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Except where stated, no developmental aspects of these products were sub-contracted to, or originated by, another.

PRODUCTIONS

Adrian MALLON (updated March 2014)

Independently-produced software and software related projects



- Townlands (an eLearning single- and multi-player online game, 2014)

 This local-history online eLearning game for all ages was built using the Unity3D game engine.

 It appears on the www.bygonesandbyways.com website in the GAME section.
- Markethill District Enterprises Ltd.
 - 1. **Bygones and Byways Revisited** (a mid-Armagh cross-community local-history multimedia archive,— *www.bygonesandbyways.com* website, kiosk & DVD, 2014)

A major new edition of the original 2003 program (described next), funded by SOAR: 800+ pages, 1800+ photos, maps and other documents, 150+ audio recordings (over 15 hours). 2. **Bygones and Byways** (the first multimedia cross-community and schools KS2-3 local-history archive resource in Northern Ireland—on CD-ROM, touchscreen kiosk displays at the Old Courthouse, Markethill, and online at www.bygonesandbyways.com, 2003)

Planning for this extensive project began in 1999 and development took place over a two-year period. It is a community-based local-history resource, designed to allow local groups and schools to edit and expand it. The 2003 publication contains over 1000 photographs, with captions and Irish Grid coordinates where appropriate. There are hundreds of illustrations, QuickTime VR simulation and visualisation elements, over nine hours of recorded interviews with local people, information on every townland in the area with maps, photos and spoken and written drscriptions, historical essays, interactive maps and plantation surveys, PRONI and NIEA databases and the 1835-38 Ordnance Survey memoirs for local parishes. A first for Northern Ireland, described by the Heritage Lottery Fund as a model for imitation by other community organisations.

- eLingua Latina (KS3-4 and Level 3 educational language software; work in progress) eLingua Latina is a computer-based reference, gaming and exercise resource designed to facilitate the learning of Latin. The design was undertaken as an exploration into Computer Assisted Language Learning (CALL) to create self-learning reference tools, extendible to languages other than Latin and English, and to explore possibilities for the creation of immersive VR language-learning game environments. It uses Whitaker Latin and WordNet English datasets. The design implements a range of innovative AI content-based, problem-solving approaches to language acquisition, alongside machine-based remedial feedback on natural-language text-input, Latin text-to-speech synactor solutions & 3D-gaming environments. See www.adrianmallon.com/elingualatina for software elements and tests published online to date and below for papers published.
- BelfastPix Socio-historical Photo Archive (digital newspaper archive, and historical photo component of Belfast Media Group's online presence, 2008).
 A project to digitize and publish a community-newspaper photographic record of Northern Ireland's Trouble years, 1976-1999, in West Belfast.
- Céim ar Chéim (KS1 Irish-language talking-book CD-ROM series, 2005).
 This project involves the conversion of an Irish-language series of 20 children's books into interactive, talking-book CD-ROM format. It uses voice-overs recorded by St. Mary's Training College, Belfast.
- Armagh Guided Tours (business and tourism promotional CD-ROM, 2004)
 This CD-ROM was commissioned to be sent to tour operators planning to visit Armagh County.
 It includes approximately 10 minutes of video and extensive, original photographs of County Armagh tourist locations and amenities.
- Livestock & Meat Commission (LMC).

On the Farm (KS2 cross-curricular multimedia CD-ROM & printed teacher notes, 2000) A survey of the beef-farming industry in Northern Ireland for Key Stage 2 pupils. An ambitious and very well received product for schools, the program describes all aspects of the industry in a virtual-world farming simulation and game-based product. It contains over an hour of original video footage, and two hours of puzzle and game-play, alongside QuickTimeVR and 3D simulation and visualisation elements. The video footage alone represents a record of beef-farming with future historical worth. Shot on farms throughout the North, young local voices are used to narrate the stories. A total of 5000 copies were produced for distribution to schools and then to all LMC farmers and partners. Independent reviews by teachers and in the press have underlined the quality, innovative nature and usefulness of this product.

The Dairy Council for Northern Ireland (DCNI).

1. "From Farm to Fridge...A Year in the Life" (Dairy-farming socio-photographic archive, 2007—a marketing, education and museum project).

In this project, photo-diaries recorded by Diary farmers from around Northern Ireland were maintained over a twelve-month period. The results are used as part of the DCNI marketing and education programs. The archive was given the Dairy Council to the Ulster Folk & Transport Museum as a permanent social record.

2. **Dairy World** (2000)—KS2 cross-curricular CD-ROM with printed teacher notes & website components; British Interactive Multimedia Awards/BIMA shortlisted 2000.

