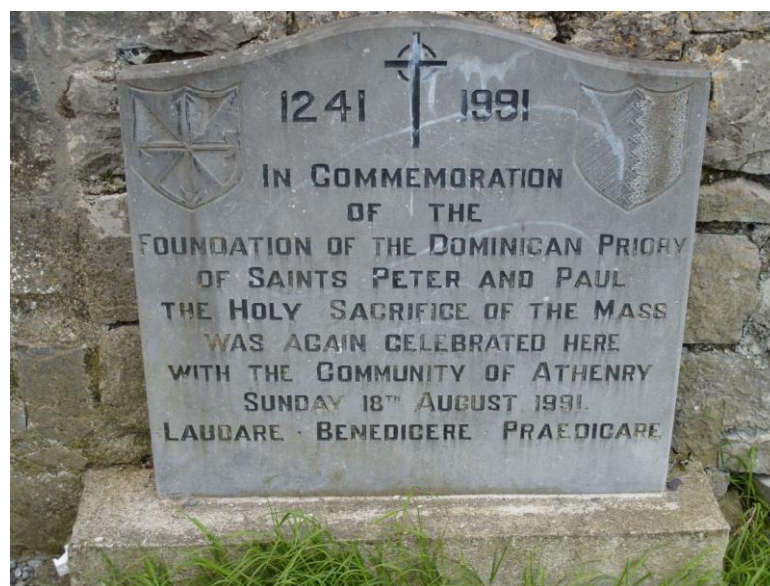
### **Dominican Priory.**

It was founded in 1241 by Meiler de Birmingham, who was buried in the Priory.





**Photo 1.3.4. The Dominican Priory undergoing restoration work. Photographed by Pam 3Smith 2008.**



**Plaque 1.3.5. To commemorate the 450th Anniversary of the founding of the Dominican Priory at Athenry. Photographed by Pam Smith 2008.**

#### **1.4. AILLWEE CAVES COUNTY CLARE.**

Aillwee caves were selected for inclusion in this research project as they illustrated how a heritage asset (the caves) had been developed to support the economy of the local area through the creation of a guided under- ground tour illustrating key features of the cave system created by the unique landscape of the Burren.

The caves were visited to gain first -hand experience of a guided tour so that comparisons could be drawn between guided and self guided tours which would assist in the development of the Brunswick Trail. Aillwee caves are located on the west coast of Ireland, close to the coastal village of Ballyvaughan in County Clare in the heart of the Burren, within easy driving distance of Galway city. The visitor centre and entrance to the caves was designed to blend into the landscape of the Burren. The caves are an important tourist attraction for this part of County Clare and 120,000 people visited the caves in 2009. (Aillwee caves data July 2010).

The caves are open all year and admission to the caves included entry to the Bird of Prey Centre which is located at the base of the road that leads up to the caves. The cost of admission in 2008 was 39 euro for a family ticket. The tour lasts about forty minutes, the most memorable experience was the point of the tour when the guide turned off the lights leaving visitors in total darkness, experiencing “pitch black” for a few minutes, a single candle was then lit which demonstrated how dark it would have been for Jack McGann in 1940; when he found the caves.

Ham (1992) advocates that effective interpretation should touch the audience encouraging associations to be made which impact on the individual in terms of understanding the content and context of the interpretation on offer. The experience of pitch black certainly touched the visitors on the tour. Lighting in the caves was quite poor which resulted in dark photographs which do not fully illustrate the features of the cave.



**Photo 1.4.1. Bear Pit Aillwee Caves County Clare. Photographed by Pam Smith 2008.**



**Photo 1.4.2. Aillwee caves rock formation. Photographed by Pam Smith2008.**

## **1.5. Aughrim County Galway**

Aughrim, a small village located off the N6, the main route from Dublin to Galway prior to the opening of the new motorway in 2009. It is located between Ballinasloe and Loughrea and was the location for the Battle of Aughrim fought in 1691. The Battle was fought between the Jacobite army led by General St Ruth and the Williamite army led by General Ginkel. The battle resulted in the death of General St Ruth and 7,000 of his men and the Williamite army lost 2,000 men. The dead from the Williamite army were buried in mass graves, but the Irish army remained unburied for over a year.

The village has various brown heritage signs marking the locations of key events within the battle, and it had a visitor centre established through the 1994 heritage initiative instigated by Bord Fáilte (Irish Tourist board).

The centre was located in the centre of the village but was closed during the visit to the site. The village has many bi-lingual panels showing key locations of sections of the battle, but without the knowledge which would have been obtained from the visitor centre they were difficult to appreciate.



**Photo 1.5. Information Panel depicting the Battle of Aughrim. Photographed by Pam Smith 2008.**

However, the brown signs located throughout the village did help to pinpoint the battle lines of the armies involved, as the picture below demonstrates.



**Photo 1.5.1. Sign Posts. Aughrim County Galway. Photographed by Pam Smith 2008.**

These signs in the village provided navigation around the site. The Old Castle was the site where the Jacobite Army defended the area before running out of ammunition; it was then over-run by the cavalry of General Ginkel's Williamite forces.



**Photo 1.5.2. The Old Castle Aughrim County Galway. Photographed by Pam Smith 2008.**

### **1.6. Clonmachnoise and West Offaly Railway County Offaly.**

The railway operated on land belonging to Bord Na Mona which was created in 1946 to develop the vast peat reserves of Southern Ireland as a fuel for energy production (electricity). The railway was visited as it provided the opportunity to assess how an industrial heritage asset had been developed. The peat is accessed by building a series of temporary narrow gauge railway tracks that allow the machinery that cuts the peat to access the bog. The powdered peat is then loaded onto trucks and transported along these temporary lines to the main narrow gauge permanent railway track, which then transports the peat to the Shannonbridge power station. The power station is one of three peat powered stations in Ireland producing approximately 5% of Southern Ireland's energy (electricity).

The train ride took one hour and a guide on board the train explained the process of peat extraction and pointed out main features of the landscape. A short stop on the route allowed visitors to cut peat by hand using an old peat shovel, today the peat is cut and turned by machinery in the bog.

The railway had a tourist centre with a shop and a café. It attracted school parties and coach groups throughout the year. This was a popular attraction and seats had to be booked in advance for the train rides. However, in 2008 the railway site was closed to the public as it was hindering the excavation of peat from the bog for use in the power station. This was a great loss for the tourism industry in the area as a great deal of time and effort had been devoted to creating an interesting and very unusual trip through the peat bog. Bord Na Mona has plans to open an attraction at the site but it would appear that these plans have been shelved in light of the current economic global recession.



**Photo 1.6. “Bog railway” County Galway. Photographed by Pam Smith 2008.**

The area around the old railway sidings had many examples of the old peat cutting machinery on show. There was no explanation as to their role in the process and interpretation panels would have helped to understand the process of peat extraction in the bog.



**Photo 1.6.1. Old peat cutting machinery at the “Bog Railway” County Galway.  
Photographed by Pam Smith 2008.**



**Photo 1.6.2. Statue depicting how peat was cut by hand “Bog Railway”. Photographed by  
Pam Smith.**

The Irish case studies were selected as they illustrated the diverse and creative use of heritage charting the journey from history to heritage which utilised various types of interpretation to support local communities and to actively encourage tourism to the area. Each location has adapted its heritage to create an interesting visitor experience which was actively supported through the Heritage Council of Ireland:-

*“The Heritage Council seeks to protect and enhance the richness, quality and diversity of our national heritage for everyone. It works with its partners, particularly at local level, to increase awareness of our national heritage and to highlight its importance to public policy and everyday life”.*

*(Heritage Council Ireland 2011).*

# **Appendix 2.**

# **Heritage Assessment of Caernarfon.**

## **2.0. Caernarfon Plaques.**

The plaques erected in Caernarfon cover a diverse topic area, and span the development of the town from its early origins as a Chancery and Exchequer for the Principality of North Wales in 1284 - 2008 when the work undertaken by Brunswick Ironworks was commemorated with bi-lingual plaques that recounted the link with the company and the ironwork for the coffin of the Unknown Warrior.

The detailed site assessment of the plaques located within the town walls of Caernarfon was undertaken so that the proposed Heritage Trail for the Brunswick Ironworks would fit in terms of establishing a theme or story which runs through the Trail; as per the methodology advocated by Veverka (1994). The stories behind each plaque are recounted and unless noted otherwise all photographs were taken by Pam Smith.

Caernarfon Civic Society erected nine plaques commemorating people associated with the town, the text on the plaques are bi-lingual in most cases but there are a few exceptions such as the plaques for Lloyd George, Sir Llewellyn Turner and Evan Richardson which are in Welsh. The plaques from the Caernarfon Civic Society are made from blue grey Welsh slate and are double mounted so that they stand out from the wall and carry the Caernarfon Civic Society logo in Welsh (Cymdeithas Ddinesig Caernarfon).



**Image 2.0 Caernarfon Civic Society logo.**



## 2.1. Creation of a unified approach to Interpretation for Caernarfon 2007-2009.

Part of the research project involved the researcher in working with Gwynedd Council on the creation of a number of new interpretation/orientation panels for the town which focused on key events, people and places within the town. Each new board is bi-lingual and focused on the history of each location, for example the interpretation panel on the Square (Maes) explains the history of the square.



**Photo 2.0. Maes Interpretation Panel.**

The heritage inventory of the plaques located within the walled town of Caernarfon revealed that a number of self guided trails could be created centred around a theme that links to the history of the town. The creation of these self guided trails would create a cohesive link for interpretation within the town by offering an additional activity for residents and visitors, to appreciate and enjoy. The plaques have been numbered so that if further research is undertaken on the project the identified heritage trails for the town can be implemented based upon the information obtained during the heritage inventory of the town.

## 2.2. Plaques and Memorials Caernarfon.

This inventory of the current heritage interpretation within Caernarfon is based on the suggested methodology of John Veverka in his book entitled Interpretative Master Planning (1994). Veverka advocated that when working with a number of different heritage attractions, an interpretive systems approach should be used to ensure that an integrated plan is created that enables all the sites within the location to share stories and develop links for the benefit of one another. The systems approach has been utilised to assess the current heritage provision on offer in Caernarfon to ensure continuity, and to identify where the work undertaken during this research project with the Brunswick Ironworks would fit into the current heritage attractions within the town. Utilising the systems approach methodology required a detailed account of the stories linked to the plaques.

In order for interpretation to be successful it must have a theme that runs throughout the location so that visitors can relate to it:-

*“The theme is the key here; the interpretation at each resource site must focus on illustrating the main interpretative theme”.*

(Veverka 1994: 65)

The various panels and plaques located within Caernarfon are currently functioning as information boards, stating facts about the location or person being commemorated. In order for interpretation to be meaningful it should provoke a response from the reader, the plaques within the town are not presently fulfilling this objective. The plaques and memorials were taken as a starting point for the creation of a more balanced approach to interpretation within Caernarfon, based on the methodology advocated by Veverka (1994). The research revealed that it was possible to re-group the plaques and memorials around a number of common themes, thus facilitating the creation of a series of new heritage trails for the town. The application of the systems approach methodology for Caernarfon revealed that the town has a rich and diverse heritage which has the capacity to encourage the residents of Caernarfon and visitors to the town to appreciate the legacy left behind by past generations thus creating a heritage attraction in the present.

*“A nation with little regard for its past has little hope for its future”.*

*Abraham Lincoln*

*(16<sup>th</sup> President of the United States of America.1861-1865)*

Caernarfon currently has seventeen plaques which record people and events associated with the town. The plaques span the history of the town, the earliest records the role of Caernarfon as the Exchequer and Chancery of the Principality of North Wales created in 1284.<sup>159</sup> The Commemorative plaques in Caernarfon provided a link to the past by recording the history of the town.

<u>Location</u>	<u>Subject and number of plaque.</u>	<u>Theme.</u>
Promenade	Lionel Brabazon Rees. Plaque 1.	Maritime/local history.
Maritime Museum Victoria Dock	Ellen Edwards. Plaque number 6	Maritime/local history.
Institute Building Pavilion Hill Maes plaque located on a plinth by the new fountain.	Sir L. Turner. Plaque number 3	Famous people of the town and key events.
Maes/ Square Caernarfon	Baronet Assheton Smith. Plaque number 8	People of the town.

<sup>159</sup> The Charter for Caernarfon was granted in 1284 by Edward 1.

Maes/Square Caernarfon	David Lloyd George. Plaque number 4.	People of the town.
Pool Street	Fountain plaque number 10.	Key event affecting the people of the town.
Maes Post Office Wall	Sir. W.H. Preece. Plaque number 9.	Industrial.
St Helen's Road	De Winton Foundry. Plaque number 12	Industrial
Maes/Square Caernarfon	Sir. H. Owen. Plaque number 7	Educationalist.
Caer Menai Guest House Church Street	First County School. Plaque number 11	Education.
Ty Gof	Evan Richardson. Plaque number 13.	Education.
Castle Street	William Foxwist. Plaque number 2	Law and Administration
Shire-hall Street	Caernarfon County Jail. Plaque number 15.	Law and Administration

**Table 2.0. Illustrating the Caernarfon Themes identified from the Heritage Assessment in Caernarfon based on the plaques located within the town.**

The heritage inventory of Caernarfon included the Royal Welch Fusiliers Museum which is located inside Caernarfon Castle, and was included because of the link to the Unknown Warrior artefacts which are currently on loan to the Museum (one of the unexpected outcomes of the research project) charting the journey from history to heritage through the utilisation of visual artefacts.

### **Plaque One.**

#### **Group Captain Lionel Brabazon Rees VC.**

#### **Site Location.**

This is on the tower of the Royal Welsh Yacht club, Porth yr Aur on the promenade side of the tower facing the Menai Straits.

#### **Site Accessibility.**

This plaque is easily accessed, it is on the promenade however, and it is located high up on the wall and can be overlooked when walking along the promenade.



**Photo 1.0. Plaque One located on the promenade. Photographed by Pam Smith 2008.**

**Plaque Two.**

**William Foxwist.**

**Site Location**

The plaque is located on the former home of William Foxwist, Church Street Caernarfon.



**Photo 1.1. Plaque on Foxwist House, 3 Church Street Caernarfon. Photographed by Pam Smith 20087.**

**Site Access.**

Easily reached as the plaque is located in the walled town, within walking distance of the Castle.

**Plaque Three.**

<sup>160</sup> **Sir Llewelyn Turner**

**Site Location.**

Plaque at the Institute Building Pavilion Hill, Caernarfon.

**Site Access.**

Easily accessed on foot.



**Photo 1.2. Sir L. Turner plaque Institute Building. Erected by Caernarfon Civic Society. Photographed by Pam Smith 2008.**

In 2008 a new plaque commemorating the work of Sir Llewelyn Turner was unveiled, it is located on a pillar by the new fountain on the Maes (square), and was erected by the Civic Society. This plaque unlike the other plaques erected by the Civic society actually recounts the life of Sir

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<sup>160</sup> Sir Llewelyn Turner was instrumental in ensuring the survival of Caernarfon Castle in his role as Deputy of Caernarfon Castle see pages 54-57.

Llewelyn Turner through a detailed bi-lingual explanation of the contributions made by Sir Llewelyn Turner to the lives of the people of Caernarfon.



**Photo 1.3. Plaque to Sir Llewelyn Turner (2008) Caernarfon Civic Society. Photographed by Pam Smith 2008.**

#### **Plaque Four.**

**<sup>161</sup>David Lloyd George.**

#### **Site Location.**

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<sup>161</sup> David Lloyd George was instrumental in ensuring that the burial of the Unknown Warrior took place in November 1920. He also commissioned DJ Williams to create metal work for his house in London see pages 101-102.

A statue erected by Public subscription located on the square in Caernarfon.

**Site Access.**

Easy walking access located in the centre of the town on the Maes close to the Castle.



**Photo 1.4. Statue to David Lloyd George located on the Maes Caernarfon. Photographed by Pam Smith 2008.**

**Plaque Five.**

**Caernarfon Pavilion.**

**Site Location.**

This building was demolished in 1961, it was located on Pavilion Hill in Caernarfon; the site now forms part of the area offices for Gwynedd Council.

**Site Access.**

Walking distance of the town however, access is up a steep hill.



**Photo 1.5. Pavilion Plaque located on the Library Wall Pavilion Hill. Erected by Caernarfon Civic Society. Photographed by Pam Smith 2008.**

These plaques are in Welsh and would be difficult for a visitor to the town to understand if they were not a Welsh speaker. This is an example of the inconsistencies evident within the town relating to language and the content supplied on the plaques erected by the Civic Society throughout the town.

### **Plaque Six**

#### **Ellen Edwards.**

#### **Site Location.**

A plaque at the Seiont Maritime Museum at Victoria dock Caernarfon.

#### **Site Access**

The museum is open for a short period during the summer months, from the Spring Bank holiday through to the end of September. A small entrance fee of £1 is charged. 2009 they had seven hundred visitors to the museum (Visit Wales figures for 2009).



**Photo 1.6. Ellen Edwards. Seiont Maritime Museum Doc Victoria. Erected by Caernarfon Civic Society. Photographed by Pam Smith 2008.**



**Plaque Seven.**

**Sir Hugh Owen.**

**Site Location.**

**Site Access**

The statue of Sir Hugh Owen is located on the Maes and is easily accessible. The statue was relocated during the recent redevelopment of the Maes (square) in 2008, and was moved to its new location in front of the Victoria Hotel. The statue was erected by public subscription to commemorate the work undertaken by Sir Hugh Owen within the town, and the development of the Welsh Training College for Teachers at the University of Wales Bangor. One of the buildings at the University of Wales Bangor is named after Sir Hugh Owen, the building now forms part of the new Enterprise centre for the University.



**Photo 1.7. Statue to Sir Hugh Owen on the Maes. Photographed by Pam Smith 2008.**

**Site Description/interpretation.**

The statue carries the inscription;

*Sir Hugh Owen*

*1804-1881*

*A tireless philanthropist.....*

## **Plaque Eight**

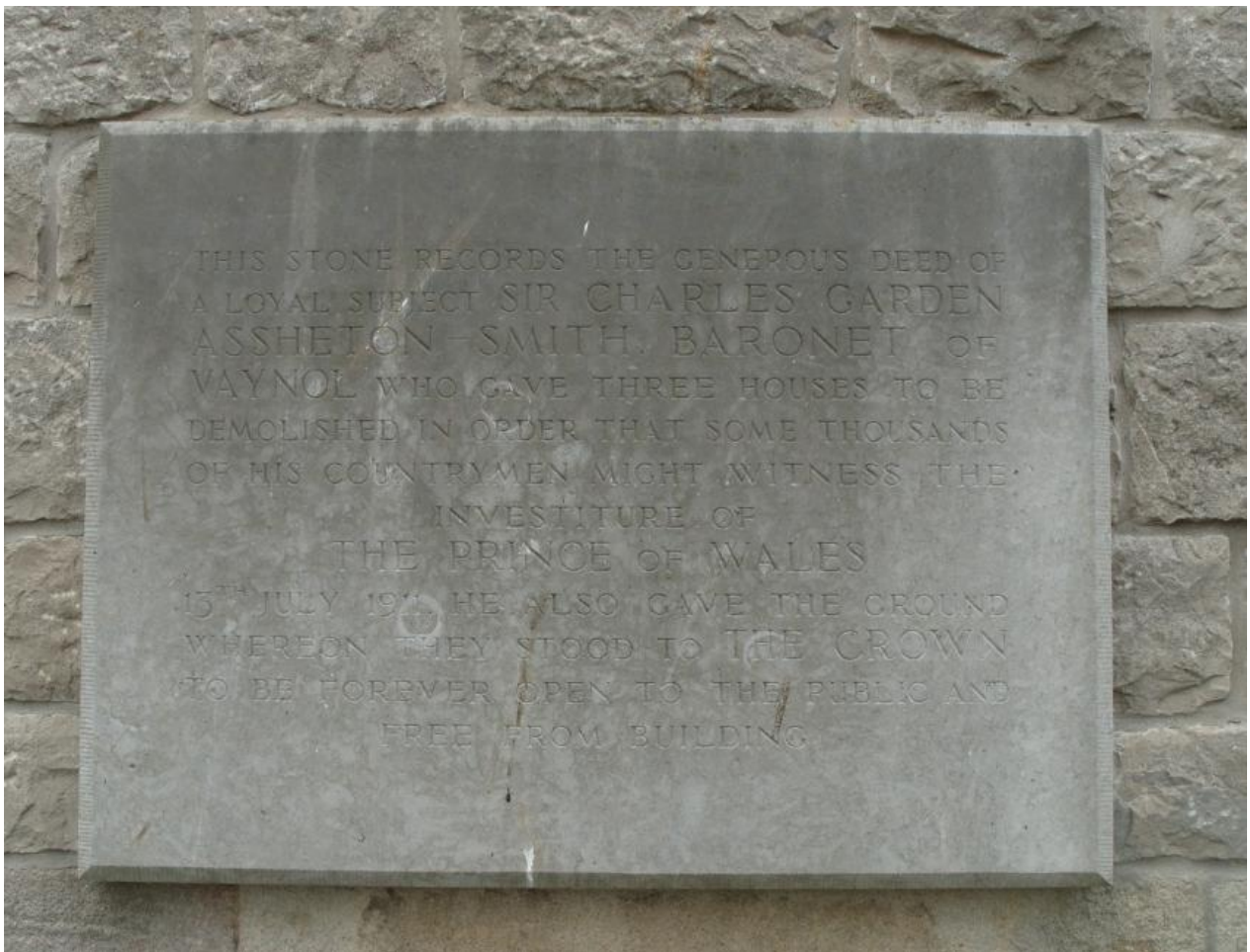
**<sup>162</sup>Charles Assheton Smith Baronet of Vaynol.**

### **Site Location.**

A stone inscription on the wall located within the area housing the statue of David Lloyd George.