This educational program's virtual-world concept, centring on the dairy industry, led to the production of the similar program for the LMC (*On the Farm*). It contains over an hour of original footage shot on farms, in dairies and in Belfast Harbour, with voiceovers using local young talent, alongside puzzles and games and 3D-modelled interactive simulations. Again, this is an extraordinarily comprehensive record of dairy farming that is accessible to its target audience (KS2 children) and lots of fun,—popular also with adults: copies were distributed to dairy farmers and all DCNI partners as well as to schools. The program was praised by DENI's chief inspector of schools as a benchmark of excellence for use in NI schools. It is also used for English language learning in at least one German HE agricultural college (2010).

- 3. **Digital media archive** (2004)—a DVD digital archive for DCNI of its extensive publicity materials (radio and television) going back to its beginnings. A total of ten DVDs were produced. Media was captured from a wide varity of formats including S-VHS, VHS (PAL and NTSC), Betacam-SP, DAT, audio-cassette and tape.
- 4. DCNI **Industry presentations**—yearly conference presentation software and support 1999-2006.
- 5. **Diet & Health**—proceedings of Home Economics KS4 Conference 2000; CD-ROM.
- Ballyclare & Ballymoney Livestock Marts.

Interactive Video Auctions 2001 (software development, training and consultancy during Northern Ireland's Foot & Mouth crisis).

This interactive auction project involved editing footage taken of cattle during the foot-and-mouth crisis for review by bidders before auction. During the auction, the video was projected in the ring. Video projection had been used in Scotland shortly before but the interactive review program was a first for NI. The events attracted much media interest until the passing of the crisis removed the need for video auctions.

• Rural Development Council (RDC).

Developing Community Environmental Projects and **Developing Culture, Heritage and Local Identity Projects** (CD-ROM community-group guides, 2002; videos by RDC).

· Oxfam Northern Ireland.

Milkmen's Christmas Appeal (website design and development).

• Infineer Ltd.

The ChipNet Opportunity: An Introduction for Resellers (CD-ROM, 2001).

• Irish Football Association.

Everyone's a Winner (2000) Irish Football Association KS3 schools football physical-education training CD-ROM (video by John Doherty for the IFA).

• DVLNI.

Internet consultancy (2000).

- Environment and Heritage Service Northern Ireland (1998-99).
 - 1. Internet consultancy, website development, report and support.
 - 2. Staff-support training in Internet development tools.
- Public Record Office for Northern Ireland (1997-98).
 - 1. New media consultancy, website development, support and training, including development of interactive online VR walkthroughs of public spaces.
 - 2. NI Small Museums conference and NICS DCC presentation software.
 - 3. Prominent Persons Index & Geographical Index software development.
- North Eastern Education and Library Board.

Cooking in the Classroom (1997)—a Northern Ireland curriculum KS4 educational CD-ROM resource, including interactive cooking simulation elements.

• Manley Communications Ltd.

Design consultancy, programming and development services 1997-1999 on LEDU **Industry Matters** CD-ROM, **Business Opportunities in Northern Ireland** (IDB CD-ROM) North Down Council Tourist Information kiosk software, Ards Borough Council Tourist Information kiosk software.

- Timescapes (1996)—KS2-3 history CD-ROM for Mac and PC commissioned by CCEA/NICLR; versioning of a CD-I produced while in NICLR, containing interactive games and puzzles.
- Waterfront Hall (1996)—version 2.0, VR presentation software for PC of work initiated while

- at the ISC, UU, for the new Waterfront Hall's marketing team.
- Mars Mania (1991)—KS3-4 Mac/Hypercard science program. Animated multimedia role-play adventure into scientific method and the history of science, set in the 1890s, using interactive free-input natural-language dialogue techniques to illustrate scientific-reasoning processes.
- Mars Manie (1991)—French-language version of Mars Mania.
- Butterflies (1991)—KS3 Mac/Hypercard science and ICT program
- Goldilocks (1991)—KS2 Mac/Hypercard science and ICT program..
- Datalogger (1991)—KS3-4 Mac/Hypercard technology and ICT program.
- Faust (1991)—KS3-4 Mac/Hypercard technology and ICT program.
- Video Board (1991)—KS3 Mac/Hypercard art and ICT program.
- Story Board (1991)—KS3 Mac/Hypercard art and ICT program.
- Planet Planner (1990)—KS3 Mac/Hypercard science program and VHS video. Multimedia role-play adventure game, where junior pupils bring general scientific knowledge to bear on a futuristic space-science problem: terraforming Mars.
- **Solar Voyage** (1990)—KS3-4 Mac/Hypercard science and ICT program for use as a standalone library resource, that links also to *Planet Planner*'s interactive search tasks.
- Interactive Titles produced while at Interactive Systems Centre (ISC) at Magee Campus, University of Ulster
- Waterfront Hall (1996)—Sales & Marketing team presentation software (including a virtual-reality interactive tour of the then-uncompleted Waterfront Hall).
 - The first time Apple's QuickTimeVR software technology had been used in this way. I constructed the virtual-tour walkthroughs using six computers to process the Robinson & McIlwaine architect's ArchiCAD specifications over a four-month period.
 - Launch of Waterfront Hall presentation software.
- Images of Yeats (1995)—an exemplar product, using a 3D model of Yeats' Thoor Ballylee home as the interactive interface to multimedia assets describing the poet's life and work.
- Project management program to manage Multimedia Assets Relating to Yeats (1995).
- Multimedia Design Guidelines (1994-95)—Intranet collaborative project working environment—and Making Multimedia Work for Us (1994–95) web site.
- Tool for the Inventorizing and Managing of ISC Resources (1994), incorporating MB033: Interactive Virtual Multimedia Studio Design Model, an interactive walkthrough of the centre (modelled in Virtus Walkthrough).
- Interactive Titles produced
 while at Northern Ireland
 Centre for Learning
 Resources (NICLR) in the
 Council for the Curriculum,
 Examinations and
 Assessment (CCEA) within
 DENI
- Timescapes (1994)—designer and project manager of this KS2-3 CD-I production for NI schools and museums, conbining puzzle-solving investigation with didactic self-learning elements focussed on the history and pre-history of the North of Ireland.
- -BIMA top Design Award 1995.
- Railway Builder (1993)—design, graphics, programming and project management of this Ulster Folk and Transport Museum touchscreen gallery program. A 3D game simulation to introduce economic and geographical factors affecting railway construction and route-planning in the 19th century. Subsequently used also in York Railway Museum, England.
 - -BIMA top Design Award for best Computer Graphics, 1993.
 - -BIMA silver award for best Public Information Display, 1993.
- Consumer Issues—interactive, screen design and programming of this Consumer Council KS4 program.
- Laganside: Traffic Flows (1992)—design, graphics, programming & management of a traffic simulation project for Laganside Corporation & local-geography classroom investigations.
- QMSIII (1993)—interactive design and initial project management of this DENI staff-development/student teacher formation CD-I program.
- **DENI Database** (1992)—designer and project manager of this laserdisc touchscreen program advertising the Department of Education Northern Ireland's responsibilities and activities
- QMS II (1992)—software and post-production manager of this laserdisc program for DENI staff-development/student teacher formation.

Selected Publications, Reports and Reviews

- Inquisitionum in Officio Rotulorum Cancellariae Hiberniae Asservatarum, Repertorium, Vol. II. [Ultonia] (work in progress, reedition of this 1829 work,—extracts published online in 2013).
- "Designing for Accessibility and Better eLearning Game Design", Picteilín Creative Media Conference 2013, Dundalk Institute of Technology, 6 September 2013. Proceedings weren't published but here's a URL to the slides, archived on my website: http://www.adrianmallon.com/products/Accessibility_BetterDesign_slides.pdf.
- "Strings, Pegs, Pixels and Passion: Automated Digital Puppet Performance in e-Learning Design", Picteilín Creative Media Conference 2011: Life Through Pixels, Dundalk Institute of Technology,