### **Site Access**

On the Maes and easily accessed on foot although the inscription is becoming faded and rather difficult to read.



**Photo 1.8. Plaque on the Maes commemorating the gift of Charles Assheton Smith to the people of Caernarfon July 1911. Photographed by Pam Smith 2008.**

**Site Description/ Interpretation.** The inscription reads:-

*Charles Assheton Smith Baronet of Vaynol*

*Who gave three houses to be demolished.*

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<sup>162</sup> Charles Assheton Smith was also instrumental in ensuring the survival of Caernarfon Castle. Works undertaken by Sir Llewelyn Turner see pages 54-57.

*In order that some thousands of his countrymen might  
Witness the investiture of the Prince of Wales 13<sup>th</sup> July 1911  
He also gave the ground where on they stood to the Crown  
To be forever open to the public and free from building.*

**Plaque Nine.**

**Sir William Henry Preece.**

**Site Location.**

The plaque is located on the main Post Office in Caernarfon.

**Site Access**

Access is easy as the Post Office is located off the Maes and is in walking distance of the Castle.



**Photo 1.9. Sir Henry Preece plaque located on the main Post Office wall on the Maes Caernarfon Photographed by Pam Smith 2008.**

The plaque reads:-

*This tablet raised by public subscription commemorates one of the earliest pioneers of wireless telegraphy. Sir William Henry Preece KCB FRS 1834-1913. Engineer in Chief to the Post Office. A native and first honorary Freeman of Caernarfon. He was amongst the foremost of pioneers in the development of wireless telegraph and one of the first to experiment successfully with the sending of the spoken word through space.*

**Plaque Ten.**

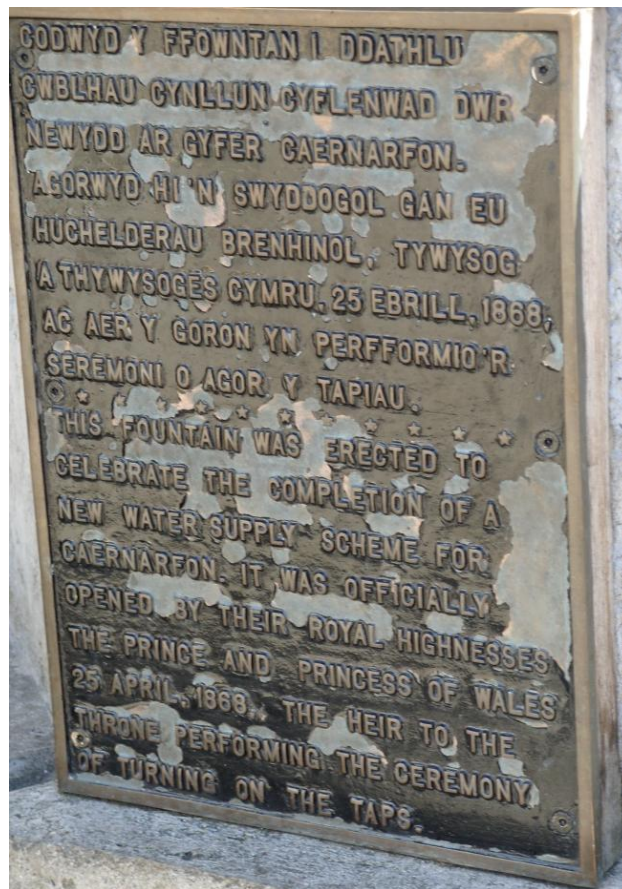
**Fountain Pool Street Caernarfon.**

**Site Location.**

The plaque is located on the now redundant remains of a stone fountain in Pool Street Caernarfon.

**Site Access**

Easy access to the fountain as it is located in the main shopping area in the town.



**Photo 1.10. Fountain Plaque Pool Street. Photographed by Pam Smith 2008.**

The plaque carries the inscription:-

*“This fountain was erected to celebrate the completion of a new water supply scheme for Caernarfon. It was officially opened by their Royal Highnesses the Prince and Princess of Wales 1868. The heir to the throne, performing the ceremony of turning on the taps”.*

**Plaque Eleven.**

**The First County School.**

**Site Location.**

Caer Menai. 15 Church Street Caernarfon.

**Site Access**

Church Street within the walled town.



**Photo 1.11. County School Plaque Church Street. Erected by Caernarfon Civic Society.  
Photographed by Pam Smith 2008.**

**Plaque Twelve.**

**Site Location.**

Plaque on the former foundry now used as plumbing merchants by Oakmere Plumbing St Helen's Road Caernarfon.

**Site Access.**

Caution required when viewing the building and plaque as there is no footpath, and the road is busy. It is within walking distance of the Town located close to the new terminus for the Welsh Highland Railway.



**Photo 1.12. De Winton Plaque St Helen's Road. Erected by Caernarfon Civic Society.  
Photographed by Pam Smith 2008**

**Plaque Thirteen. Reverend Evan Richardson.**

**Site location.**

Engedi Chapel New Street Caernarfon.

**Site Access.**

The plaque is located within the town and is within walking distance of the castle.



**Photo 1.13. Evan Richardson Plaque. Erected by Caernarfon Civic Society. Photographed by Pam Smith 2008.**

**Site Description/Interpretation.**

The plaque carries the following inscription;

Evan Richardson 1759-1824 Innovator of Calvinistic Methodism.

**Plaque Fourteen. Edward Povey Mural.**

**Location.**

On the wall next to the Town library on Bangor Road.

**Site Access.**

Walking distance of the town centre.



**Photo 1.14. Povey Mural Helter Skelter. Photographed by Pam Smith 2008.**

This mural is a pictorial representation of key events in Caernarfon. Unfortunately a large section of the mural was lost when the library was built, as one of the walls of the library is attached to the wall that contains the rest of the mural.



**Plaque Fifteen.**

**<sup>163</sup>History of Caernarfon Goal.**

**Site Location.**

The Old County Offices, Shire Hall Street, located in the walled town and close to the castle.

**Site Access.**

Limited access, due to the information plaques being located within the County Offices; access by prior appointment with Gwynedd Council.



**Photo 1.15. Old County Offices Shire-Hall Street. Location of Caernarfon County Goal. Photographed by Pam Smith 2008.**

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<sup>163</sup> This building contains the staircase created by DJ Williams in 1931 see page 80.



**Photo 1.16. One of the plaques located within the old County Offices previously Caernarfon Goal. Photographed by Pam Smith 2008.**

**Plaque Sixteen.**

**Site Location.**

Two slate plaques on the wall of Porth Mawr the East gate entrance to the walled town of Caernarfon.

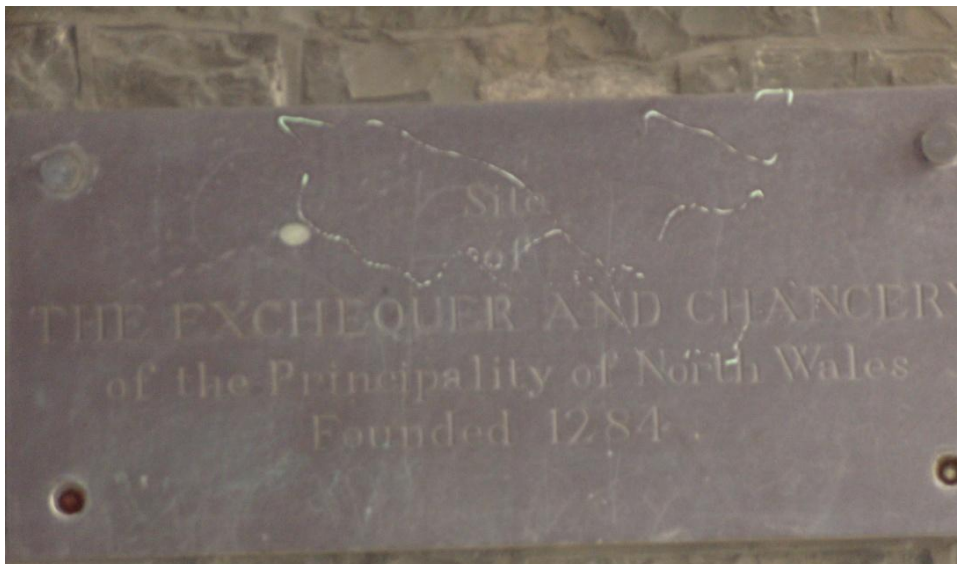
Porth Mawr, Eastgate Street Caernarfon.

**Site Access.**

Located in the walled town of Caernarfon at Porth Mawr.



**Photo 1.17. The East Gate Porth Mawr Caernarfon. The two plaques are located inside the arch of the gate on the right hand side. Photographed by Pam Smith 2008.**

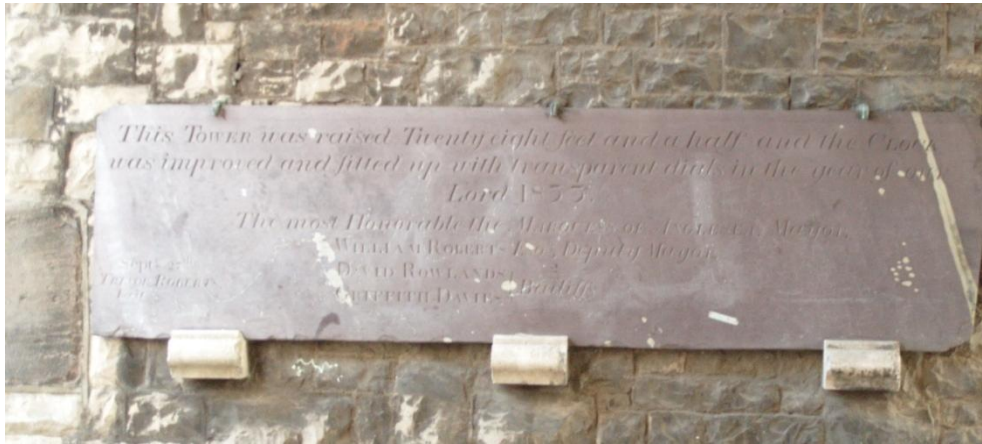


**Photo 1.18. Exchequer plaque Porth Mawr. Photographed by Pam Smith 2008.**

**Site Description/Interpretation.**

Plaque one carries the following inscription:-

*Silo of the Exchequer and Chancery of the Principality of North Wales founded in 1284.*



**Photo 1.19. Second plaque on Porth Mawr commemorating the work o the Town Clock in 1833. Photographed by Pam Smith 2008.**

*“This tower was raised twenty eight feet and a half and the clock was improved and filled up with transparent dials in the year of our Lord 1833. The most Honourable, Marquis of Anglesey Mayor. William Robert Esquire Deputy Mayor. Daniel Rowland and Griffith Davies Bailiffs. Made by Trevor Roberts September 27<sup>th</sup> 1833.”*

The wording on the second plaque is fading and was quite difficult to read and as a result of this the photograph cannot be focused to enable the text to be read clearly.

### **Plaque Seventeen.**

### **<sup>164</sup>Plaques to the Unknown Warrior.**

### **Site Location.**

The plaques are located in the Peace Garden Gwynedd County Council Offices on Shirehall Street.

### **Site Access.**

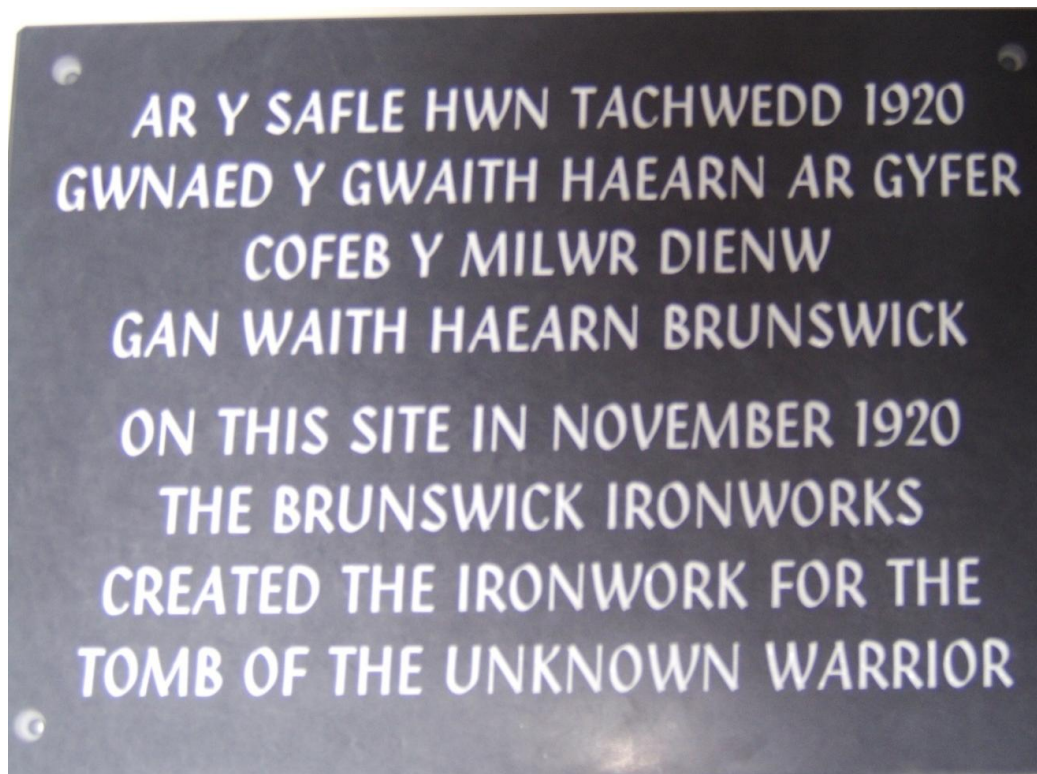
Pedestrian area, in walking distance of the Town and Castle.

### **Site description/Interpretation.**

The plaques were erected by Mr Meurig Williams of the Brunswick Ironworks, to commemorate the work undertaken by his grandfather David John Williams on the ironwork for the coffin of the Unknown Warrior in November 1920. The plaques were paid for by Mr Williams and the wording on the plaques was created by Mr Williams and Pam Smith.

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<sup>164</sup> The plaques commemorating DJ Williams and the link to the Unknown Warrior –pages 163-178.



**Photo 1.20. Unknown Warrior Plaque November (2006) Gwynedd Peace Gardens Caernarfon. Photographed by Pam Smith 2008.**



**Photo 1.21. Unknown Warrior Plaques Brunswick Ironworks. Photographed by Pam Smith 2008.**

## **2.1. Heritage Inventory of the Royal Welch Fusiliers Museum Caernarfon.**

The heritage inventory of Caernarfon included the Royal Welch Fusiliers Museum which is located inside Caernarfon Castle. The material displayed in the Museum is a depiction of the history of the Regiment, utilising various methods of interpretation ranging from static displays, to audio visual displays which recount important battles and events from the Regiments history.

*“Interpretation is a communication process that forges emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource”.*

*(Brochu and Merrimen, 2008 Llandudno Conference).*

A detailed assessment of the material on display within the museum was conducted during 2008, in order to identify themes and stories which would aid in the identification of common strands linked to the current level of interpretation within Caernarfon.



**Plaque 2.0. Located at the entrance to the Museum. Photographed by Pam Smith 2008.**

### **Site Location.**

The museum is located within Caernarfon Castle and occupies the Chamberlain Tower. Although the museum has on average 26,000 visitors per year<sup>165</sup>. Access for disabled visitors is limited as the museum is located over five floors within the tower with access to the main entrance via a stone spiral staircase. Disabled access is possible to the ground floor level and the museum shop. This is one of the major problems that the museum faces being located within a World Heritage site; many of the older visitors to the castle decline to visit the museum due to access problems.

<sup>165</sup> Data provided by the Curator of the Museum 2008.

## **Site Description/Interpretation.**

Entry to the museum is linked through entry to the castle, the ticket acting as a dual entry ticket. The site is managed by Cadw with staff working at the museum either employed by the Ministry of Defence or by the Royal Welch Fusiliers Trust. The material on display in the museum was assessed using the methodology suggested by Veverka (1994) who advocated that a detailed systems inventory should be conducted on the site under review to enable a detailed analysis of the history of the location to be assessed.

## **Main Theme of the Museum. History of the Royal Welch Fusiliers Regiment.**

The Regiment was raised at Ludlow in 1689 this was the seat of the Governing Council for Wales at the time. Lord Herbert of Chirbury raised the regiment, and it became known as Herbert's Regiment (the tradition at the time was for the regiment to take the name of its founder). It was raised to defeat James II who had invaded Ireland and William II ordered Lord Herbert to form a regiment of infantry.

The Royal Welch Regiment (RWF) is the oldest Infantry Regiment in Wales and recruits from across the whole of Wales, it is known as a family regiment with many sons following their fathers into the regiment.

## **Additional Themes.**

These focused on people who had served with the Regiment, locations where they fought and the stories behind some of the battles. The heritage assessment selected key themes from each level to demonstrate how themes had been developed to recount the history of the Regiment.

## **Level One.**

### **King George V and the Tomb of the Unknown Warrior.**

King George V was the Commander in Chief of the Regiment at the time of the burial of the Unknown Warrior in Westminster Abbey November 11<sup>th</sup> 1920. The artefacts created by DJ Williams of the Brunswick Ironworks for the Tomb of the Unknown Warrior are now on display at the museum. This is the first time that the work of DJ Williams and the story behind his contribution to the coffin of the Unknown Warrior have been displayed in Caernarfon. This is an important link to the town as visitors to the museum will now be able to see the artefacts and appreciate the role that the company played in this key event.

## **Level Two.**

### **Themes People and Events.**

#### **Captain G.W.O. Bell Crimean War.**

This room contains the Victoria Cross that was awarded to Captain G.W.O. Bell at the Battle of Alma in September 1854. This exhibit links to the cannon displayed in the room below. Captain

Bell was awarded the VC for capturing one of the Russian horse drawn heavy guns at the Battle of Alma in 1854.

The corridor that links the main museum has numerous interpretative panels depicting aspects of the Regimental history, and audio presentations that explain how the Regiment used the Welsh language in Burma 1944 and again in Bosnia in 1995, to confuse the enemy and to ensure that their messages could not be broken.

### **Level Three.**

#### **Famous Members of the Regiment.**

##### **Duke of Marlborough. John Churchill.**

This is the start of the main displays within the museum. An audio/visual presentation on the wars of the Spanish Succession in 1702-1713, recounts the story of John Churchill who was Commander of the allied armies, it recounts his brilliant victories at Liege and Blenheim. He was created Duke of Marlborough in recognition of his leadership during this conflict. John Churchill an ancestor of Winston Churchill who was Prime Minister during World War Two.

##### **Sir Henry Walton. Battle of Waterloo.**

The story of Sir Henry Walton Ellis KCB who commanded the regiment during the Peninsula Wars, before the Battle of Waterloo he gave orders that;

*“No one should break rank, even to help a wounded comrade”.*

Feeling faint after having been mortally wounded he requested an opening to be made in the lines so that he could ride to the rear. He died two days later with the words;

*“I am content... I have done my duty”.*

### **Level Four.**

#### **Story recounting the origin of the term Tommy.**

Thomas Atkins a Private in the 23<sup>rd</sup> RWF had his name used on a specimen pay book. Since then, the British Soldier has been commonly known as “Tommy”.

#### **Regimental Awards. Victoria Cross.**

The Indian Mutiny of 1857-1858 and the relief of Lucknow, it was at this conflict that Lt. Hackett and Band-boy George Monger aged 17 were awarded the VC for rescuing a badly injured Corporal under heavy musket fire.

### **Army Life.**

Many of the Battalions from the RWF served abroad for up to sixteen years at a time, many of the men never returned home, dying from disease and fever, the death rate amongst the



servicemen was as high as 7% per year. The Secretary of State for War ended the purchase of Officer's Commissions, and created short service engagements for soldiers enabling them to sign up for military service for a given number of years. He also established a County depot for each Regiment within the British Army, allowing one regiment to remain at home whilst the others were on duty abroad. The RWF permanent home depot was established at Wrexham in 1877.

### **Regimental History. Battle Honours.**

A series of interpretation panels and static displays recounts the story of the regiment during the South African War 1899-1902.

*“Thirty four miles on the first day... twenty four miles on the following day. Marching forty four miles in thirty hours with no stragglers”.*

The Boxer Rebellion in 1900 saw the first and second Battalions of the RWF involved fighting in the conflict. The RWF were part of an international force that fought their way from the coast to Peking to break the siege, the battle honour “Peking 1900” is unique within the British Army.

### **Level Five.**

### **Regimental history and the Great War. The men behind the Battles.**

*“The nations slithered over the brink into the boiling cauldron of war”.*

*(David Lloyd George).*

At the outbreak of the war the RWF had seven battalions; by the end of the conflict it had forty two. Half of the men served in Europe, others seeing service in Egypt, Gallipoli, Italy, Palestine and Macedonia. Over ten thousand RWF men lost their lives in the Great War, one of the youngest being Thomas Bull of Swansea, one of the oldest being Walter Speight aged 62. The RWF was awarded over two thousand eight hundred decorations during the conflict, eight of which were Victoria Crosses.

### **Story of the Regimental Poets and Writers of the Great War.**

Robert Graves served in France with the RWF during the First World War and wrote the book “Goodbye to All that”, as well as numerous war poems. Siegfried Sassoon also served with the RWF during the war and wrote “Memoirs of an Infantry Officer” and numerous war poems, both men maintaining their friendship after the war.

Sassoon wrote the poem the “General” in 1917:-

#### **The General.**

*“Good morning, good morning” the General said*

*When we met him last week, on our way to the line.*

*Now the soldiers he smiled at are all of ‘em dead*

*And we're cursing his staff for incompetent swine  
He's a cheery old card' grunted Harry to Jack  
As they slogged up to Arras with rifle and pack  
But he did for them both by his plan of attack.*

The Military Cross awarded to Sassoon was purchased by the RWF Museum Trust in 2007. It forms part of display relating to the role of the War -poets during WW1. Sassoon survived the war and died in 1967, and is buried at St Andrew's Church near Frome in Somerset.



**Photo 2.1. Military Cross of Siegfried Sassoon displayed at the Royal Welch Fusiliers Museum Caernarfon.**

### **Welsh War Poet Ellis Humphrey Evans (Hedd Wynn).**

Ellis Humphrey Evans better known as Hedd Wynn (white peace), was conscripted into the RWF in 1917 and following basic training was posted to Flanders where he was stationed with his Regiment at Pilckem Ridge. He was killed at Pilckem Ridge during the fighting in August 1917. In September 1917 he was awarded the Chair at the National Eisteddfod of Wales “posthumously” for his poem Yr Arwr (The Hero) the Chair was draped with a black cloth.



**Photo 2.2. Photograph of Hedd Wynn reproduced with the kind permission of the RWF  
Museum 2010.**

# **3. Delphi Replies.**

## **3.1. Delphi Survey.**

### **Background letter sent out to respondents with the questionnaire.**

The research is the result of a joint partnership with Brunswick Ironworks and funding drawn down from the European Social Fund. The remit from the company was to raise the profile of the company through the utilisation of its heritage charting its journey from history to heritage. The research project commenced in February 2006 and will be completed in 2010. One of the outcomes of the research project was the creation of a self guided trail based on the history of the company, thus creating a new heritage attraction for Caernarfon that will benefit visitors and the local community.

Brunswick Ironworks has been in Caernarfon for over one hundred years, it was established in 1906 by D.J. Williams a local man who quickly gained a reputation as a gifted art metal worker. His work can still be seen in Caernarfon where he worked extensively in the Castle for the Investiture of the Prince of Wales in 1911 and 1969. The skills of the art metal worker have been passed down from father to son, through three generations of the Williams family. Meurig Williams the grandson of DJ Williams is the current owner of the company. The research discovered a vast archive of photographs and drawings which have created a visual record of the work undertaken by the company and have been catalogued as part of the research project, under the guidance of Gwynedd archives.

During the research the utilisation of the artefacts relating to the Unknown Warrior have been developed to demonstrate how one specific aspect of their history has assisted in guiding the development of the company. In 1920 DJ Williams was commissioned to create the ironwork for the coffin of the Unknown Warrior, he created the handles, iron bands which bound the coffin and antique hammered the plaque for the top of the coffin.

2006 was the 90<sup>th</sup> Anniversary of the Somme Offensive. A meeting took place with Westminster Abbey in August 2006 and as a result of this meeting, the artefacts were displayed at the foot of the tomb of the Unknown Warrior during the Remembrance weekend in November 2006. In 2008 they were loaned to the Imperial War Museum London as part of their exhibition to commemorate the 90<sup>th</sup> Anniversary of the end of the Great War. They are currently on loan to the Royal Welch Fusiliers Museum, Caernarfon.

The company has diversified as the demand for ornamental gates has diminished; they now have a reputation for building railway bridges as a result of the work they undertook for the re-opening of the Welsh Highland Railway from Caernarfon to Porthmadoc. The skills of the art metal worker

are now being used to build railway bridges, water tanks, water cranes and coal tenders for heritage railways, utilising their skills to create objects that are much in demand.

The company also works closely with local artist Ann Catrin Evans, her designs in aluminium and steel, are re-created by the company. The designs range from street furniture, to full scale modern sculptures continuing the link that was established by DJ Williams In order to assess the impact of the research project on Caernarfon your comments are sought relating to how you see the research helping to raise the profile of the company, and how you see it developing in the future?

All replies received will be treated as confidential and anonymous.

Thank you for your support.

### **3.1. Delphi Survey Responses.**

The replies received from the questionnaire are presented in no specific order so as not to identify/indicate the identity of the respondents. The identity of the respondents as per the suggested methodology for this type of survey have remained anonymous, they constituted University lecturers, Members of Parliament from the Welsh Assembly and Westminster to Museum Curators and archivists and experts in the field of heritage..

#### **Question. 1.**

*“A website was created as part of the research. How do you see it developing in the future? Is there anything else that needs to be developed/added to the web site?”*

#### **Replies.**

- More interactivity and the creation of games for children and adults always attracts visitors on line
- Company website is an attractive resource and a worthwhile project in itself. It is obviously a good marketing tool for future business opportunities but it can also be an interpretive asset. This could be developed by linking illustrations from the website and the archive with text captions and graphics to provide an interactive gallery of pictures text and activities for visitors to the web site to explore.
- The web site looks good, well designed an attractive looking with clear photographs. Like all websites it will require constant updating.
- The site requires a bi-lingual structure and ideally should be divided into two sections one Welsh, the other English.
- It might be an idea to separate the commercial information from the historic, as it is a little confused at the moment and the presentations you have done could then be a proper page

rather than a separate document. There is some duplication too which this separation could assist with.

- Five of the specialists consulted did not respond to this research question, possibly due to the fact that the question might cause a conflict of interest relating to their work. No explanation was given by the experts as to why they did not complete this section.

### **3.2. Question. 2**

*“Were you previously aware of the link between the Brunswick Ironworks and the coffin of the Unknown Warrior? If so please explain?”*

#### **Replies.**

- No not at all but I found this fascinating.
- Not until the research project began. Although I have read much of the published literature on Lloyd George over the best part of five decades I have never seen the connection referred to until recently. It should also be featured in the Lloyd George museum.
- I have heard the story.
- I had heard the story but did not realise how important it was for Caernarfon.
- Yes through local knowledge.
- Through my work
- I was aware of the involvement with the coffin of the Unknown Warrior but the current research has however brought the details of their involvement to the attention of the public.
- I was totally unaware of the link between the Brunswick Ironworks and the coffin of the Unknown Warrior.

### **3.3. Question 3.**

*“Have you seen any of the media coverage generated as a result of the link between the Unknown Warrior and the Brunswick Ironworks?”*

#### **Replies.**

- I have not seen any of the media coverage. I tend not to read the local press. Nor have seen any of the coverage.
- There have been many mentions of the Brunswick research in the press over the past three years; one recalls an exhibition in the Celtic Royal hotel and its presence in Westminster Abbey in 2006. I recall hearing about the artefacts being on display at the Imperial War Museum London; and the recent opening of the display at the Royal Welch Fusiliers

Museum in Caernarfon Castle. Brunswick Ironworks skills as art metal workers are on display all over Caernarfon for example the entrance gates to the Celtic Royal hotel Caernarfon.

- Over the past four years I have seen a number of stories featuring the Brunswick Ironworks especially in the local press, but there has also been significant TV coverage especially the Antiques Road Show which has been especially effective.
- One of the interesting features has been the references to the Unknown Warrior in features about the companies work today, notably the Welsh Highland Railway emphasizing the sustained track-record of excellence of this local company.
- Yes, the media coverage has done much to publicise the link between the Unknown Warrior and Brunswick Ironworks.
- I read the article in Interpret Wales about the link between Caernarfon and Westminster Abbey through the coffin of the Unknown Warrior and the Brunswick Ironworks.

### **3.4. Question.4**

*“As a result of this research an archive of the work undertaken by the company has been created and catalogued under the guidance of Gwynedd archives. Do you think that this will be a valuable asset for Caernarfon? How do you see it being developed?”*

### **Replies.**

- Clearly a valuable asset and worthy of wider dissemination. I think a small booklet along the lines of the presentations on the website could be produced and presented at local museums and places of interest for example the Lloyd George Museum and Caernarfon Castle.
- Indeed it should be part of the presentation of the story of the town presented in an exciting and entertaining way.
- The archive of the company’s remarkable range and status of projects is a very valuable asset for students, for industrial historians and the general public. The archive ties in this local company to internationally-known places people and events.
- It will form a valuable asset and will emphasize the level of locally based engineering / craft skills it has developed. How it will be developed will depend on evolving archive policy.
- The archive is certainly a valuable asset for Caernarfon. The important issue is where will the archive be kept and how accessible it will be to researchers and interested members of the general public.
- Yes indeed the more interpretation of Caernarfon the better especially indigenous stories as a foil to Edward1 dominance in terms of the town’s history.
- The archive provides a valuable record of the work of the company.
- Archive needs to be developed as a link with the industrial heritage of the town.

- It is an important asset for Gwynedd archives and researchers providing historical material charting the work of the company.

### **3.5. Question.5**

*“Brunswick Ironworks has recently completed the construction of the railway bridges for the Welsh Highland railway project. This will create a link between Caernarfon and Porthmadoc. Do you think that this work has raised the profile of the company? Please explain?”*

### **Replies.**

- I have not been on the train so have not seen the bridges. Are they best viewed from the train or on foot?
- The completion of the Welsh Highland railway link is very important to Caernarfon. The fact that the Brunswick has been involved with the Welsh Highland Railway shows that the company can adapt to meet current needs as it has done throughout its history.
- I feel that the Welsh Highland Railway will (already has) raised the number of visitors to the town, but I feel that it is unlikely that the work carried out by the Brunswick Ironworks for the Welsh Highland Railway will increase visitor numbers except in so far as they have supplied the railway with essential civil engineering.
- The completion of the Welsh Highland Railway link to Porthmadoc should be beneficial to the company’s profile as long as Brunswick’s role in the project is adequately publicized through the Welsh Highland Railway web site, and at its numerous stations. Brunswick Ironworks needs to be well-represented at the grand opening of the completed line in 2011.
- I was not aware of the connection.
- The company is widely acknowledged as having done the work in railway fields but I don’t know how widely this has penetrated the general public.
- The work carried out by the Brunswick on the Welsh Highland Railway project safeguarded the jobs of the men employed by the company who are highly skilled craftsmen.
- Brunswick Ironworks are well known in the “railway family” for their work with the Welsh Highland Railway.
- The company has raised its profile through its partnership with the Welsh Highland Railway and shows that the company can adapt to meet the demands of the 21<sup>st</sup> century.



### **3.6. Question 6.**

*“Do you think that the work carried out by the company on the Welsh Highland railway project will encourage more visitors to the town? How do you see this developing? Are there any other ways in which this link could be developed?”*

#### **Replies.**

- I doubt that people will visit the town because of the bridges on the railway however, I do think that the connecting of the David Lloyd George museum, Caernarfon Castle and the railway could establish a link that may well encourage people to visit more locations than they would otherwise have done so.
- Not of itself but the link is interesting.
- The completed Welsh Highland Railway should bring more visitors to Caernarfon both as intending passengers catching the train at Caernarfon and as arrivals from Porthmadoc. Timetabling of the service from Porthmadoc should also ensure that passengers arriving at Caernarfon on the train have plenty of time to see the town's attractions.
- I am sure that the connection between Brunswick Ironworks and the Welsh Highland Railway has raised the profile of Brunswick Ironworks amongst Welsh Highland Railway volunteers and employees as well as the wider railway community.
- The Welsh Highland Railway could highlight the work the Brunswick Ironworks has done and its restoration of the line from Caernarfon to Porthmadoc.
- Possibly Caernarfon needs more concerted effort in terms of interpretation so that visitors appreciate the heritage on offer in the town. Green travel plans for the town which encourage visitors to arrive on the train from Porthmadoc to Caernarfon and vice versa and the use of the train to access the Snowdonia National Park would do much to promote Caernarfon as an ECO friendly destination.
- The work carried out by the Brunswick Ironworks on the Welsh Highland Railway project will encourage more visitors to the town as everyone would want to ride the train from Caernarfon to Porthmadoc.
- If the company had not built the bridges someone else would have done so, in terms of encouraging visitors to Caernarfon to ride the railway the role of the Brunswick Ironworks was crucial.

### **3.7. Questions 7.8.9.**

These questions are grouped together as they focused in the history and development of the company.

#### **Questions.**

- *7. Are you aware of the history of the Brunswick Ironworks? How?*
- *8. Do you know the present location of the company?*
- *9. How important do you consider the history of the Brunswick Ironworks to the rich and diverse heritage of Caernarfon?*

#### **Replies.**

- Yes I was aware of the history of the company and its present location. The work should be taken further to bring the heritage of the company to the attention of the public. It would be an important element in the promotion of Caernarfon as a heritage town. This could be done through web sites, heritage trails and a Heritage centre where the artefacts and photographs of the companies work could be displayed.
- Not really apart from its presence at its original works on the slate quay I did not know that it had moved from the slate quay.
- The research project has not made me aware of the heritage of the company, I'm only aware of it through this questionnaire and accompanying text which could be used to reach a wider audience.
- Yes through historical research and I know that the company moved to Peblig Mill from the slate quay. Greater publicity would be useful in promoting the company within the local area.
- Yes primarily through the work of Pam Smith as a PHD research student at Bangor University. The Brunswick Ironworks was known to me only by name before Pam Smith's research began. I know that the company has moved to Peblig Mill. A town venue is needed for displaying the company's current range of projects and the designs translated into metal by the company in terms of the work of Ann Catrin Evans. The company has contributed a great deal to Caernarfon's heritage, but at present it lacks a site in town where its story can be told.
- I am aware of the Brunswick Ironworks and that it has a proud pedigree, but I am not aware of any of its details and I know that the company is at Peblig Mill.
- No. I was largely unaware of the history of the company I have however visited the company at Peblig Mill on more than one occasion. I am interested in the history of the company. It is important we record our heritage it also connects the three greatest assets of the town: David Lloyd George, Caernarfon Castle and the Welsh Highland Railway.
- Yes. I am aware of the history of the company through my job, but did not know that it had moved. The heritage of the Brunswick Ironworks is important to Caernarfon in terms of forming the link between De Winton and Brunswick Ironworks as together they form an important link with the industrial heritage of the town.

- No I did not know about history of the company and do not know its current location. However, the text with the questionnaire has made me aware of the importance of the company's heritage to Caernarfon.
- Yes I am aware of the history of the company and its present location. The work undertaken by Brunswick Ironworks on the coffin for the Unknown Warrior is a link that should be developed

### **3.8. Question 10**

#### **Question.**

*“The research project aims to create a Brunswick trail for residents and visitors to use. How should it be developed in order to maximise its potential”?*

#### **Replies.**

- The trail should be one of many.
- It needs a clear start and finish for the trail in an easily accessible location within the town.
- Needs to be accessible whenever possible for disabled people to enjoy.
- The trail should be developed as part of an overall tourism strategy for Caernarfon which is currently lacking.
- The trail should link it to other themes from the town's history for example the Investitures of the Prince of Wales 1911&1969, Royal visits of 1937 and 1953, David Lloyd George and his war time role as Prime Minister linking it to the Unknown Warrior and the Royal Welch Fusiliers Museum. Or mix the themes using the heritage of the Brunswick as the link starting with Segontium-Castle-Industrial Heritage De -Winton and Brunswick-David Lloyd George-WW1-RWF Museum.
- Suggest that you use metal plaques to mark the route Brunswick Ironworks could design and install them.
- Creation of a Brunswick Town Trail which could lead onto a second trail which would link the Grave and Museum of David Lloyd George- Sir O.M. Edwards at Bala and the Castles of Edward 1 –Welsh Highland Railway and its Brunswick bridges.
- Need to ensure that the trail is advertised via the web sites for the Brunswick and WHR and Town Council and leaflets are displayed in key locations such as WHR Station, Tourist Information Offices and the Castle.

## **4.9. Question 11**

### **Question.**

*Should it be guided/self guided trail? Please explain your reasons behind the selection?*

### **Replies.**

- Both are feasible but self guided trails are more cost effective and allow people to use the trail any time.
- Excellent idea but the trail needs to be advertised so that people know about it.
- Instinctively go with the self guided trail as costs are minimal and avoids over interpretation.
- Self guided trail as there would not be enough interest in a guided trail.
- Self guided is the less expensive option.
- Both types guided and self guided as each one has something to offer.

## **3.10. Question.12.**

### **Question.**

*“How do you see the work developing in the future?”*

### **Replies.**

- In time we might even have an integrated Caernarfon visitor pack which tells of all the great things there are to do. This work could be a useful catalyst to that as there are such strong links to develop.
- Brunswick Ironworks forms the basis for an integrated heritage approach for Caernarfon as it has links with the main attractions within the town such as the Castle and the Welsh Highland Railway.
- A permanent interpretation centre linking the key themes from Caernarfon’s past and directing visitors to attractions within the town and beyond.
- To plan clearly and in conjunction with Cadw and Gwynedd Council to create an integrated interpretation policy for Caernarfon which features the Brunswick Ironworks?
- The research could provide a profile based on things other than Edward1 and the 1969 Investiture.
- There is a need to develop a heritage interpretation centre for Caernarfon which highlights the heritage of the town.
- The link between the Brunswick Ironworks and the Unknown Warrior should be highlighted as part of the town’s history.
- The creation of a Trail of Remembrance for Caernarfon linking the Brunswick Ironworks and the Unknown Warrior to the Royal Welch Fusiliers Museum and the World War One graves at Llanbeblig cemetery.

- Possibly the creation of a series of heritage trails which focused on the work undertaken by the company, for example the London Trail taking in the work created by the company in the Tower of London and Westminster Abbey and then on to the Kent and East Sussex railway for the Cavell van restoration project.

# **4.0. Presentations made during the project.**

These presentations were created to raise the profile of the company on a local level through the presentation to the Caernarfon Civic Society and to a global audience through the publication of the Two Men from Caernarfon on the company's web site and its presentation to the Lloyd George Society.

## **4.1. Civic Society 2006**

### **The Brunswick Ironworks the Spark that Lights the Future.**

*“These old buildings do not belong to us only... they have belonged to our fore-fathers and they will belong to our descendants unless we play them false. They are not... our property to do as we like with. We are only trustees for those who come after us”.*

*William Morris 1889.*

The Brunswick Ironworks has indeed belonged to our fore fathers, it is now in the third generation of the Williams family, and it is still creating a future for Caernarfon. This small company has an amazing heritage which has the potential to ignite the Royal Town of Caernarfon.

### **How can this be achieved?**

By working together in partnership with all interested parties. Imagine the Brunswick Ironworks as a large spider's web, each strand representing the thread that binds it together. The Brunswick Ironworks have impacted Caernarfon in terms of creating unique art metal work for the major locations within the Royal Town. The most prestigious being the Castle. Brunswick Ironworks worked in the Castle for the 1911 Investiture when the founder of the company DJ Williams created the well cover, the metal work for the doors and the lock and key which were used to open the door to the Eagle Tower. He then created the unique railings around the Castle, a fine example of the craft of the master art metal worker.

His son and grandson continued the tradition with the Investiture of the current Prince of Wales in 1969 creating the platform at the Queens Gate and creating the decorative metal posts which adorned the canopy supports designed by Lord Snowdon for the Investiture.

### **Brunswick Ironworks Work in Caernarfon.**

The company worked extensively in Caernarfon their work is still on view today at locations across the town.

- Segontium the Roman Fort has railings created by the Brunswick Ironworks.

- The old Council Offices, Shire Hall Street has a magnificent staircase designed by DJ Williams.
- The Celtic Royal Hotel sign and lights made by DJ Williams.
- The Salem chapel where DJ Williams was Deacon has railings and gates which DJ designed.
- The WHR has water tanks and bridges built by DJ's grandson Meurig Williams.

### **Brunswick Ironworks in the local area,**

- Moving out of the Town, the David Lloyd George Museum has gates designed and crafted by DJ Williams. The grave of DLG has gates and monogram translated into metal by DJ Williams.
- Entrance gates at Vaynol.

### **Brunswick Ironworks in the United Kingdom.**

- These skills have been passed from father to son. Harold Williams created the Crown of Thorns for the Roman Catholic Cathedral in Liverpool.

### **The untold connection.**

- The Tomb of the Unknown Warrior in Westminster Abbey the crowning glory.

### **How can we use this heritage?**

The Brunswick Ironworks is the glue that holds it together it is the key to the regeneration of Caernarfon. It is the starting point, the first step along the road to creating a future for our children and our children's children. It will not be achieved overnight, but it can be accomplished in small carefully planned steps creating a working partnership building a future for Caernarfon.

The key is to utilise the heritage of the company. Look at what we have, how we can use it.

### **Who can help?**

- The Civic Society.
- The Harbour Trust.
- The WHR
- Caernarfon Town Council
- DLG Museum
- Cadw for the Castle and Roman Fort.
- Gwynedd Council
- The people of Caernarfon

### **Why work together how can a shared vision be created?**

Caernarfon is the only Royal Town in Wales it is blessed with majestic mountains and coasts. It has a unique Heritage encompassing the Romans, Slate industry, Maritime history, Railways, the

Iron Foundry of De Winton and the Brunswick Ironworks, and great men like David Lloyd George and Sir Hugh Owen. This is not an extensive list but illustrates what we have to work with.

### **How can it be realised?**

The first step has already been taken the link with the Tomb of the Unknown Warrior has been commemorated, both in Caernarfon and in a special service marking the 90<sup>th</sup> Anniversary of the Somme. The artefacts belonging to the company were displayed in Westminster Abbey over the Remembrance weekend 2006.

The journey has begun and hopefully it will identify a different aspect of the heritage of the town.

## **4.2. Presentation Two.**

### **David Lloyd George Society Presentation.**

#### **TWO MEN FROM CAERNARFON.**

This is the story of David Lloyd George MP and David John Williams an art metal worker both local men from Caernarfon.

The story begins in 1909 at the National Eisteddfod, which was held at the Royal Albert Hall London. This was the year that the talents of DJ Williams, first came to prominence, he won first prize for the garden gate designed for Lady Turner of Caernarfon.