- 8 September 2011
- "Issues in Language and Design: a Case Study." Paper presented at the *Learn to Game*, *Game to Learn* 40th Annual Conference of the International Simulation and Gaming Association (ISAGA), Singapore, 29 June-3 July 2009.
- "Comenius Revisited: Vocabulary Acquisition with the Mundus Language-learning Program." Workshop presented at the ISAGA 2009 Conference, Singapore, 29 June-3 July 2009.
- "Pleasure, Responsibility and the Ideated Author in Virtual-world Gaming", in E. Bogdanos & I. Patasiene (eds.), *Games: Virtual Worlds and Reality*. Kaunas (2009: 129-136). ISBN 978-9955-25-682-3.
- "Exploring the Torque and Unity Game Engines for Realist 3D Game-world Design". Paper and workshop presented at the 39th Annual Conference of the International Simulation and Gaming Association (ISAGA) in Kaunas Univ. of Technology, Lithuania, 7-11 July 2008.
- "eLingua Latina and immersive CALL tool design", *Computer Assisted Language Learning*, (2007, Vol. 20, No. 4 October: 345-363).
- "Balancing Structured and Discovery Approaches to Learning: Feedback Mechanisms in a Classical-language CALL Tool", in Mayer, I & Mastik, H. (eds.), *Organizing and Learning through Gaming and Simulation: Proceedings of ISAGA 2007*. Delft, Eburon Delft (2007: 221-229).
- "eLingua Latina: Designing a Classical-language E-learning Resource", *Computer Assisted Language Learning* (2006, Vol. 19, Nos. 4 & 5: 373-388).
- "Talk to the Triangle", Reality and Game & Game and Reality: Abstracts and Papers of the 37th Annual Conference of the International Simulation and Gaming Association (ISAGA), St. Petersburg State University of Engineering and Economics, 3-7 July 2006 (ISBN 5-88996-651-0).
- "eLingua Mundus: Developing a Natural-language CALL Tool", *Cambridge University Schools Classics Project 40th Anniversary Conference*, 7 June 2006 (conference paper).
- "eLingua Latina: Designing a Classical-language e-Learning Resource", *Developing a Pedagogy for CALL: examples of Theory and Practice* (paper read at *UCALL conference* in University of Ulster, Coleraine, 14 June 2005).
- On the Farm: Teacher Notes (KS2, 2000. Software support book.).
- Dairy World: Teacher Notes (KS2, 1999. Software support book.).
- "Guidelines for multimedia design and development", TENCON apos; 97. IEEE Region 10 Annual Conference. Speech and Image Technologies for Computing and Telecommunications, Proceedings of IEEE (1997, Vol. 2: 839 842). (Conference paper with Z. Zouaoui.)
- "PRONI on the Internet", *PRONI [Public Record Office for Northern Ireland] Statutory Report*, 1996-97 (1997: 118-121).
- "Making Multimedia Work for Developers: Authoring Tools in the Assistance of Project Development" (paper presented at the Second Irish Computer Graphics Workshop, 1995)
- Report for Northland Computers (evaluation report for Northland Computers on their banking software program).
- The Collection and Management of Assets in the Production of a Multimedia Program on Yeats (1995, ISC report commissioned by Digital Equipment Corporation).
- Guidelines for the Design, Production and Evaluation of Interactive Media (1995)—ISC report commissioned by Digital Equipment Corporation (DEC).
- "Making Multimedia Work for Us", interactive World Wide Web article (1994).
- "Developments in Photo-CD/Optical imaging", ARCLIB [Architecture Librarians] Conference September 1993 (conference paper).
- "Case Study: The Heritage Project", *Images of Information: Electronic Imaging and Interactive Media for Interpreters of Heritage and the Environment* (The London Institute & Museum of London, August 1992, conference paper).
- "Multimedia in the Classroom", *Teaching with Objects*. *Museums in Schools (GEMINI) Conference*, 1992 (conference paper).
- "Educational Multimedia in the Curriculum", *EMAI [Educational Media Association of Ireland] Conference June 1993* (Limerick University, conference paper with Derek Kinnen).
- "Cooking With CD-ROM", *IMmediate: Northern Ireland Centre for Learning Resources Interactive Multimedia Bulletin*, Issue 2, Summer 1993 (and smaller contributions in the same issue).
- "The Case for CD-I", *IMmediate: Northern Ireland Centre for Learning Resources Interactive Multimedia Bulletin*, Issue 1, Spring 1993 (and smaller contributions in the same issue).
- *The Christian Brothers*, *Science and Practical Education in 19th-century Ireland* (published by the author, 1990, 12pp).
- "The Death of Samuel Beckett", *PM Ulster*, BBC Northern Ireland, 27 December 1989 (Radio Ulster interview).



- "A Gentle Stroll on the Wilde Side", *Irish News*, 6 June 1989 (book review of Jonathan Goodman's *The Oscar Wilde File*, London, 1989).
- "L'Académie des Sciences à Paris, 1683–1685: une Crise de Direction", De la Mort de Colbert
 à la Revocation de l'Edit de Nantes: un Monde nouveau?, Actes du XIVe Colloque du Centre
 Méridional de Rencontres sur le XVIIe Siècle, January, 1984: 19–31.

Teaching/Training Videos produced while teaching at St Mary's CBGS

- Renaissance Science (1991)—VHS Junior Science and History video (17 min.)
- Graphic Communication and Design (1991)—VHS Art & Design video (25 min.).
- Napoleonic Wargame Tactics (1989)—VHS history video (2 min. stop-motion animation).
- I.T. at St. Mary's CBGS (1989)—VHS staff-development ICT video (30 min.).
- Creative Video Technology in the Classroom (1988)—VHS staff-devmt. video (25 min.).

School Exhibitions' Design and Organisation

- From Waterloo to World War II: an Exhibition of Militaria, Models and Books (St Mary's CBGS, 1990)—including video and dynamic computer wargame simulation displays.
- Chronicle of Science in the French Revolution: 1789–1989 Bicentenary Exhibition (St Mary's CBGS, 1989)—History and Science school exhibition.