THE GATE  
CREATED BY  
D.J WILLIAMS  
FOR LADY  
TURNER.  
AWARDED 1<sup>ST</sup>  
PRIZE AT THE  
NATIONAL  
EISTEDDFOD  
1909

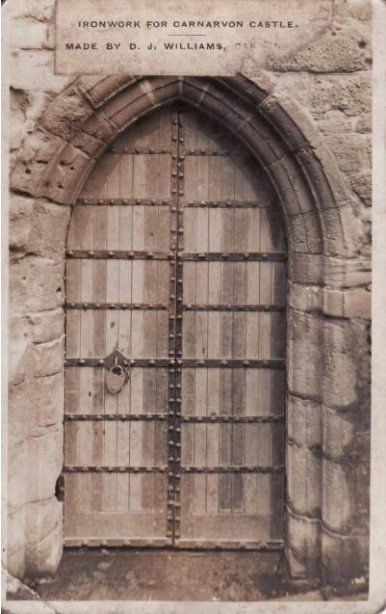


At the same time another local man David Lloyd George was Chancellor of the Exchequer and was emerging as one of the great social reformers of the twentieth century. He had already introduced the Old Age Pensions Act and was in the process of presenting the Peoples Budget to Parliament.

In 1911 the Two Men from Caernarfon embarked on their first joint venture. David Lloyd George was Constable of the Castle and was instrumental in ensuring the Investiture of the Prince of

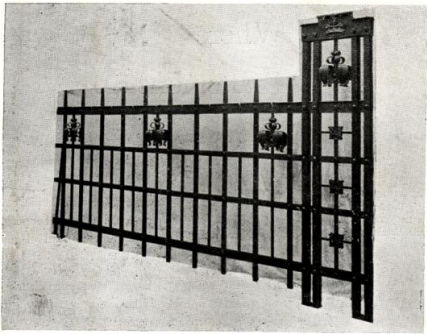


Wales at Caernarfon. The castle required considerable work to ensure that it would be a suitable venue for the Investiture. DJ Williams was commissioned to create the railings for the outside of the castle, the lock and key for the Eagle Tower, the light fittings for the retiring rooms of the King and Queen, and the Ceremonial key that was to be presented to the King by David Lloyd George; in his capacity as Constable of the castle. The art metal work that was designed for the Investiture of the Prince of Wales in July 1911 can still be seen at the Castle.



The Two Men from Caernarfon continued to work together. In 1915 DJ Williams was commissioned to create the wrought iron railings and gates for the Victoria Tower Gardens at the Houses of Parliament. These railings and gates were of a modern contemporary design and highlighted the skills of DJ Williams as a gifted art metal worker. Unfortunately, these gates and railings were taken for scrap during the Second World War.

WROUGHT IRON NEW RAILINGS  
 VICTORIA TOWER GARDENS, HOUSES OF PARLIAMENT  
 WESTMINSTER, S.W.



800 feet of these Railings were made, and 3 Gates to match. Hammered  
 Antique. Over 50 tons of Iron used.

David Lloyd George during this period was continuing with his social reforms, establishing himself as one of the longest serving Chancellors of the Exchequer and as a social reformer through the Old Age Pensions Act and the National Insurance Act 1911.

However, it was not until 1920 when David Lloyd George was Prime Minister having steered the country to victory over Germany during the First World War that the Two Men from Caernarfon collaborated on the Tomb of the Unknown Warrior. David Lloyd George had gained a victory in the war but the cost was high, 885,000 men did not return from the war. Many families could not mourn the dead, because in 1915 the decision had been taken not to repatriate the fallen. For many families this left a void that could not be filled, the cost of visiting the Battlefields was beyond the means of most families, but worse still many thousands had no known graves; lost forever in the mud of Flanders Fields.

However, in 1920 the Dean of Westminster Herbert Ryle suggested the creation of a grave in Westminster Abbey for all those men who never returned home. The idea had originated in 1916 when the Reverend David Railton a serving Padre during the war had seen a simple cross inscribed with the words:-

### **AN UNKNOWN SOLDIER OF THE BLACK WATCH.**

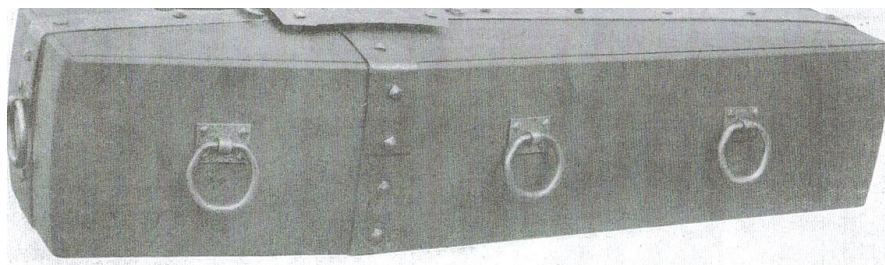
David Lloyd George was fully committed to the idea and even managed to persuade the King:-

**The king took some persuading but gave way to the enthusiasm of his Prime Minister Lloyd George.**

DJ Williams was sent a telegram in early November 1920 requesting his presence in London on a “matter most urgent”. He arrived in London, was commissioned to create the handles for the coffin, and the iron banding that would bind the coffin and to antique hammer the plaque that was to be placed on top of the coffin. The plaque was to carry the inscription:-

### **A BRITISH WARRIOR WHO FELL IN THE GREAT WAR OF 1914-1918 FOR KING AND COUNTRY.**

DJ Williams worked for two days and night to ensure that the work was completed on time the coffin was taken to France bringing home the body of the Unknown Warrior. The Unknown Warrior was buried in Westminster Abbey in the presence of the King and Queen and Lloyd George. The part that DJ Williams played in this act of national remembrance was acknowledged through a letter from Sir Lionel Earle the Secretary to H.M. Office of Works.



**Photograph of the Unknown Warrior coffin detailing the ironwork of DJ Williams.**

The Two Men from Caernarfon continued to work together. In 1923 DJ Williams was commissioned to create the ironwork for a wooden casket presented to King George V to mark the re-opening of Westminster Hall after the fire that nearly destroyed it. The casket was made from oak that survived the fire, and the metal work was created from melting down metal spikes from the original roof of Westminster Hall. The casket was presented to the King on July 17<sup>th</sup> 1923. Although by this time Lloyd George was no longer Prime Minister, taking a back seat in politics, it is assumed that he was present at the ceremony in his capacity as the Member of Parliament for the Caernarfon Boroughs.

After his resignation as Prime Minister in 1922 the career of Lloyd George was in decline, whereas the reputation of DJ Williams was on the ascension. In 1926 DJ Williams worked for Lloyd George installing dog grates, electric light fittings and newel posts for the staircase in Lloyd George's new London home 2 Addison Road, Kensington.



LIGHT FITTINGS  
CREATED BY D.J  
WILLIAMS FOR THE  
HOME OF DLG IN

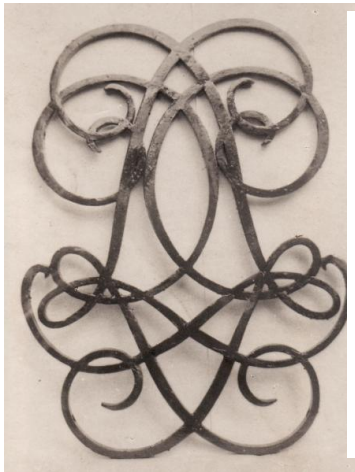
The Two Men from Caernarfon were to work together once again in 1937. Lloyd George as Constable of the Castle was responsible for the visit of their Majesties, King George VI and Queen Elizabeth. DJ Williams was commissioned to design and install antique lamps for the retiring rooms of their Majesties. The visit of King George VI and Queen Elizabeth marked the end of the working relationship between these Two Men from Caernarfon.



AS SUPPLIED TO  
CAERNARFON  
CASTLE FOR THE  
RETIRING ROOMS OF  
THEIR MAJESTIES  
KING GEORGE VI.  
AND QUEEN  
ELIZABETH, ON THE  
OCCASION OF THEIR  
VISIT TO  
CAERNARFON, JULY  
15. 1937.



But this is not quite the end of the story. They worked together on one last commission, the burial of one and the recognition of the talents of the other as one of the most gifted art metal workers of the twentieth century. Lloyd George died in 1945; his wish was to be buried beside his beloved River Dwyfor in Llanystumdwy close to his childhood home. With the death of Lloyd George the relationship between these Two Men from Caernarfon was commemorated by Sir Clough Williams Ellis, who was commissioned to create the designs for the tomb designing a monogram and a set of gates. DJ Williams then transferred his designs into metal. Lloyd George was buried beside the river Dwyfor.



THE MONOGRAM  
AND GATES  
DESIGNED BY SIR  
CLOUGH WILLIAMS  
ELLIS FOR THE  
GRAVE OF DLG. THE  
DESIGNS RECREATED  
IN METAL BY D.J  
WILLIAMS.



This is the end of the story of the Two Men from Caernarfon. A journey that lasted thirty six years, a time that saw great social reforms, two World Wars and the emergence of a modern Britain. It is the story of how Two Men from Caernarfon in their own unique way, created a lasting heritage that reflected the changes that took place during their lifetimes.

### **POST SCRIPT.**

During the next twenty one year's DJ Williams continued to establish himself as a gifted art metal worker, teaching his skills to his son Harold who in turn passed those skills onto his son Meurig; who continues the family tradition. DJ Williams died in October 1966 leaving behind a lasting visual record of his skill as one of the most talented art metal workers of the twentieth century. A heritage that is hopefully, going to help to restore the fortunes of Caernarfon

The research discovered the original letter from Lloyd George, thanking DJ Williams for his work carried out at 2 Addison Road Kensington. This is the only piece of written evidence that supports the working relationship between these Two Men from Caernarfon. A letter from Sir Clough Williams Ellis was found amongst the private letters of the Williams family that confirms the final part of the story the work that DJ Williams completed for the grave of Lloyd George.

In 2006 the Grandson of DJ Williams travelled down to Westminster Abbey to show the artifacts relating to the work undertaken by DJ Williams on the Tomb of the Unknown Warrior. 2006 marked the 90<sup>th</sup> Anniversary of the Battle of the Somme; the artifacts were exhibited at the foot of the Tomb of the Unknown Warrior in the Abbey over the Remembrance weekend.



**The Brunswick Ironworks artefacts on display at Westminster Abbey. The photograph is reproduced with the kind permission of Westminster Abbey and is copyright to Westminster Abbey 2006.**

## 5.0.

# Creation of the Brunswick Archive.

This section contains supporting documentation relating to objective four of the research project relating to the processes involved and experienced by the researcher during the creation of the Brunswick Archive. It is included within the research project as it might assist researchers and interested members the public who might wish to utilise the research undertaken on the Brunswick Ironworks archive for their company.

### ARCHIVE INTRODUCTION FOR BRUNSWICK IRONWORKS

Brunswick Ironworks were founded in 1906 by David John Williams; initially he was located in a small Blacksmith's forge in Bontnewydd. The business moved to Caernarfon, Porth Y Aur using a Smithy located at the back of the Sportsman Hotel (Jail Street). It was from here in November 1920 that he made the ironwork for the coffin of the Unknown Warrior that now rests in Westminster Abbey. The company at this time was simply known as DJ Williams Porth yr Aur. The skill of DJ Williams as a gifted art metal worker became widely recognised following key commissions for Hampton Court Palace, the Tower of London and work undertaken for David Lloyd George as Constable of Caernarfon Castle and as MP for the Caernarvonshire Boroughs and as Prime Minister of the United Kingdom.

In the 1930's he relocated the business to the Slate Quay where the company expanded and continued to work on key commissions such as the Memorial Gate for Sir OM Edwards at Llanuwchllyn, the monogram and gates for the grave of David Lloyd George at Llanystumdwy and the restoration of Chirk Castle gates, a commission that took seven years to complete. DJ Williams worked alongside his son Harold, and together they worked on the Fire screen for Princess Elizabeth a gift from the people of Caernarfon on the occasion of her wedding to Prince Philip. DJ Williams died in 1966 and his son Harold continued the tradition of working on key commissions, in 1968 he created the Crown of Thorns for the new Roman Catholic Cathedral in Liverpool.

In 1960 Harold was joined by his son Meurig, who started to learn the skills of the master art metal worker. Harold died in the 1980's, after having worked on the building of the nuclear power station at Wylfa, Liverpool Airport, Fords at Halewood, and Ferodo in Caernarfon.

In 2000 the Company relocated to Peblig Mill outside of Caernarfon as the Slate Quay was no longer a safe working environment. Meurig Williams has continued the family tradition of working on key commissions having just completed the final bridge extension for the Welsh

Highland Railway from Caernarfon to Porthmadoc. The company has diversified and developed its skills building tenders and water towers, and heritage fencing for heritage steam railways. The archive contains the history of the company from 1909 - 1950's.

(Pam Smith 2010).

The documents produced below are examples taken from the Brunswick Archive to illustrate the various sections contained within the archive ranging from DJ Williams original hand drawn designs, photographs of the company's work, to work undertaken for various designers and companies. A copy of the agreement citing the consent of Meurig Williams for the archive to be created and stored at Gwynedd Archives at Doc Victoria Caernarfon.

The process of creating the archive was identified through the archive booklet which provided guidance relating to the structure and content of archives based on their experience as archivists.

- A hand list this would consist of a rough list summarising the entire contents onto one or two sides of paper.

*"Sometimes called a list which contains details of every individual document of value or at least every bundle or file"*

*(Gwynedd Guide P1).*

- The creation of a catalogue,
- A Calendar which is described as being more detailed than a catalogue;

*"In fact the calendar is a paraphrase of the document without omitting any details, however unimportant or general they may be".*

*(Gwynedd guide P1).*

- Create an Index similar to that found in the back of a book which lists the content of the book.
- Create a card index that involves making cards referring to:-

*"Places, personal names and subjects which appear in all the catalogues of the Records Office and are arranged in alphabetical order".*

*(Gwynedd Guide P1).*

XD135/3/1/1 – 3			<u>Brunswick Ironworks Catalogues.</u>
XD135/3/1/1	n.d.		CATALOGUE of work undertaken and designs by D.J. Williams. The catalogue inscribed with words "Buckingham Palace Catalogue which the Queen Inspected".
XD135/3/1/2	n.d.		CATALOGUE of works for sale and made by the Brunswick Ironworks.  (2 copies).
XD135/3/1/3	n.d.		CATALOGUE No. 4 of work designed and produced by D.J. Williams, Art Metal Worker.
XD135/3/2/1 – 17			<u>Catalogues and cuttings of designs by other Companies.</u>
XD135/3/2/1	1972	Nov	CATALOGUE from Glendale Forge, Essex for a range of cast iron firebacks.
XD135/3/2/2	n.d.		CATALOGUE of antique ironwork.
XD135/3/2/3	n.d.		CATALOGUE of antique ironwork.
XD135/3/2/4	n.d.		CATALOGUE by Smith Pearson Ltd., showing designs of gates.
XD135/3/2/5	n.d.		CATALOGUE pictures of various wrought iron lanterns and firescreens.
XD135/3/2/6	n.d.		CATALOGUE of wrought iron gates for sale with prices.
XD135/3/2/7	n.d.		CATALOGUE of designs of wrought iron gates with prices.

**Image 5 extract from Brunswick Archive.**



XS4442/2/4/1/5	n.d. [1915]		PHOTOGRAPH of dog iron made for the Admiralty Board Room by D.J. Williams.
XS4442/2/4/1/6	n.d. [1915]		PHOTOGRAPH of fire dog lion design for Admiralty Board Room by D.J. Williams.
XS4442/2/4/1/7	n.d.		PHOTOGRAPHS of wrought iron test pieces for show at the Rural Industries Bureau.
XS4442/2/4/2/1	- 3		<u>Oxford.</u>
XS4442/2/4/2/1	[1940's]		PHOTOGRAPH of gates for Merton College, Oxford by D.J. Williams.
XS4442/2/4/2/2	[1940's]		PHOTOGRAPH of gates at Merton College, Oxford by D.J. Williams.
XS4442/2/4/2/3	1950	June	POSTCARD sent to D.J. Williams, showing the gates at Trinity College, Oxford.
XS4442/2/4/3/1	- 2		<u>Miscellaneous.</u>
XS4442/2/4/3/1	n.d.		PHOTOGRAPH of work showing a lion's head and face (Greek design) created by D.J. Williams for H.J. Sadler, Cadsan Road, Tottenham, Wolverhampton.
XS4442/2/4/3/2	n.d.		PHOTOGRAPH of design G possibly by F. Clubb & Son Ltd. Suffolk of an entrance gate priced at £13 or maybe sent out to Clubb & Son by D.J. Williams.

**Image 5.1. Extract from the Brunswick Archive.**

XD135/2	<b>Work by Other Designers Undertaken by D.J. Williams</b>
XD135/2/1	St David's Hospital, Bangor
XD135/2/2	County Architect's Department
XD135/2/3	HM Office of Works
XD135/2/4	Local Architects
XD135/2/5	Out of County Architects
XD135/2/6	Austin Hopkinson and Co., Manchester
XD135/3	<b>Catalogues</b>
XD135/3/1	Brunswick Ironworks Catalogues
XD135/3/2	Catalogues and Cuttings of Designs by Other Companies
XD135/4	<b>Clients Correspondence</b>
XD135/5	<b>Miscellaneous Documents</b>
XD135/6	<b>Publications</b>
XS4442	<b>Photographs of work done mostly by D.J. Williams</b>
XS4442/1	<u>Individuals and Royalty</u>
XS4442/1/1	D.J. Williams
XS4442/1/2	David Lloyd George
XS4442/1/3	Sir O.M. Edwards
XS4442/1/4	Royalty
XS4442/2	<u>Work Undertaken at Various Locations</u>
XS4442/2/1	<i>Local</i>

**Image 5.2. Extract from the Brunswick Archive.**

INDEX

XD135/1     **D.J. Williams Designs**

XD135/1/1             D.J.. Williams Designs for Various Clients

XD135/1/1/1             University College of North Wales, Bangor

XD135/1/1/2             Ferranti Motors Ltd

XD135/1/1/3             Port Adelaide

XD135/1/1/4             Royal Hotel, Caernarfon

XD135/1/1/5             Institutions

XD135/1/1/6             Companies and Businesses

XD135/1/1/7             Ecclesiastical

XD135/1/1/8             Individuals

XD135/1/2             Various D.J. Williams Designs

XD135/1/2/1             Specialist Designs

XD135/1/2/2             Gates

XD135/1/2/3             Gates and Railings

XD135/1/2/4             Railings and Rails

XD135/1/2/5             Balconies

XD135/1/2/6             Staircases

XD135/1/2/7             Hearths and Grates

XD135/1/2/8             Door Fittings

XD135/1/2/9             Light Fittings and Lanterns

XD135/1/2/10            Candle Holders and Brackets

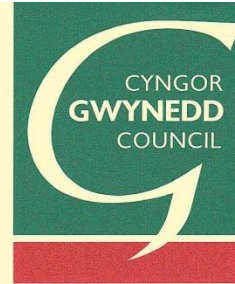
XD135/1/2/11            Dinner Gongs and Bells

XD135/1/2/12            Clips and Brackets

**Image 5.3. Extract from the Archive.**

**Cyfadran Datblygu  
Development Directorate**

Pennaeth y Gwasanaeth Dysgu Gydol Oes/  
Head of Lifelong Learning Service – Rhys Wyn Parri



Gofynnwch am/Ask for: Lynn C. Francis

☎ (01286) 679095

☎ (01286) 679637

✉ [archifau@gwynedd.gov.uk](mailto:archifau@gwynedd.gov.uk)

Ein Cyf / Our Ref: LF / PS

Pam Smith,  
Cartrefle,  
Fron,  
Caernarfon  
LL54 7BB

27-10-2006

Dear Pam,

I hope that you are well. I enclose a copy of the receipt sent to Meurig. I also enclose a copy of our Conditions of Deposit. I look forward to seeing you soon.

Yours sincerely,

Lynn C. Francis  
Senior Archivist

Archifdy Caernarfon/  
Caernarfon Record Office  
Swyddfa'r Cyngor  
Caernarfon  
Gwynedd, LL55 1SH  
Ffôn / Tel : 01286 679095  
Ffacs / Fax : 01286 679637  
[www.gwynedd.gov.uk](http://www.gwynedd.gov.uk)

**5.0. Letter from the Archives.**



Gwasanaeth Archifau Gwynedd  
Gwynedd Archives Service

Derbynneb - Receipt

Adnewr:  
Depositor: Mr M Williams

Dyddiad Derbynodi:  
Accession Date: 23-9-2006

Rhif Derbyn:  
Accession No. C-12104

Rhif Cyfeirnod:  
Reference No.: XD135 XS4442

Teitl:  
Title: Brunswick Ironworks Collection

Disgrifiad:  
Description: Includes plans, drawings, photographs  
and a few records relating to  
administrations

Termau Adneuaeth:  
Deposit Terms: Deposit

Mynediad:  
Access:

Hawlfraint:  
Copyright:

COPY

Lynn C. Francis  
Uwch Archifydd/Senior Archivist

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**Image 5.4 copy of the letter accepting the archive from Gwynedd Archives.**

**GWASANAETH ARCHIFAU GWYNEDD  
GWYNEDD ARCHIVES SERVICE**

**BRUNSWICK IRONWORKS COLLECTION**

**Cyfeirnod . XD135  
Reference . XS4442**

**Catalogwyd gan / Catalogued by Pam Smith**

**Myfyrwraig ym Mhrifysgol Bangor  
Student at Bangor University**

**Archifdy Caernarfon Record Office**

**2009**

**Image 5.5 Front cover of the Brunswick Archive.**

# **6.0. BRUNSWICK TRAIL.**

The material presented below is the result of research objective six which resulted in the identification and creation of a new heritage trail for Caernarfon based on the work undertaken by the Brunswick Ironworks within the town and the local area, illustrating how heritage can connect locations through the active sharing of its heritage. If the research project on the company was to be followed up the creation of the heritage trail would be one of the objectives. The photographs used in the trail have already been referenced in the main text of the project but have been replicated here to identify the route for the proposed trail.

## **THE FOOTSTEPS OF THE ART METAL WORKER. A JOURNEY THROUGH TIME.**

### **Content of the Tour. Caernarfon-Porthmadoc-Llanystumdwy-Porthmadoc-Caernarfon.**

#### **World Heritage Site of Caernarfon Castle.**

The tour starts at Caernarfon Castle, construction of the castle began in 1282, during the reign of Edward 1. The castle forms part of the World Heritage Site of the Castles and Town Walls of Edward 1.



**Photo 6.0 The World Heritage Site Plaque inside Caernarfon Castle. Photographed by Pam Smith 2011**

Caernarfon castle contains many examples of the work of DJ Williams and successive member's of the Williams family. The link with the castle began in 1911 when DJ Williams was commissioned by the Ministry of Works to create and install railings for the outside of the castle in preparation for the 1911 Investiture of Edward Prince of Wales later to become Edward VIII.



**6.1. The railings designed and installed by DJ Williams for the 1911 Investiture of the Prince of Wales. Photographed by Pam Smith 2011.**

DJ Williams also designed a well cover, created new metal work for the doors within the castle and designed a new key and padlock for the castle.



**6.2. Caernarfon Castle key presented to King George V by Mr DL George on the occasion of the Investiture of the Prince of Wales 1911. Photographed by Pam Smith 2006.**





**6.3. The well cover located within the Well Tower designed and installed by DJ Williams. Photographed by Pam Smith 2011.**



**6.4. The seaward entrance gate to the castle detailing the padlock and door furniture designed and installed by DJ Williams. Photograph by Pam Smith 2011.**

Royalty have visited Caernarfon Castle on a number of occasions and each time the Brunswick Ironworks have been involved in creating and installing art metal work within the castle to mark the event.

### **1937 Visit of King George VI and Queen Elizabeth.**

The King and Queen visited the castle in 1937 as part of their coronation tour following their coronation at Westminster Abbey in May 1937. DJ Williams was commissioned to create electric light fittings for one of the rooms used by the King and Queen in the Eagle Tower. The lights had to fit into the medieval heritage of the castle, hence their cresset design which is an ancient lighting device mounted onto a stand. DJ Williams took this design and created these unique metal cresset lights which were powered by electricity whilst maintaining their medieval appearance. The cresset lights are located on the second floor of the Eagle Tower and are still in use today.



**6.4. Cresset lights designed and installed by DJ Williams 1937. Photographed by Pam Smith 2011.**

## **The 1969 Investiture of the Prince of Wales.**

In 1969 Prince Charles was invested as Prince of Wales at Caernarfon Castle by his mother Queen Elizabeth II. The Castle was transformed for the event by Lord Snowdon in his role as Constable of the Castle. A new viewing platform was installed at the Queens Gate by Harold Williams the son of DJ Williams. Brunswick Ironworks also provided the metal supports for the glass canopy that covered the slate dais created and installed for the Investiture, the metal poles were decorated with intricate metal bands which fitted together over the poles.

A detailed visual and audio display of the 1969 Investiture is located within the North East Tower of the Castle the display contains original photographs and artefacts from the Investiture.

## **<sup>166</sup>Brunswick Ironworks and the Coffin of the Unknown Warrior November 1920.**

In November 1920 DJ Williams received a telegram from the Ministry of Works requesting his presence in London on a matter most urgent. The urgent matter was the ironwork for the coffin of the Unknown Warrior which was to be laid to rest in Westminster Abbey November 11<sup>th</sup> 1920.

DJ Williams received the telegram on November 1<sup>st</sup> 1920, just ten days before the ceremony was to take place. Working for two days and nights without sleep he completed the handles for the coffin, eight in total and the iron bands that sealed the coffin. Two plaques were created for the ceremony each plaque carrying a different inscription:-

1. A BRITISH WARRIOR WHO FELL IN THE GREAT WAR 1914-1918 FOR KING AND COUNTRY.
2. A BRITISH WARRIOR WHO FELL IN THE GREAT WAR 1914-1918 FOR KING AND EMPIRE.

Two plaques were prepared as the decision had not yet been taken as to whether the Unknown Warrior was to represent the British dead or the dead from the Empire. The decision was taken that the Unknown Warrior should represent the nearly one million dead from Great Britain who had no known graves. The replica handle, rejected second plaque and photographs of the coffin detailing the ironwork created by DJ Williams are on loan to the Royal Welch Fusiliers Museum in the Castle. The display is located in the medal room alongside the great coat worn by King George V during the 1920 ceremony.

The Museum is open every day and entry into the Museum is free as part of the entry ticket for Caernarfon Castle. Access to the museum is difficult as it is located in the Chamberlain Tower but the Medal Room is easier to access located in a room within the tower on the first floor.

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<sup>166</sup> The background to the burial of the Unknown Warrior is contained in appendix 9. The story of DJ Williams and the Unknown Warrior is located on pages 119-123 the history of the company.



**6.6. Unknown Warrior Artefacts on display at the RWF Museum inside Caernarfon Castle.**  
**Photograph by Pam Smith.**

**Gwynedd Council Offices.**

**Peace Garden Commemorative Plaques. Brunswick Ironworks and the Ironwork for the coffin of the Unknown Warrior.**

The Peace Garden is located in front of the main entrance to the new Council Offices for Gwynedd Council on Jail Street across the road from the entrance to the Castle. The three plaques are located in the courtyard. Plaque one marks the location of the Brunswick Ironworks premises at Porth yr Aur in 1920 where the ironworks for the coffin was made, the other two one English and one Welsh recounts the story of the contribution of DJ Williams.



**6.7. Memorial Plaques commemorating the work of DJ Williams on the coffin of the Unknown Warrior. Photographed by Pam Smith.**

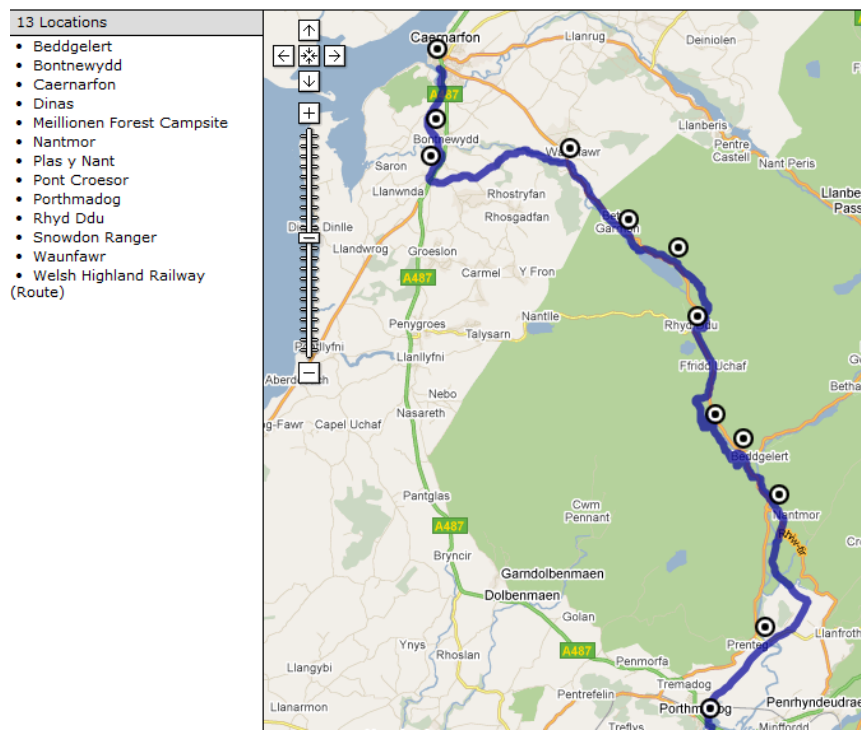
**Welsh Highland Railway.**

Exit Jail Street using the exit facing the Castle and follow the tourist signs to the Welsh Highland Railway station on St Helen's Road. Brunswick Ironworks constructed and installed the five railway bridges for the railway which now runs from Caernarfon to Porthmadoc. Brunswick Ironworks have also built and installed water tanks along the route including the water crane at Beddgelert Station as all the original water tanks along the route had been scrapped.

The water tanks and water cranes were fabricated using the skills of the art metal worker of the 21<sup>st</sup> century, but they were all hand riveted so as to create a visual image of the original water tanks using the methods that would have been used in their initial construction.



**6.8. Water Tank built by Brunswick Ironworks at Caernarfon Station for the Welsh Highland Railway. Photographed by Pam Smith.**



**Map 6.0. Detailing the WHR route. Reproduced from the WHR Website. (<http://www.festrail.co.uk/route>).**

Purchase your tickets for the journey to Porthmadoc at the station and request the ticket that allows you to travel to Porthmadoc by train but return using the open topped bus operated by

Express Motors.

The ticket costs (2011)

- Adults £23.75 return trip outward on the train inward on the open topped bus.
- Children travelling with an adult £1.70.
- Children £11.90.
- Concessions using the WHR ticket for residents £21.60.
- The ticket can work either from Caernarfon to Porthmadoc or vice versa.

The train journey will take you through the majestic countryside of the Snowdonia National Park and it is the longest heritage railway in Britain. The journey to Porthmadoc allows you to cross the bridges built by the company including the Bryn Y Felin Bridge and the impressive Pont Croesor Bridge.



**6.9. Bryn y Felin Bridge constructed and installed by the Brunswick Ironworks. Reproduced from the Brunswick archives with their kind permission 2011.**



**6.10. Lyd crossing Bryn y Felin Bridge. Photographed by Barrie Hughes reproduced with his kind permission 2011.**

### **Arrival at Porthmadoc Station.**

On arrival at Porthmadog station leave the train and exit the station and turn right and walk over the bridge to catch bus 1A Express Motors or a number 3 Arriva bus to Pwllheli, via Cricieth. Purchase a return ticket. Request that you are dropped off in Llanystumdwy outside the David Lloyd George Museum.

### **7.2. David Lloyd George Museum Llanystumdwy Gwynedd.**

#### **David Lloyd George Museum.**

The museum interprets the life of David Lloyd George (1863-1945) and Highgate his boyhood home from 1864-1880 and is open to the public as part of the museum tour.

Entry to the museum and Highgate costs:

- Family ticket £10
- Adults £4
- Children and Old Aged Pensioners £3





**6.11. Highgate the “boyhood” home of David Lloyd George. Photographed by Pam Smith.**



**6.12. The Lloyd George Museum at Llanystumdwy. Photographed by Pam Smith.**

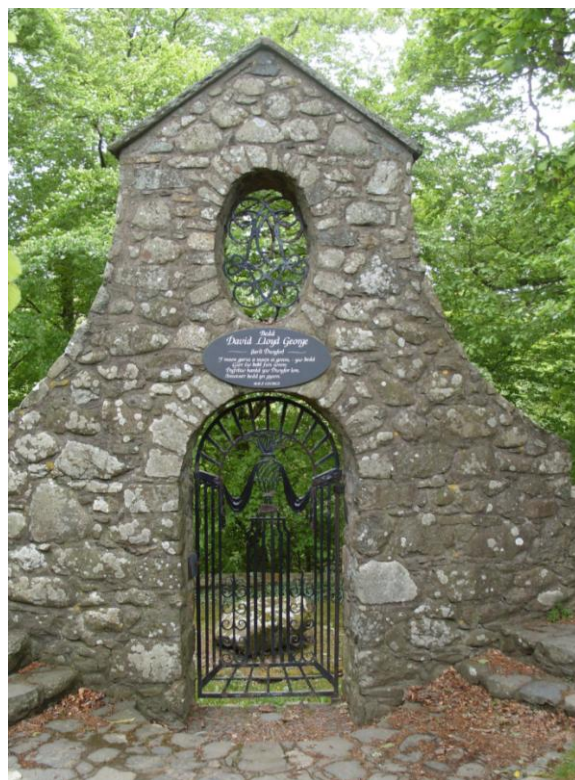
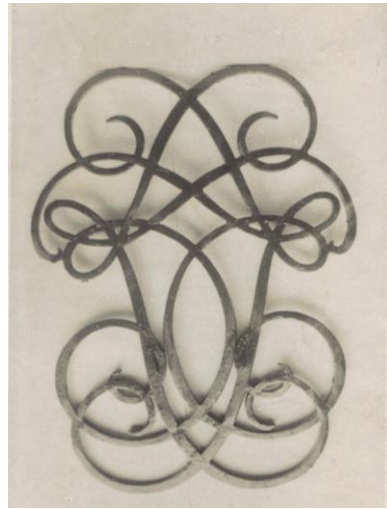
The museum recounts the lives and times of David Lloyd George who as Prime Minister led the country through the First World War. The museum contains photographs, documents and artefacts relating to his role as Prime Minister. David Lloyd George was a passionate Welshman and was buried in Llanystumdwy beside the river Dwyfor. The grave is located through the back gates of the museum; the grave was designed by Sir Clough Williams- Ellis who created Portmerion village. The designs were translated into metal by DJ Williams, completing the work on the grave of David Lloyd George marked the end of a thirty year working relationship between David Lloyd George and DJ Williams. The story of these Two Men from Caernarfon can be downloaded from the Brunswick Ironworks web site at

([www.brunswickironworks.co.uk](http://www.brunswickironworks.co.uk))



**6.13. The rear entrance gates to the Lloyd George Museum. Designed by Sir Clough Williams- Ellis created in metal by DJ Williams. Photographed by Pam Smith.**

**The monogram for the grave of David Lloyd George photographed by the Brunswick Ironworks 1945. Reproduced from the Williams Family Archive.**



**6.14. The gates and monogram for the grave of David Lloyd George Earl of Dwyfor designed by Sir Clough Williams- Ellis and created in metal by DJ Williams. Photographed by Pam Smith.**<sup>167</sup>

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<sup>167</sup> This is referenced in the history of the company page 104.



**6.15. Museum entrance gates designed and created by DJ Williams circa 1950.**  
**Photographed by Pam Smith**

**6.3. Return Journey. Llanystumdwy to Caernarfon via Porthmadoc.**

Return to Porthmadoc on the bus, exit the bus at the WHR Station and catch the Express Motors open topped bus to Caernarfon.



**Express Motors open topped bus reproduced from the WHR website with their permission.**  
<http://www.festrail.co.uk/returnbybus.htm>

The Brunswick trail can be accessed from either Caernarfon or Porthmadoc with people visiting the Lloyd George Museum and catching the train from Porthmadoc to Caernarfon and following the Caernarfon section of the trail before catching the open topped bus back to Porthmadoc.

# **7.0. Marketing.**

## **Marketing material created for the company.**

The following marketing booklets were created for the company as part of the project and were utilised as a tool through which the diverse skills of the company were brought to the attention of the Heritage Steam Railway Sector in the United Kingdom, and local and national construction companies. The booklets were sent out to all the heritage railway companies located throughout the United Kingdom as a visual guide to their skills as metal fabricators.

The skills of the company as bridge builders was advertised through the creation of the “We Build Bridges” booklet that was sent out to construction companies located in North Wales, Cheshire, Manchester and Liverpool, as this was the catchment area identified by the company in terms of transportation costs and the travelling required to cost the price of the contracts.

The photographs reproduced in the booklets have been referenced in the main text of the work but were used in the marketing material as they are fine examples of the skills of the company for use in the Heritage railway sector and the construction sector. The wording within the booklets was kept to a minimum so as to draw attention to the photographs which are a visual representation of the company’s skills as metal fabricators in the 21<sup>st</sup> century.

**D. J. WILLIAMS AND SON.**  
**BRUNSWICK IRONWORKS LIMITED.**

**Industry Booklet.**

**ESTABLISHED 1906**



**BRUNSWICK IRONWORKS**

**CAERNARFON**

**GWYNEDD LL54 2SE**

**TEL. 01286 673254**

**FAX 01286 672007**

**E-MAIL [djwilliamsandson@aol.co.uk](mailto:djwilliamsandson@aol.co.uk).**

**Introduction.**

DJ Williams and Son is a family firm which has recently celebrated its centenary and is now trading as Brunswick Ironworks Limited. We have years of experience working on prestigious heritage projects. We have recently undertaken work for the Welsh Highland Railway as part of its development from Caernarfon to Porthmadoc. This has included refurbishing existing bridges, fabricating and erecting new bridges, building and erecting water cranes and tanks and the fabrication of coal and water locomotive tenders.

Work in mild steel, high yield steel and stainless steel can be fabricated for the nuclear and hydro electric industries, as well as quarries, marine and agriculture.

All welding is carried out by coded welders and relevant welds are inspected in house by a qualified welding inspector. An extensive range of fasteners are always in stock including metric, coarse and fine in 8.8 and 10.9 grade, BSW, BSF, UNC, UNF bolts, stainless steel bolts A4 etc, etc. Brunswick Ironworks takes Health and Safety and Environmental issues seriously and constantly review our policies to ensure that we are complying with current legislation. We have a dedicated and well trained work force.



**7.0. One of five bridges fabricated, transported and erected. Client-Welsh Highland Railway.**



**7.1. One of three bridges strengthened and re-decked.**

**Client Welsh Highland Railway.**





**7.2. Steel frame fabricated to support telescopic jib.**

**Client-Bob Francis Crane Hire**



**7.3. Ornamental Gates**

**Client-Gwynedd Council**



**7.4. Street furniture.**

**Designer - Ann Catrin Evans**

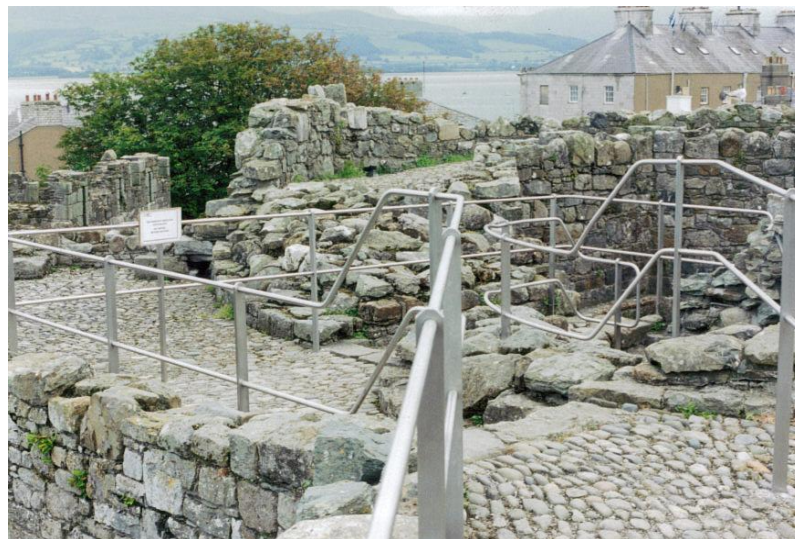


**7.5. Internal steelwork hollow sections.**

**Contractor-Jones Brothers Caernarfon.**



**7.6. External steelwork. Contractors Orritt and Son Caernarfon**



**7.7. Stainless steel handrails for Beaumaris Castle**

**Client-CADW.**



**7.8. Welded and riveted tender for narrow gauge locomotive.**

**Client-Ffestiniog Railway**



**7.9. Fire escape Caernarfon.**

**Contractor - Evans Wilson and Evans Caernarfon.**

**D.J. WILLIAMS AND SON.**  
**BRUNSWICK IRONWORKS LIMITED**  
**ESTABLISHED 1906.**



**BRUNSWICK IRONWORKS**

**CAERNARFON**

**GWYNEDD LL54 2SE**

**TEL.01286 673254**

**FAX.01286 672007**

**E-MAIL [djwilliamsandson@aol.com](mailto:djwilliamsandson@aol.com).**

## **7.1. Background history of the Company.**

D.J. Williams and Son is a family firm, which has recently celebrated its centenary and is now trading as Brunswick Ironworks Limited. We have years of experience working on prestigious heritage projects. We have undertaken work for the Welsh Highland Railway as part of its development from Caernarfon to Porthmadoc. This has included refurbishing existing bridges, and building and installing new bridges, building and erecting water towers and cranes and other general steel work associated with heritage railways.

Work has also been carried out for the Ffestiniog Railway consisting of the modification of pannier tanks and the construction of a new bunker for a Garratt engine. All welding is carried out by coded welders and all relevant welds are inspected by a qualified welding inspector. This work can be done either in house or by an independent company.

We have a highly skilled and dedicated workforce that can construct railway bridges for use on both narrow and standard gauge railways, using modern methods of construction, whilst visually producing a heritage product finished to the highest quality.

The Brunswick Ironworks have the skills to translate your designs, creating bridges and associated furniture essential for the visual appeal of the modern heritage railway.



**7.1.1. Bryn Y Felin Railway Bridge.**

**Constructed for the Welsh Highland Railway Project.**

### **Construction details.**

One of three identical bridges constructed for the Welsh Highland Railway. Weight 30 tonnes, length 23.5m. Fabricated using high yield steel. The other two bridges were situated in difficult to access locations.



### **8.1.2. Nantmor Railway Bridge.**

#### **Construction details.**

Ferro concrete bridge fabricated in our works and erected on site in one day.



### **7.1.3. Croesor Railway Bridge**

#### **Construction details.**

An eight section bridge each section weighing five tonnes, with a total length of sixty four metres. It was erected over a wide river in one day in mid-winter.

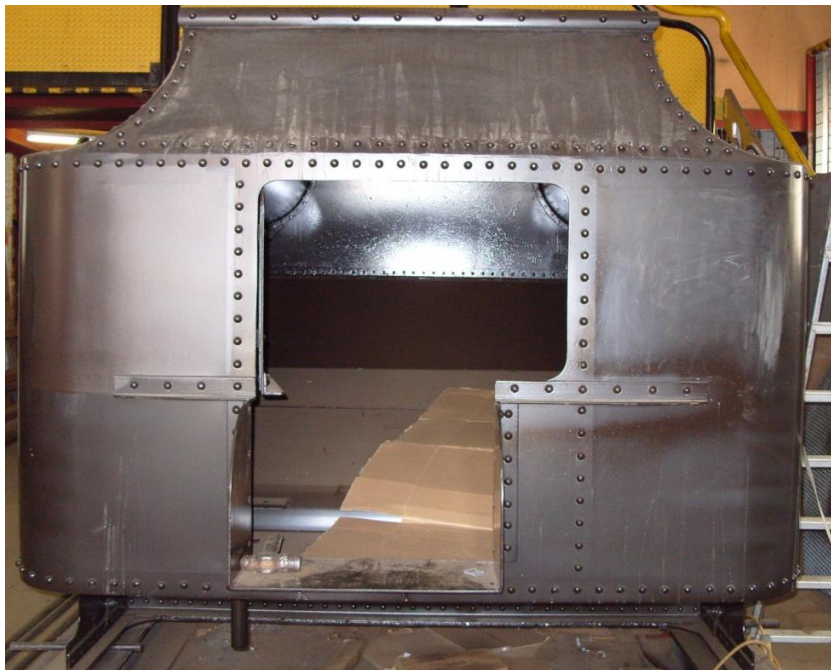




**7.1.4. Waunfawr Water Tower.**

**Construction details.**

Structural steelwork frame built by the company fabricated galvanised and erected.



**7.1.5. New Tender for the Welsh Highland Railway Locomotive NGG16 Class Garratt number 87.**

**Construction details.**

Fabricated and riveted the water compartment welded and tested on site.



**BRUNSWICK IRONWORKS**  
**BRIDGING THE PAST TO THE FUTURE**

## **8.0. Correspondence linked to the project.**

This section contains examples of the numerous correspondences received during the project linked to confirming the existence of work created by the company and authenticating its origins for both the company and the heritage asset that owned/cared for the artefacts.

This was part of the work undertaken during the project relating to the history of the company which also supported the aim of bringing its work to the attention of other heritage attractions thus raising its profile through its historical record as art metal blacksmiths. It also assisted in charting the journey from history to heritage as experienced during the project.



ENGLISH HERITAGE

Pamela Smith  
Cartrefle  
Fron  
Caernarfon  
Gwynedd  
LL54 7BB

13 December 2006

Dear Ms Smith,

**Re: Eltham Palace Gates**

Thank you for your letter of 1 December and your enquiry with reference to Eltham gates.

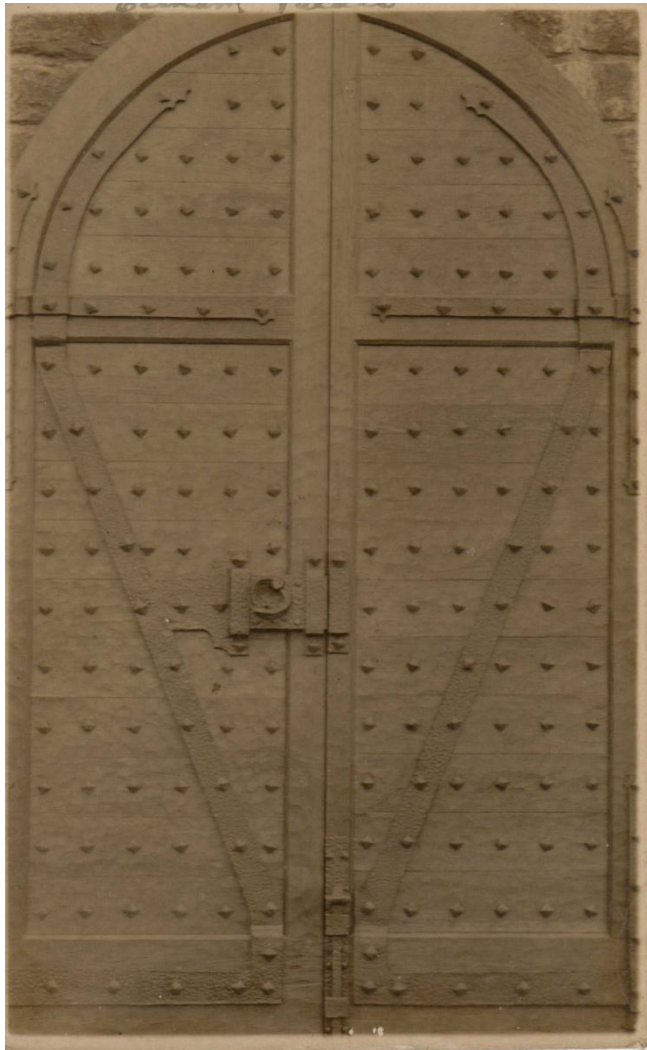
Your postcard shows one of the pair of Great Hall doors which were made for the Courtauld family in 1936 or thereabouts. This was as part of the incorporation of the shell of the fifteenth century hall into a much larger Art Deco residence, as you probably know.

Please find below an image of the north door as it looks today, and a ground floor plan with locations of north and south doors. We do not, unfortunately, hold any further information on the doors at Eltham, but you are welcome to visit the house during opening hours and take any pictures you wish.

With thanks,

Tori Reeve  
Curator (Collections)  
English Heritage  
1 Waterhouse Square  
138-142 Holborn  
London W1S 2ET

**Letter 8.0. Eltham Palace.**



**8.1. The entrance doors for Eltham Palace detailing the ironwork created by DJ Williams.**

**Brigadier H D C Duncan MBE**



**YEOMAN USHER OF THE BLACK ROD  
HOUSE OF LORDS LONDON SW1A 0PW**

Tel: 020 7219 3099/3100 Fax: 020 7219 2500

E-mail: duncanh@parliament.uk

10 August, 2006

*Mrs Pam Smith  
Cartrefle  
Fron  
Caernarfon  
Gwynedd LL54 7BB*

*Dear Mrs Smith*

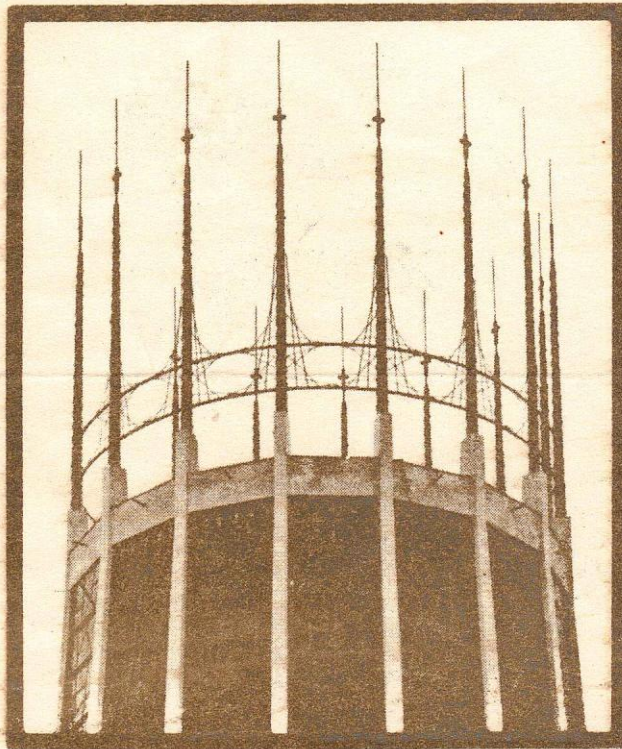
Thank you for your letter which I am answering on behalf of Black Rod who is on his annual holiday. I would be grateful if you could let me know exactly where the railings in Victoria Tower Gardens were. It may be that you would be able to photograph their position without having to obtain our permission.

I look forward to your reply. I am sure that we will be able to accommodate your request one way or another.

*Yours sincerely  
Hedley Duncan*

**YEOMAN USHER OF THE BLACK ROD**

**8.1. Letter from Black Rod re Victoria Tower Gardens.**



THE 16 CROSSES SURMOUNTING  
THE CATHEDRAL  
WERE FABRICATED BY

**D. J. WILLIAMS & SON**

STEEL FABRICATORS

*Art Metal Workers*

BRUNSWICK IRONWORKS, CAERNARVON, N. WALES

Telephone 3254

*Antique Ironwork a Speciality*

CONTRACTORS TO M.P.B.&W.

1.3. Image of Liverpool R.C. Cathedral showing the work of the Brunswick Ironworks.

15 September 2006

To:  
Ms Pam Smith  
Cartrefle, Fron  
Caernarfon  
Gwynedd  
LL54 7BB



Historic Royal Palaces is the independent charity that looks after the Tower of London, Hampton Court Palace, the Banqueting House, Kensington Palace and Kew Palace. We help everyone explore the story of how monarchs and people have shaped society, in some of the greatest palaces ever built.

We receive no funding from the Government or the Crown, so we depend on the support of our visitors, members, donors, volunteers and sponsors.

Dear Ms Smith

Thank you for your enquiry of September 11th. I am glad that you have identified the railings you are interested in. I would be happy for you to come and photograph them yourself - I can arrange a visitor pass for you as you are a researcher. Alternatively I can photograph and e-mail some digital images if you have an e-mail address. Let me know which you prefer. If you wish to visit we need to arrange a time and date.

With best wishes

Yours sincerely

Jane Spooner  
Curator (Historic Buildings)

0203 166 6411

[Jane.spooner@hrp.org.uk](mailto:Jane.spooner@hrp.org.uk)

**Historic Royal Palaces**

HM Tower of London, London, EC3N 4AB  
Tel +44(0)870 751 5172 (Switchboard) [www.hrp.org.uk](http://www.hrp.org.uk)

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The registered office and address for service of both bodies is Hampton Court Palace, Surrey, KT8 9AU.



INVESTOR IN PEOPLE

**8.2. Letter from the Tower of London.**





**MINISTRY OF DEFENCE ART COLLECTION**

Charlotte Henwood, Registrar  
G.I.48, Main Building, Whitehall  
London SW1A 2HB

Telephone: (Direct dialling) 020 7218 0502  
(Fax) 020 7218 7917

Email: charlotte.henwood745@mod.uk

	Your reference
Pam Smith Cartrefle, Fron Caernarfon Gwynedd LL54 7BB	Our reference
	Date 20 June 2006

*Dear Pam*

**ADMIRALTY BOARDROOM FIREPLACE**

Thank you for your letter – fascinating! Here are two of the only pictures I have at present, with details of each relevant area. It’s got to be the same one. What’s the date, please?

How quickly do you need decent photos of the fireplace without the horrid flowers in front? I won’t be able to get in for a couple of weeks, so if you can wait that long I’ll send you a digital image to play with...do you have email?

Once again, thank you for this. Is it possible that you know how Mr Williams’ work came to be in the Boardroom?

With very best wishes

*Charlotte Henwood*

**8.3. Letter from the Admiralty Board Rooms.**



HISTORIC ROYAL PALACES

Pam Smith  
Cartrefle  
Fron  
Caenarfon  
Gwynedd  
LL54 7BB

23.5.06

Dear Ms Smith,

Thank you for your letter of 17.5.06 which was passed onto me from Dr Lucy Worsley, Curator. Your research project is most interesting.

I can confirm that we do have two fire grates at Hampton Court Palace that match your photograph. Unfortunately our records do not have any information on where they were made or for how long they have been at the Palace. Thus your research has helped us fill in this missing provenance information, for which we are grateful.

I enclose recent photographs of the fire grates, firedogs and trays. They are currently located in the Wolsey Rooms at Hampton Court Palace. Their dimensions are:

1. # 3003473. Dog - 85(h), 35(w), 64(d). Grate - 41.5(h), 98(w), 36(d). Tray - 4.5(h), 55(w), 39(d).
2. # 3003472. Dog - 84.5(h), 32(w), 67(d). Grate - 41.5(h), 122(w), 36(d). Tray - 4.5(h), 65.5(w), 40(d).

I had a quick look at them this morning and could not find any maker's marks on them. Do you know if this would have been common with Mr DJ Williams' work?

If you would like to visit the Palace to see them in situ, do contact me and I can arrange complimentary tickets for you.

Yours sincerely

Melanie Sant  
Assistant Curator.

Tel 020 8781 9822  
Email: [melanie.sant@hrp.org.uk](mailto:melanie.sant@hrp.org.uk)



KENSINGTON PALACE



HER MAJESTY'S PALACE AND FORTRESS  
THE TOWER OF LONDON



KEW PALACE



THE BANQUETING HOUSE  
WHITEHALL PALACE



HAMPTON COURT PALACE

Hampton Court Palace, Surrey KT8 9AU.

Telephone: 0870 751 5172 (Switchboard)

Website address: [www.hrp.org.uk](http://www.hrp.org.uk)

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INVESTOR IN PEOPLE

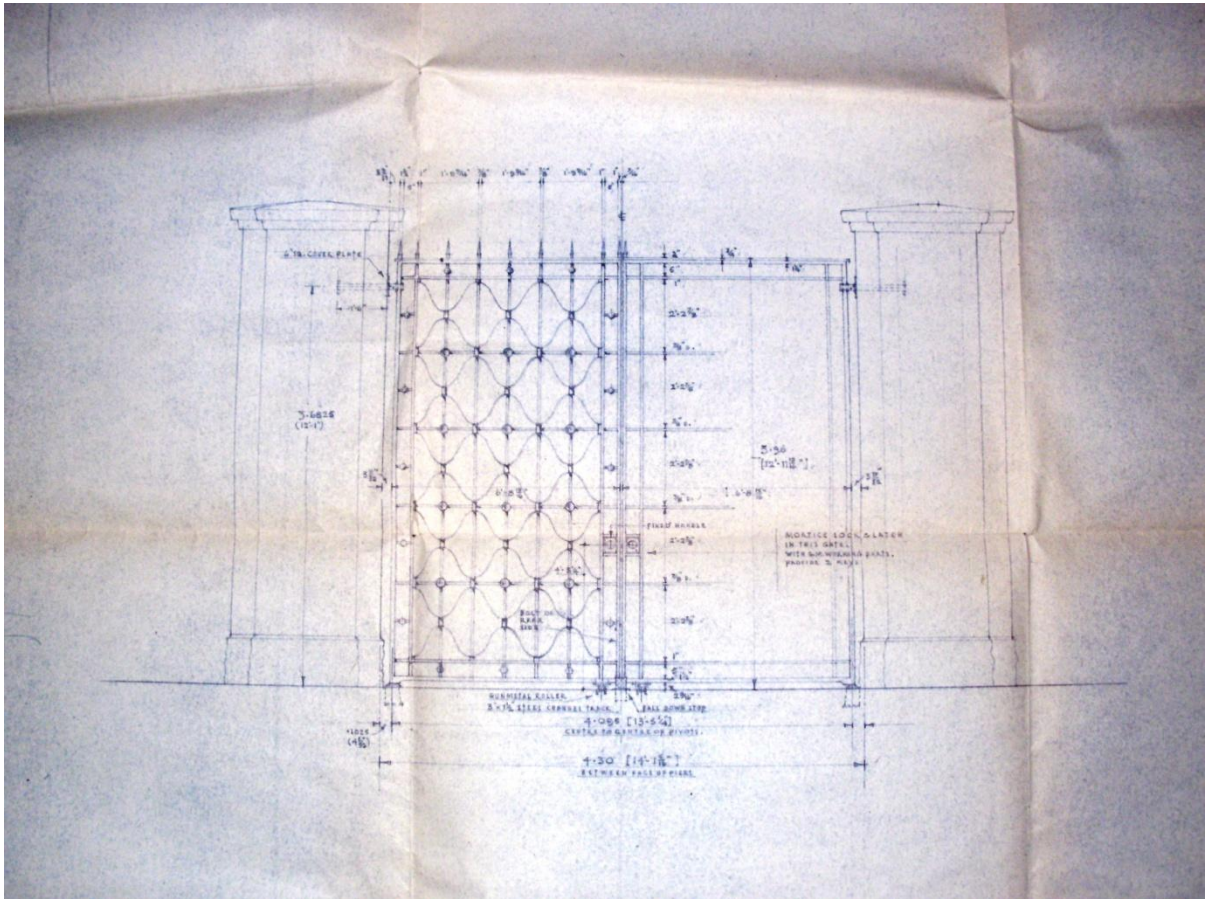
**8.4. Letter from Hampton Court Palace.**



**8.7. The dog grates at Hampton Court Palace designed by DJ Williams.**

The diagram below is a copy of the design that was to be built for the Royal Palace Baghdad by the Brunswick Ironworks. The gates were never constructed as the Shah was assassinated before they were built. The design is presented in two sections as the drawing is too large for display, as it is a detailed drawing detailing the overall design requirements for the gates.

ROYAL PALACE - BAGHDAD  
 ENTRANCE GATES TO CAR PARK & GARAGE WING  
 N° 3 PAIRS - IN WROG. IRON WITH BRONZE HANDLES & BACKPLATES.  
 SCALE. 1:25



**8.0. Plan of the gates for the Royal Palace Baghdad.**

### BUILDING BRIDGES – MAKING CONNECTIONS

The re-building and re-instatement of the WHR from Caernarfon to Porthmadog and the connection to the Ffestiniog Railway will create a forty mile rail journey through some of the most dramatic scenery in Wales. In order to complete this exciting heritage railway project, the bridges that were constructed as part of the original line between Dinas and Porthmadog were in need of either refurbishment or replacement. The Brunswick Ironworks of Caernarfon was awarded the contracts under competitive tender; they have refurbished three of the original bridges on the route and have built four new ones to replace those which did not comply with current safety standards or had been removed when the line closed in 1937. All the bridges that have been either refurbished or built by the Brunswick team have followed as closely as possible the original designs.

The Brunswick Ironworks has been established for over one hundred years and has worked on several key commissions during this time. The founder of the Company, D. J. Williams, created the ironwork for the Tomb of the Unknown Warrior in Westminster Abbey; his son Harold created the Crown of Thorns for the Roman Catholic cathedral in Liverpool. His son, Meurig, is now continuing the family tradition by refurbishing and building the bridges for this prestigious railway project.

The Brunswick team has refurbished three bridges on the route between Dinas and Rhyd Ddu. Four new bridges have been constructed and installed along the route from Beddgelert to Porthmadog. The final bridge will be Pont Croesor bridge, which will carry the railway over the Afon Glaslyn. This will be parallel to the road bridge carrying the B4410 Garreg to Llanfrothen road and the new bridge will be carried on the existing eight masonry piers of the original bridge. The new bridge will resemble the 1922 version.

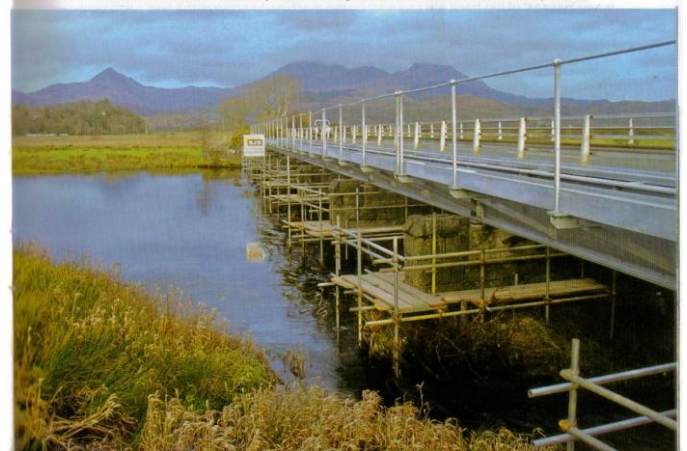
This is a heritage project and attention to detail is the key to the whole visual impact of the completed railway. In order to achieve this, the bridges, water tanks, water crane and heritage fencing produced by the Brunswick Ironworks, resemble as closely as possible the original designs that were in place when the railway was working. They have been constructed, however, using modern techniques to ensure strength, safety and longevity, but with rivets being used to maintain the outward appearance of the new bridges.

The connections made between the Welsh Highland Railway and the Brunswick Ironworks are helping to expand the tourist industry in the area by providing the longest heritage railway journey in Great Britain. The rebuilt line will also connect communities along the route, as well as providing rail access to Beddgelert and the countryside of Snowdonia for locals and visitors alike.

**Pam Smith**



UB196, built by Brunswick Ironworks, Caernarfon, showing the completed public footpath attached to the west side of the bridge over the Afon Nanmor, 21st December 2007 (Roy Woods)  
UB212, Pont Croesor, 5th January 2008, following its installation earlier in the week (Roy Woods)



**Article published in the Snowdon Ranger Magazine. Winter 2008.**

## Rail buffs hope to raise big sum

By **ALEX HICKEY**

A MATHEMATICAL equation in the puzzle section of a national newspaper is the inspiration behind a scheme to raise £1m in a month.

Rail enthusiasts from Caernarfon plan to raise the astonishing sum to help restore two old steam engines back to full working order for the Welsh Highland Railway company.

Brunswick Iron Works, Caernarfon owner Meurig Williams and researcher Pam Smith want to raise the money to put two NG15 locomotives, currently lying in sidings at Dinas station.

On Monday they will bring one of the old South African engines down from Dinas to Y Maes by crane to put on full public display from August 3-30 to help publicise their appeal.

The engine will be formally unveiled by the Lord Lieutenant of Gwynedd Gruffydd Huw Morgan Daniel and Caernarfon mayor Hywel



**EUREKA:** Pam Smith and Meurig Williams pictured with Dr David Gwyn. They want to raise £1m to restore old steam engines.

AP010709Train

# Eureka! £1m in 27 days quest

Roberts

The iron works owner revealed just how they plan to raise the money in such a short period of time – thanks to the puzzle section of the *Guardian* newspaper.

Mr Williams said: "If I saved a penny on day one doubled it on day two,

doubled it again on day three and so on, how long would it take to save a £1m? The answer is 27 days."

After mulling it over for a few days this equation gave him a kind of eureka moment. He would use the equation as a basis of raising the money to restore the old engines.

According to the formula by the first week he should have raised 64p which jumps to £81.92 by week two.

Weeks three and four might be a bit more tricky as he needs to have raised £10,485.76 and £1,342,177.28.

But both he and Pam Smith are confident they can do it.

The first thing they needed was the engine on Y Maes to give the campaign a focus and then some publicity from the local, regional and national media.

"We have also asked local dignitaries, well known local people, large companies and institutions to visit us on the square and make a donation. We have also been well supported by Gwynedd Council and local companies with our appeal."

He acknowledges the hard part will be raising the cash at least from days 19-27.

"By focusing on groups of people in villages, towns and counties it might be possible to do it."

He does accept that it could be a tall order with the credit crunch and job insecurity high on people's minds.

"But if we can get the local community involved with a lot of people giving a little our appeal could yet cause a surprise."

■ To sponsor the fundraising effort or make a donation contact NG15 Appeal c/o Brunswick Iron Works, Peblig Mill, Caernarfon LL55 2JE. Cheques and payments to be made out to NG15 appeal. To find out more call log on to [www.brunswickironworks](http://www.brunswickironworks) or call Kate on (01286) 673254.

[alex.hickey@northwalesnews.co.uk](mailto:alex.hickey@northwalesnews.co.uk)

**Article in the Caernarfon Herald. July 2009.**



First Hydro Company  
Dinorwig Power Station  
Llanberis  
Gwynedd LL55 4TY  
Tel: +44(0)1286 870 166  
Fax: +44(0)1286 873 200  
www.ipplc.com  
www.mitsui.co.jp



First Hydro Company is part of a joint venture between International Power plc and Mitsui & Co., Ltd.

Welsh Highland Railway Society  
C/O Mr M Williams  
Llanbeblig Road  
Caernarfon  
LL55 2SE

3 August 2009

Our Ref: FHC/CDB

Dear Mr Williams

Thank you for sending in your recent Sponsorship Application Form.

FHC are pleased to award you £1,000 to sponsor the SAR Chime Whistle specifically as part of the costs involved in the restoration of the NG15 engine number 134. Whilst we have not completed the form for this specific item, we trust that this letter will be sufficient to grant us this request.

Please find enclosed a cheque for £1,000 and for this I would be grateful if you could keep us informed of progress, along with some photographs that we may use in our internal monthly newsletter.

May I wish you well in this project.

Yours sincerely

Claire D Branston  
Administrator



First Hydro Company  
Registered in England and Wales: 02444277  
Registered Office: Senator House  
85 Queen Victoria Street  
London EC4V 4DP  
VAT Registration No: 656 2000 65

**Letter from First Hydro supporting the Scrap to Steam Event with a donation of £1000.**

Subj: **THANK YOU TO BRUNSWICK**  
Date: 31/08/2009 17:53:56 GMT Daylight Time  
From: [Ajgrushton](#)  
To: [PAMELAS636](#)  
CC: [john@prideauxoffice.com](mailto:john@prideauxoffice.com), [MikeHartRWB](mailto:MikeHartRWB), [friddisaf@freezone.co.uk](mailto:friddisaf@freezone.co.uk), [andy@hiljarv.demon.co.uk](mailto:andy@hiljarv.demon.co.uk)

Hello Pam and Meurig,

I would like to thank you and Meurig on the huge effort and time you put in on behalf of the WHR and the NG15 Project - it is really appreciated - and it was nice to work with you.

I hear that the amount collected will make no one a millionaire. I do hope this is not disheartening, as I think the actual amount is secondary to the activities you were carrying out. This is the first time we have ever had a community effort of this kind, and it really matters. It will probably take time to build the links we look for, and I would be much obliged to get a debrief with you, to find out more about how local people feel.

I am off for a couple of months to Japan and Australia. When I am back, Andy and I will be in touch to review where we got to and what we can do next in 2010. This railway's funding need is there for the long haul, and there's a big distance to go!

Thank you so much for your commitment and interest. It is impressive and is much appreciated.

I will be in touch soon.

Kind regards,

Gordon Rushton.

**E-mail supporting Scrap to Steam from one of the Directors of the WHR.**





Rushton Video Rail Ltd, 15 Rycroft, Furzton, Milton Keynes MK4 1AH

---

Pam Smith  
Brunswick Ironworks  
Caernarfon  
Gwynedd  
LL55 2SE

Monday, 12 July 2010

Dear Pam,

**BRUNSWICK IRONWORKS AND THE WHR**

I had never heard of Brunswick Ironworks before it was brought to my attention that the Company had tendered for and got the contract for large bridges on the Welsh Highland Railway restoration. Those bridges, re-designed to the shape used on the original WHR, but with the snags taken out, were installed on time and within budget. Of course other jobs for the railway followed - it is rich in artefacts that must be remade for it to be able to run. In my course of investigation for writing a book about the WHR restoration and of making videos of it, my attention was drawn to the Brunswick story. Of course the profile of the company will be raised a result, indeed special mention will be made in the book.

The policy for the restoration of WHR, supported as it has been by the Welsh Assembly Government and local agencies, has been to place as many contracts with local companies as is practical. This revealed the latent skill in the area; it meant that funds were disbursed appropriately, back into the local community. It has raised the profile of skilled craftsmen and local ability, and it has employed an iconic platform (the WHR) in order to do this.

---

Company No. 5421566 Directors: Martins Kreicis, Reginald Davies, Gordon Rushton  
VAT Registered. No. 944 8218 03

It is essential that people know, and learn about how these skills benefit the community. Therefore a heritage trail will be educational and entertaining, broadening the dialogue from slate and war to include contemporary subjects. There is much to be done to encourage innovation and industry in Caernarfon and the locality. There ought to be centres of excellence nearby, to attract young people to stay, and tourism should be recognised and given the status it deserves as a very real earner of wealth.

Heritage trails excite attention and retain the visitor's interest, enriching the experience of visiting the town. The accomplishments of Brunswick should be told as a story, with a welcome supplement of being able to see living examples along the railway itself.

Yours faithfully,



Gordon Rushton  
Director

---

Company No. 5421566 Directors: Martins Kreicis, Reginald Davies, Gordon Rushton  
VAT Registered. No. 944 8218 03

**Letter received from Gordon Rushton on the research project.**

# 9.0.

## Unknown Warrior Material.

This section contains additional material not contained within the main text of the case study relating to how one specific aspect of the history of the company, the link with the Unknown Warrior was developed as one of the tools through which the profile of the company was raised bringing the story to life through the work of DJ Williams from the Brunswick Ironworks.

The contribution of DJ Williams to the ironwork for the coffin of the Unknown Warrior in 1920 revealed the importance of remembering the fallen who had given their lives in the service of their country throughout the centuries. In order to appreciate the contribution made by DJ Williams to the tradition of creating memorials to the fallen; an overview of the history of war memorials is given below; with special reference to the creation of war memorials within Caernarfon so that these memorials are placed within the context of the research project.

This section also contains the detailed background planning and events leading up to the burial of the Unknown Warrior in 1920, it is provided as it places into context the contribution made by the Brunswick Ironworks to the event in 1920 and how this link was developed and shared with the Kent and East Sussex Railway in 2010. The section relating to the creation of the Tomb of the Unknown Warrior in 1920 contained in this section illustrates how history has become part of heritage; not only in terms of the Brunswick Ironworks but also that of Great Britain through the creation of the Tomb of the Unknown Warrior in 1920.

The transformation of history into heritage involves society in making decisions relating to what they perceive as worthy of saving, and that the heritage preserved as a result of this choice would be valued by future generations; in terms of what they needed or wanted to save. History imparts value based on decisions made by historians as to what can be proven through evidence, whereas heritage requires a value judgement based on what society selects as worthwhile. In the case of the creation of War memorials they are based on fact (history) but also on the decisions made by the bereaved families, communities and Nations (heritage) that their sacrifices should be recorded for future generations through the creation of lasting memorials.

The contribution made by DJ Williams in 1920 was a result of the losses incurred by the British Forces during World War One, but the creation of the Unknown Warrior was also a long term decision made by the Government to record for posterity the sacrifices made by those servicemen and women who never came home. The little known link between Westminster Abbey (Unknown Warrior) and the Brunswick Ironworks of Caernarfon through the work of DJ Williams was developed during the project to illustrate the journey from history to heritage as a mechanism utilised to raise the profile of the company by the use of one specific aspect of their heritage.

Prior to 1914 the construction of war memorial were undertaken by the wealthy titled classes, as was the case with the creation of the Victory monument at Blenheim Palace. This was erected to commemorate the campaigns fought by John the First Duke of Marlborough. His descendant Winston Churchill<sup>168</sup> served in the War Cabinet during WW1 and in his post war position as Chairman of the War Graves Commission was responsible for overseeing the creation of the war memorials and cemeteries for the fallen of the Great War in Europe.

### **9.0 Caernarfon War Memorials.**

One of the first war memorials created in Caernarfon is attributed to the Crimean War (1854.) The losses incurred during this conflict were high, and towns and cities began to erect monuments to commemorate the fallen from this conflict. In Caernarfon a road was named in honour of the Battle of Balaclava in 1854 which was immortalised in the poem by Alfred Lord Tennyson (1864)<sup>169</sup>.

The South African War (1889-1902) was honoured in Caernarfon with a row of terraced houses named Pretoria Terrace in honour of the battle of Pretoria 1900.



**Photo 9.0. Pretoria Terrace Caernarfon named after the Battle for Pretoria in 1900.**  
**Photographed by Pam Smith 2011.**

A monument was erected by public subscription at Twt Hill a rocky outcrop above the town to commemorate the fallen from the town during the South African war.

---

<sup>168</sup> Winston Churchill steering Britain to victory during the Second World War in his role as Prime Minister.

<sup>169</sup> The Charge of the Light Brigade. Half a League, half a League, half a League onward. All in the valley of death rode the six hundred.



**Photo 9.1. The South African War Memorial Caernarfon Gwynedd. Photographed by Pam Smith 2011.**

### **9.1. War Memorials 1914-1918.**

The impact of the First World War would change forever the lives of the people of Britain, bringing with it great social change and the loss of a generation of young men who gave their lives for freedom. The decision not to repatriate the fallen was taken to maintain morale at home. The sight of thousands of coffins arriving at ports and railway stations throughout Britain would have demoralised the Nation, and provoked an outcry for the war to end. This combined with the effect that this sight would have had on soldiers awaiting transport to the front would have been catastrophic.

However the losses incurred during World War One and the non repatriation of the war dead resulted in the creation of local memorials erected through public subscription to commemorate the fallen from the area. The first memorial was erected in 1914 at Hawkshaw, Greater Manchester, a small village located north of Bury in Greater Manchester.<sup>170</sup> One hundred and sixty men from Hawkshaw enlisted to fight for King and Country of whom forty men never returned home. The scale of the loss of life during the War was so great that in 1917 the Imperial War Museum was established as a memorial in order to record the efforts of those men and women who died in the war.

### **Caernarfon War Memorial**

In Caernarfon, a stone memorial was erected on the Maes (square) which records the names of the two hundred and one men (World War One) who gave their lives for King and Country. The Memorial also lists the names of the fallen from the Second World War on a separate brass plaque.

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<sup>170</sup> Prior to local Government re-organisation Hawkshaw was in the County of Lancashire. Sourced from the Manchester County Records Office.



**Photo 9.2. Caernarfon War Memorial erected in 1922. Photographed by Pam Smith 2010**



**Photo 9.3. Memorial Plaque located inside the National Westminster Bank Caernarfon. Photographed by Pam Smith 2011 and reproduced with their kind permission.**

The plaque located on the wall of the National Westminster Bank, Caernarfon commemorates the 2681 men from the bank who served during W.W.1 it also records the loss of 415 men.<sup>171</sup>

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<sup>171</sup> The National Westminster Bank in 1914 was known as the National Provincial Bank and the United Bank of England. It later became the District Bank, which then became the National Westminster Bank, part of the Royal Bank of Scotland Banking group.

## **9.2. Llanbeblig Churchyard Caernarfon and the Graves of Soldiers from World War One.**

Caernarfon has thirty one World War One graves (located and counted during the project). The men commemorated served on all Fronts during the war ranging from France and Flanders to Egypt and Gallipoli. Twelve of the men commemorated at Llanbeblig Churchyard Caernarfon served with the Royal Welch Fusiliers Regiment. This created a link with the research project through the artefacts from the Unknown Warrior which were loaned to the Royal Welch Fusiliers Museum Caernarfon (2009). The story of one of these men is given below:-

### **268259 Colour Sergeant Major William John Roberts.**

Colour Sergeant Major William John Roberts served with the Royal Welch Fusiliers in France during the early stages of the war.<sup>172</sup>



**Photo 9.4. The grave of William John Roberts Llanbeblig Cemetery. Photographed by Pam Smith.**

### **9.3. The creation of War Memorials.**

In Bangor the Memorial Arch was erected by public subscription to commemorate the fallen from the county of Caernarvonshire in the Great War 1914-1918. An article in the Chronicle newspaper dated February 18<sup>th</sup> 1918 commented that the Welsh Heroes Memorial Fund had reached £61,000 with donations received from across the country. The monies raised from the

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<sup>172</sup> He was awarded the Mona Star and served as an instructor training Army volunteers in Bangor after having been injured whilst serving in France. He died of pneumonia as a result of injuries received.

memorial fund paid for the erection of the Bangor Memorial Arch<sup>173</sup>, the lights for the memorial arch were created and installed by DJ Williams of the Brunswick Ironworks. The memorial arch was restored during 2008-2009, and the original lights were repaired by his grandson Meurig Williams of the Brunswick Ironworks.



**Photo 9.5. The Welsh Heroes Memorial Arch Bangor University, showing the lights designed and installed by Mr DJ Williams of the Brunswick Ironworks. Image reproduced from (<http://www.bangor.ac.uk/newsworks>).**

The First World War ended on November 11<sup>th</sup> at 11am 1918 by which time nearly a million British servicemen had given their lives in defence of their country. Throughout the war there had been many heroic actions, six hundred and fifteen men had been awarded the Victoria Cross but two events captured the imagination of the nation. The executions of Nurse Edith Cavell and Captain Fryatt<sup>174</sup> by the Germans during the war prompting Neil Oliver to comment:-

*“In what was almost a dress rehearsal for the funeral of the Unknown Warrior the following year, a special train met the coffin at Dover and carried it with full military honours to London. A horse drawn carriage transported it to Saint Paul’s Cathedral where a member of the Royal Family and senior representatives of the Government and armed forces attended the memorial service”.*

*(N. Oliver commenting on the burial of Captain Fryatt).*

*(Oliver 2005:201).*

### **9.3.1.. Official Acts of Remembrance. Post 1919**

The British Government recognised that an official act of Remembrance was needed in order to provide closure for the grieving families. The Victory Parade held on July 19<sup>th</sup> 1919 was the first official act of Remembrance. It was marked by a two minutes silence to remember the dead. A temporary Cenotaph (from the Greek word meaning empty tomb) was designed by Sir Edward Lutyens and placed at Whitehall the structure carried no cross or other Christian symbol. The King attended the parade and commented:-

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<sup>173</sup> Bangor Memorial Arch is located on land belonging to Bangor University. The Memorial Arch is a Grade Two listed building being of either architectural or historical interest.

<sup>174</sup> Their stories are told on pages 367-368.



*“The most impressive sight I ever saw”.*

*(Hanson 2005:417).*

A two minutes silence was held at 11am on November 11<sup>th</sup> 1919 to:-

*“The first minute to honour those who came home, the second to remember the fallen”.*

*(Gavaghan. 2003:11).*

The Cenotaph became the focus of the nation’s grief after the ceremony, mothers and fathers, children and friends began laying wreaths around the cenotaph. The Cenotaph was only a temporary structure but following a public outcry it was decided to create a permanent memorial to the fallen. So great was the feeling of grief amongst the British public that when the temporary Cenotaph was taken down by the Ministry of Works they erected a temporary scaffold around it so that people could not see it being destroyed Hanson (2005). It was evident from the number of people who laid wreaths at the cenotaph that Britain was still a nation in mourning.

### **9.3.2. Armistice Day 1920 the unveiling of the new Cenotaph and the burial of the Unknown Warrior.**

Armistice Day 1920 marked the unveiling of the new permanent Cenotaph and the burial of the Unknown Warrior in Westminster Abbey. The impact of the burial of the Unknown Warrior had implications beyond the contribution of DJ Williams. The repatriation of the Unknown Warrior was an iconic symbol representing one of the million men who never returned home. Losses incurred by British forces reached catastrophic levels during the second battle for Ypres in 1915 (estimated that 59,000 British troops died<sup>175</sup>). These numbers were so high because it was the first time that the Germans had used chlorine gas on troops defending the area around Ypres. It was felt by politicians and senior military officers that the sight of thousands of coffins brought home for burial would do little to help the war effort.

*“The War Ministry took the decision because as a public enterprise it would have cost too much, as a private enterprise, it was intolerable to let the rich do what the poor could not afford”*

*(Inglis.: 1993:23).*

Statistics issued by the Central Statistics Office in 1920 recorded the total number of Allied dead from the conflict.

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<sup>175</sup> Imperial War Museum figures.

Country	Killed	Wounded
Australia	61,928	152,171
Canada	64,944	149,732
Great Britain	908,371	2,090,212
India	74,187	69,214
Newfoundland	1,204	2,314
South Africa	9,463	12,029
New Zealand	18,050	41,317

**Table 9.0. Allied Dead and Wounded Soldiers from World War One<sup>176</sup>.**

The high losses encountered by the Army in France and Flanders meant that for thousands of families there was no marked grave for their loved ones. Inglis in his article History and Memory stated that:-

*“In this one precise sense the British people needed war memorials more than anybody else, for nearly all their million dead men lay in foreign graves”.*

*(Inglis.1993: 22)*

November 11<sup>th</sup> 1920 was the second anniversary of the end of the conflict and it had been agreed that the new permanent Cenotaph would be unveiled by the King. It was designed by Lutyens and carried the simple inscription “Our Glorious Dead”.

#### **9.4. The story of the burial of the Unknown Warrior.**

The decision to proceed with the burial of an Unknown Warrior in Westminster Abbey on November 11<sup>th</sup> 1920 was attributed to the Reverend David Railton MC who had served as a Padre during the Great War. It was whilst serving as a Padre that he had seen a wooden cross at his billet at Erquinghem-Lys near Armentieres. The cross carried the simple inscription:-

*“An Unknown Soldier of the Black Watch”.*

*(Gavaghan. 2003:8).*

The simple cross and its inscription had a profound and lasting effect on him. In his memoirs he wrote about how the idea had formed and of the need to reduce the pain and anguish of the bereaved:-

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<sup>176</sup> The statistics for table 3.1 were obtained from the Commonwealth War Graves Commission Annual Report for 2007-2008. The numbers are based on the names commemorated in official records from 4.08.1914-31.08.1920 and include those men who died after the war as a result of their injuries.

*“Quietly and gradually there came out of this mist of thought this answer clear and strong. Let this body this symbol of him be carried reverently over the sea to his native land”.*

*(Railton cited in Wilkinson, 2006:4).*

In August 1920 a decision was made by Railton to write to the Dean of Westminster, Dr Herbert Ryle outlining the idea for the burial of an unknown soldier in Westminster Abbey. The Dean wrote back:-

*“The idea shall germinate”.*

*(Gavaghan.2003:9).*

It was not until the second week in October that the Dean wrote again to Railton informing him that:-

*“He had been in communication with the Prime Minister, the King and the War Office and that an announcement would be made by the Prime Minister on the afternoon of 19th October “.*

*(Gavaghan 2003:9).*

From August to October the Dean of Westminster had been in contact with many key figures and

*“Overcame all difficulties to ensure that the Warrior was buried in the Abbey”.*  
*(Gavaghan. 2003:8).*

He wrote to Lord Stamfordham (the King’s Private Secretary) suggesting that:-

*“One such body (name not known) should be exhumed and interred in Westminster Abbey, in the Nave”.*

*(Gavaghan. 2003:10).*

The King had already agreed to unveil the Cenotaph on November 11<sup>th</sup> 1920, and the King’s view was given in Stamfordham’s reply to the Dean of Westminster on October 7<sup>th</sup> 1920:-

*“His Majesty is inclined to think that nearly two years after the last shot fired on the battlefields of France and Flanders is so long ago that a funeral now, might be regarded as belated”.*

*(Gavaghan. 2003:10).*

The Dean was disappointed with the reply from the Palace, but he had also contacted the Prime Minister Mr David Lloyd George and Field Marshall Sir Henry Wilson, who both supported the idea. The King was not against the idea, but was concerned about the effect the burial might have on the public. The King sought the view of his Prime Minister Lloyd George who convinced him of its merits, thus Royal consent was granted. In a letter sent to the Dean of Westminster from Lord Stamfordham on 18<sup>th</sup> October:-

*“It is hoped that the ceremony can be arranged to take place on Armistice Day”.*

*(Gavaghan. 2003:11).*

The decision had been made to bring home an unknown soldier for burial in Westminster Abbey, but time was short, meaning that in the space of just over three weeks everything had to be prepared. The burial was to take place after the unveiling of the Cenotaph at Whitehall by the King on November 11<sup>th</sup> 1920.

On November 1<sup>st</sup> the Prime Minister Lloyd George announced that:-

*“Warrior was to be the word chosen, so that the body chosen would represent the three services”.*

*(Inglis.1993:15).*

The name Warrior was selected as this would represent all three services that had fought in the Great War, even though the body selected for burial was a soldier from the battlefields of Flanders.

#### **9.4.1. Selection of the body for burial in Westminster Abbey.**

The selection of the body for the Unknown Warrior was carried out under the command of Brigadier General L. J. Wyatt.<sup>177</sup> The body for burial in the Abbey was selected on November 7<sup>th</sup> 1920. Four army field ambulances were dispatched to the four main battlefields of the Western Front; Aisne, Somme, Arras and Ypres. The four teams consisted of an Officer and two other ranks, all equipped with shovels and sacks, they had been instructed to exhume a body from an unmarked grave from each of the four battlefields and to ensure that the body selected had fallen during the early part of the war. The body was selected from one of the earliest battles as identification of the body selected for burial would not be possible. The decision to select a body from 1914 infers that it was important that the man selected for burial in Westminster Abbey had been a member of the British Expeditionary Force, rather than one of the thousands of volunteers and conscripts who died for their country on these battlefields later on in the war. The identity of the body selected for burial in Westminster Abbey was unknown. It established a tentative link for those families who had lost a brother, father, son or uncle in the war.

*“The very anonymity of the body buried in Westminster Abbey allowed every person if only in the privacy of their own thoughts to assume a personal link with the Unknown Warrior, and many thousands of grieving people perhaps even all of them convinced themselves that their missing loved ones could really be buried in the Abbey”.*

*(Hanson 200:463).*

Brigadier Wyatt later described the bodies as being mere bones; the bodies were placed into the sacks and brought back to St Pol-sur-Ternoise, the headquarters of Brigadier Wyatt. Each burial party unloaded their body at different times to ensure that they did not meet. The bodies were then

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<sup>177</sup> The General commanding the troops of France and Flanders in 1920.

covered by a Union Jack and laid in a row inside the small hut that served as a chapel. A plain pine coffin was laid out in front of the altar ready to receive the body that was selected for burial. Brigadier Wyatt selected the body for burial at random and the other bodies were re-buried in a shell hole on the road to Albert. The body was placed inside the pine coffin and the lid was secured, an inter-denominational service was held in the chapel at St Pol. The pine coffin which contained the body selected for burial was placed inside the coffin brought from England which was based on the design of a sixteenth century treasure chest and had been brought across the Channel by two British undertakers, Mr Noades and Mr Sowerbutts.<sup>178</sup> The body of the Unknown Warrior was carried home to Britain aboard HMS Verdun<sup>179</sup>; and it was joined by an escort of six destroyers from the Atlantic Fleet sailing with flags at half mast, arriving at Dover at three o'clock in the afternoon. HMS Verdun entered Dover harbour alone and steamed the length of the sea wall, as a mark of respect to all those wounded soldiers who returned home to Britain by this route. HMS Verdun was greeted with a nineteen gun salute, an honour only bestowed on soldiers with the rank of a Field Marshal. The coffin was brought ashore and passed through a guard of honour before being placed inside the Cavell Van.<sup>180</sup>



**Image 9.0. The Unknown Warrior arriving at Dover Port November 10th 1920. Reproduced with the kind permission of Dover Harbour Board.**

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<sup>178</sup> The coffin was secured with the bands made by DJ Williams.

<sup>179</sup> HMS Verdun was selected as the ship to bring home the Warrior as a mark of respect to the French soldiers who had fought so valiantly during the Battle of Verdun February 1916 – July 1816 which resulted in 400,000 French casualties.

<sup>180</sup> Dover Harbour Board was contacted as part of the research project and they very kindly sent photographs of the coffin arriving at Dover for use in the research project. It is believed that these photographs had not been seen for many years.

Near this spot on the 10th November 1920  
the body of the Unknown Warrior  
was brought ashore from HMS Verdun  
on the way to its final resting place  
at Westminster Abbey.

The Dover Society 1997

**Photo 9.6. Commemorative plaque erected by the Dover Society. Reproduced with the kind permission of Dover Harbour Board.**



**Image 9.1. The Unknown Warrior passing through Dover Docks. From the Pathe film of the event. Reproduced with the kind permission of the Imperial War Museum.**

The coffin departed Dover station aboard the Cavell Van, the luggage van was marked with a large white cross on the roof so that it could be identified as it passed through stations on its

journey to Victoria Station London. The train arrived at Victoria station and was guarded overnight by members of the Grenadier Guards at platform eight. Sir George MacDonogh handed over the care of the coffin to a Guards officer with a simple salute. Hanson commented that:

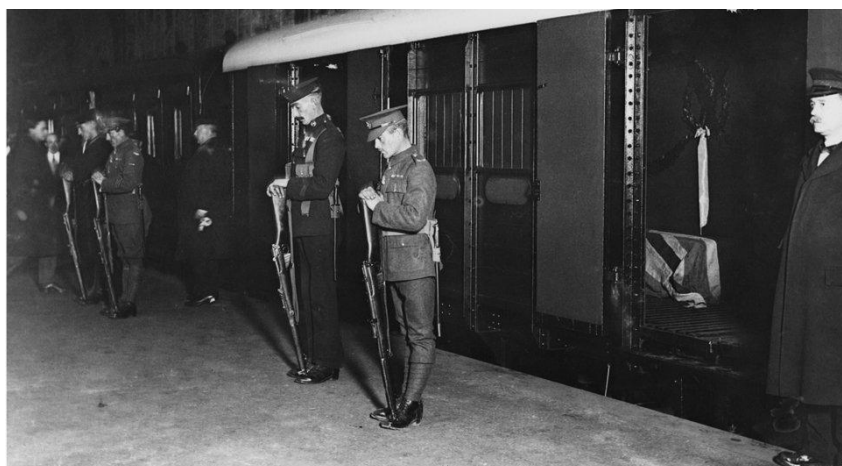
*“By stripping this hour of every device of parade, they made it quick with such tragedy and such wonder as wrung the heart. Men wept as they saw the double railway carriage.....they knew not why they wept...”*

*(Hanson 2005:442).*

The Western Front Association erected a plaque at platform eight Victoria station to commemorate the event.<sup>181</sup>



**Photo 9.7. The Western Front Association plaque at Victoria Station platform 8. Photographed by Pam Smith 2009.**



**Image 9.2. The Unknown Warrior at Victoria Station November 10th 1920. From the Pathe film of the event. Reproduced with the kind permission of the Imperial War Museum.**<sup>182</sup>

<sup>181</sup> Private Frank Sumpter (1897-1999) a veteran of the Great War unveiled the Western Front Plaque at Victoria Station on November 10<sup>th</sup> 1998. The plaque is located on platform 10 at Victoria station the closest platform to where the Unknown Warrior arrived in 1920.

<sup>182</sup> The soldier's guns were inverted as a mark of respect to the fallen.

The next morning the coffin was draped with the Union flag carried by the Reverend David Railton throughout the war, when it had been used as an altar cloth at Vimy Ridge and Ypres. A steel helmet, side arms and a webbing belt were placed upon the coffin before it was carried to the waiting gun carriage and a 19 gun salute was fired at Hyde Park. The funeral procession left Victoria station through the Western Arch, the Guardsmen detailed with lining the route were given the order to invert their guns and to stand with their heads bowed, the funeral procession consisted of serving and retired members of the Armed Forces, who walked behind the gun carriage as it made its way to the Abbey. The procession proceeded to the Cenotaph, where King George V had unveiled the new permanent Cenotaph placing a wreath of red roses on the coffin, the wreath was inscribed by the King:-

*“In proud memory of those who died unknown in the Great War. Unknown and yet well known; as dying, and behold they live”*

*(Hanson 2005:450).*



**Image 9.3. King George V placing the wreath onto the coffin of the Unknown Warrior at Whitehall November 11th 1920. Photograph from the Pathe film of the event. Reproduced with the kind permission of the Imperial War Museum.**

The King unveiled the Cenotaph which was followed by a two minute silence. The King then walked behind the gun carriage as it made its way to Westminster Abbey. The coffin was carried into the Abbey passing through a guard of honour of one hundred men<sup>183</sup> seventy four of whom had been awarded the Victoria Cross during the Great War.

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<sup>183</sup> On the day four of the men selected were too ill to attend the service.



The coffin was placed on bars laid across the prepared open grave in front of the West Door as it was carried through the West Door the route that Kings and Queens entered the Abbey for their Coronations. The congregation in the Abbey consisted of mothers and war widows, a group of around one hundred women received special attention due to the fact that they had lost their husbands and all their sons during the war. The coffin was lowered into the grave, then the King:-

*“Scattered earth gathered from the battlefields from a silver shell”.*

*(Hanson 2005:459).*

The Last Post and Long Reveille was played after which four sentries representing the three services, Army, Navy and Air Force stood guard at each corner of the grave their weapons inverted. Thousands of grieving relatives visited the grave of the Unknown Warrior and by the time the grave was sealed on November 27<sup>th</sup> 1920 over one a half million people had paid their respects at the Tomb of the Unknown Warrior. The grave was filled with earth brought from France and was covered with a slab of York stone carrying the following inscription:-

**A BRITISH WARRIOR WHO FELL IN THE GREAT WAR 1914-1918.**

**FOR KING AND COUNTRY.**

**GREATER LOVE HATH NO MAN THAN THIS.**

In 1921 it was replaced by a black Belgium marble gravestone, a gift from the people of Belgium to the Unknown Warrior the inscription reads:-

**BENEATH THIS STONE RESTS THE BODY**

**OF A BRITISH WARRIOR**

**UNKNOWN BY NAME OR RANK.....**

The burial of the Unknown Warrior and the unveiling of the permanent Cenotaph established a focal point for the grief of a nation decimated by the impact of the Great War. Mr. David Lloyd George wrote to Lutyens on November 17<sup>th</sup> 1920:-

*“The cenotaph it may be said is the token of our mourning as a nation, the grave of the Unknown Warrior is the token of our mourning as individuals”*

*(Hanson 2005:462).*

The tomb of the Unknown Warrior assumed a spiritual significance and it was claimed:-

*“There is probably no other memorial in the world so unostentatious in character and yet so moving in its appeal as the grave of the Unknown Warrior”.*

*(Jeans in Royal British Legion Article 1926:118).*

The burial of the Unknown Warrior in Westminster Abbey created a focal point for a nation’s grief:-

*“I know of no crowds so vast at the inauguration of any country’s memorials”*

*(Gavaghan 95:62)*

### **9.5. The National Memorial Arboretum.**

The National Memorial Arboretum was created by the Royal British Legion. It is a living memorial to the fallen commemorating men and women from the United Kingdom, a National memorial to remember the dead from the conflicts that have taken place since the Second World War. The National Memorial Arboretum is located within the National Forest in Staffordshire it consists of 150 acres of trees and memorials to the fallen:-

*“The national memorial arboretum honours the fallen, recognizes sacrifice and fosters pride in our country”.*

*(RNM Guidebook 2007:2).*

The Armed Forces Memorial was created by Ian Rank-Broadley and established a link with November 11<sup>th</sup> 1920 and the creation of the Cenotaph and the Tomb of the Unknown Warrior, a space within the sculpture allows light to shine through it on the 11<sup>th</sup> day of the 11<sup>th</sup> month of the eleventh hour.



**Photo 9.9. The Armed Forces Memorial Sculptures were created by Ian Rank-Broadley. Photographed by Pam Smith 2011.**



**Photo 9.8. The light shines through this space on the 11th day of the 11th month at the eleventh hour. Photographed by Pam Smith 2011.**

*“Every name, every life, every sacrifice, deserves to be remembered.*

*(National Memorial Arboretum 2011)*

## **9.6. Publicity material generated during the project linked to the Unknown Warrior.**

This section contains additional material not contained within the main text of the case study relating to how one specific aspect of the history of the company the link with the Unknown Warrior was developed as one of the tools through which the profile of the company was raised bringing the story to life through the work of DJ Williams from the Brunswick Ironworks. The story of the link between the Brunswick Ironworks and the Unknown Warrior generated a great deal of interest and assisted in raising the profile of the company through the recounting of the work of DJ Williams on the coffin of the Unknown Warrior in 1920.

### **Town's link with unknown warrior**

**A Gwynedd town has marked its link to the Tomb of the Unknown Warrior to mark the 90th anniversary of the end of World War I.**

A plaque notes that the founder of the Brunswick Ironworks, in Caernarfon, created the ironwork on the warrior's coffin, at Westminster Abbey in London. To coincide with the unveiling there are



The trail will feature DJ William's story [pictured right at his first forge].

plans to develop a Trail of Remembrance in the town.

Town councillor Trefor Owen welcomed anything to tidy up local war graves. Brunswick Ironwork's founder, D J Williams, was commissioned to carry out the unknown warrior work at the recommendation of the then prime minister David Lloyd George.

The two men knew each other from Caernarfon, and D J Williams had worked on ironwork for the town's castle, when Lloyd George was "constable" of Caernarfon Castle.

"We are hoping that as this year is such a special anniversary the unveiling of the plaque will be the first phase of a trail of remembrance for the town," said Pam Smith, a PHD student at Bangor University who is researching the history of the ironworks.

"Eventually this will tell the story of the 33 men from the town who are buried in Llanbeblig churchyard," she added.

Ms Smith said there would be a link to the Royal Welch Fusiliers museum in the town's castle as many of the men buried in the churchyard served with them during WWI.

"The trail would enable the town to celebrate the past, and honour the memory of the men who gave their lives.

"It would create a unique trail for locals and visitors to the town to enjoy," she added.

Llanbeblig cemetery has been in the news in recent years because of its bad state of repair.

Caernarfon town councillor Trefor Owen said any plan which might improve the situation was to be welcomed, and said the cemetery was in a poor state.

"You can't see the old graves, and a trail of remembrance would be a good idea, if it helped the situation, which seems to be at a stale-mate at the moment," he added.



**The plaque notes D J Williams worked for 48 hours to complete the ironwork**

## **9.7. Westminster Abbey and Brunswick Ironworks.**

The following text was displayed at the foot of the Tomb of the Unknown Warrior in Westminster Abbey November 9<sup>th</sup>-11<sup>th</sup> 2006 to commemorate the

90<sup>th</sup> Anniversary of the Somme offensive 1916-2006.

## **BRUNSWICK IRONWORKS AND THE TOMB OF THE UNKNOWN WARRIOR**

**In November 1920 Mr. David John Williams of the Brunswick Ironworks received a telegram from the Minister of Works requesting his presence in London on a matter most urgent. Mr. Williams travelled to London on November 1<sup>st</sup> 1920 and was given the Commission for the Ironwork for the Tomb of the Unknown Warrior.**

**The ceremony was going to take place on the 11<sup>th</sup> November 1920 in Westminster Abbey. Mr. Williams had to design and attach the handles to the coffin that was made from English oak from the forest at Hampton Court Palace. He also designed the iron bands that bound the coffin; he also antique hammered the plaque that was to be attached to the top of the coffin. Mr. Williams worked for two days and night without sleep to ensure that the work was completed on time.**

**The coffin left England in November for the journey across the Channel to France where the remains of an unknown serviceman had been selected for burial. The body was placed in the coffin and brought to London, first on the destroyer HMS Verdun and then by train from Dover to Victoria Station. The procession made its way via the Mall to Whitehall where it paused for the unveiling of the Cenotaph.**

**At the Abbey the coffin passed through a guard of honour consisting of holders of the Victoria Cross and the Unknown Warrior was buried in the Abbey in the presence of a vast congregation, headed by the King and Queen.**

### **9.8. The story of the Cavell van.**

#### **Nurse Edith Cavell (4<sup>th</sup> December, 1865- 12<sup>th</sup> October 1915).**

Nurse Edith Cavell was arrested by the German authorities in August 1915 and was charged with assisting the escape of the Allied soldiers; she was tried by the German authorities and sentenced to execution. The night before her death she spoke to the Rev. Sterling Gahan she told him that:-

*“Patriotism is not enough. I must have no hatred or bitterness towards anyone”.*

*James 2011:6).*

Asquith commented that:-

*“She has taught the bravest man amongst us a supreme lesson of*

*courage, and in this United Kingdom and throughout the Dominions of the Crown there are thousands of such women, but a year ago we did not know it”.*

*(Marwick 65:138).*

Nurse Edith Cavell's body was returned to Britain on May 14 1919, it was transported to London on May 15 aboard luggage van number 132<sup>184</sup>. The train arrived at Victoria station a short memorial service was conducted in Westminster Abbey in the presence of Queen Alexandra (Queen Mother). Nurse Edith Cavell was laid to rest at Norwich Cathedral.

### **Captain Charles Algernon Fryatt. (December 2<sup>nd</sup> 1811-July 27<sup>th</sup> 1916).**

Captain Fryatt was Captain of the SS Brussels when signalled by a U boat to stop but took evasive action steering directly at the U boat which was forced to make an emergency crash dive. Captain Fryatt was awarded for his gallantry with two gold watches, one from the Admiralty and the other from the Great Western railway company for his actions in ensuring the safe arrival of the SS Brussels. Captain Fryatt was captured by the Germans in July 1916 and was found guilty and condemned to death as a “guerrilla” for his attempt to ram U boat 33. Captain Fryatt was shot on July the 27<sup>th</sup> of 1916.

Captain Fryatt was brought home to England on July 7<sup>th</sup> 1919 the coffin carrying his remains arrived at Dover aboard HMS Orpheus, it was carried to London aboard luggage van number 132 (Cavell van). It was transported to Saint Paul's cathedral for a short memorial service. Captain Fryatt was laid to rest in All Saints church in upper Dovercourt

## **9.9. Sharing the Heritage.**

### **9.9.1. Mr Graham Lay.**

This section contains information relating to the sharing of the Brunswick heritage with various people and projects during the research project.

*Dear Pamela*

*I write to thank you for your considerable assistance in helping me prepare for a lecture I am putting together on the subject of the Unknown Warrior, whose tomb is in Westminster Abbey. I know that you have been researching the matter for some time. Particularly where it relates to the manufacture of the iron coffin mounts and handles that were made by Brunswick Ironworks of Caernarfon.*

*Your information has been invaluable and because of your help I feel sure the lecture will be well received. As one of the Experts on the BBC*

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<sup>184</sup> The luggage van was named the Cavell van in memory of Nurse Edith Cavell.

*television programme; The Antiques Road-show I am often asked to give talks and you may like to know that I have decided to add it to my series of regular lectures, so the hitherto little known knowledge you have provided will continue to be passed on to others.*

*With kind regards  
Yours sincerely*

*Graham Lay*

In order to support the After Dinner speeches Meurig Williams created a replica coffin handle as a visual artefacts for the speeches.

*Hello Graham,*

*Sorry for the delay but Meurig was not happy with the handle. So he has hand forged another one from old wrought iron found in the slate quarries close by, the wrought iron consisted of old railway track and various other bits and pieces. Meurig hand forged the handle and has given it an antique metal finish as his grandfather would have done with the original handles and ironwork for the coffin. The handle and base have been antique hammered by Meurig and then hand polished we think that the handle does not need a mount.*

*Meurig has had a slate replica plaque created by a local slate company, Indigo Jones of Caernarfon who have made all our plaques and this is an exact copy of our plaque but in slate if you would like to borrow it as a visual artefact for your speeches you would be most welcome. Mr Meurig Williams believes very strongly that this is a special heritage that should be shared for the good of everyone as a sign of respect for all those men who are still not coming home, 90 years after the Unknown Warrior was buried.*

*(Pam Smith to Mr Lay November 2010).*

### **9.9.2. Cavell Van Project Kent and East Sussex Railway 2010.**

The Brunswick Ironworks supported the restoration of the Cavell Van through the sharing of their heritage linked to the Unknown Warrior. A number of photographs were given to the researcher who attended the opening ceremony from the Kent and East Sussex railway for use in the research project.



**Photo 9.10. Admiral of the Cinq Ports unveiling the plaque November 11<sup>th</sup> 2010 Kent and East Sussex Railway.**



**Photo 9.11. Guards outside the Cavell Van. November 11th 2010.**



**Photo 9.12. Guarding the coffin inside the restored Cavell van. November 11<sup>th</sup> 2010.**





**Photo 9.13. The researcher and her two sons inside the Cavell van. November 11th 2010<sup>185</sup>.**



**Photo 9.14. Of the plaque on the restored Cavell Van November 11th 2010.**

The images overleaf are from the private collection of the Williams family and are copies of the original telegrams sent to DJ Williams in 1920 relating to the request by the Ministry of Works for his presence in London for the creation of the ironwork for the Unknown Warrior.

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<sup>185</sup> Ben and Sam were invited to the event to thank them for their contribution to the event the purchase of the sword for the top of the coffin. The sword can be seen on page 176.

C. or B.		Charges to pay	No. of Telegram		Office Stamp
Recd. from		s. d.	48		
POST OFFICE TELEGRAPHS.			Sent.....M.		
This Form must accompany any inquiry respecting this Telegram.			To.....		
By.....			By.....		
Prefix	Handed in at	Office of Origin and Service Instructions	Words	Received here at	
	BK	OH m o Parliament St.	55	3	

Williams Blacksmith, Barnaroon

The following telegram has just been despatched to Mr. Ironbridge. Sir Frank Baines wishes Williams who did railing round Castle at time of Investigations to come to London at once.

**Image 9.4. Of the telegrams sent to DJ Williams by HM Office of Works November 1920.**

C. or B.		Charges to pay	No. of Telegram		Office Stamp
Recd. from		s. d.			
POST OFFICE TELEGRAPHS.			Sent.....M.		
This Form must accompany any inquiry respecting this Telegram.			To.....		
By.....			By.....		
Prefix	Handed in at	Office of Origin and Service Instructions	Words	Received here at	
			326		

(2) Williams

in connection with Iron filings for Coffin of Unknown Warrior matter most urgent were time of Williams arrival.

Office of Works London