Black Country Historic Landscape Characterisation

Technical Appendix: Enhancing the Record of Previous Land Uses

English Heritage Project Number 3638 Main

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This study has been funded by English Heritage as part of its national programme of Historic Landscape Characterisation. It was conducted by the Black Country Archaeology Service, based within Wolverhampton City Council, on behalf of the four Black Country local authorities.

The project commenced in 2004 with the appointment of Debbie Langley as Project Officer. Debbie compiled the database and undertook much of the early work on the Character Area profiles before her departure for Staffordshire County Council. Paul Quigley succeeded Debbie in 2007 and has been responsible for the subsequent analysis of the data, for the completion of the Character Area Profiles, and for the compilation of the report. Mike Shaw, the Black Country Archaeologist, has acted as Project Manager throughout the life of the project.

We are particularly grateful to Graham Fairclough and Roger M Thomas of English Heritage who commissioned the project, and to Sue Whitehouse, Conservation Officer at Wolverhampton City Council, who provided conservation and policy advice.

Maps & Photographs

Unless otherwise marked, all maps are orientated with north at the top of the page. All photographs have been taken by the author (unless otherwise stated), and those of the Black Country form part of the photographic archive linked to the Black Country Historic Landscape Characterisation. The codes included at the end of each photo caption refer to the particular identifier for the corresponding area within the database of the Historic Landscape Characterisation.

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Executive Summary

This technical appendix is intended to accompany the second main report of the Black Country Historic Landscape Characterisation (*Recycled Landscape: The Legacy of 250 Years in the Black Country*).

It outlines a number of changes which have been made to the database on which the Historic Landscape Characterisation (HLC) is based. These changes improve the ability to analyse the landscape thorough the filter of the HLC database. In particular, the improvements focus on improving the representation of past changes in the fabric of the Black Country.

Following a brief **Introduction**, **Section 3** describes a particular approach to the creation of reconstructed maps of past landscapes. This approach allows the analysis of the relative land area given to different land uses at previous points in time. It then outlines a simplified structure of landscape categories which has been used to compare the present and past occurrences of features of the same type.

Section 2 describes three changes made to the data in order to remove anomalies in the recorded period of origin of past uses of the landscape.

Section 4 outlines further changes in the database in order to ensure that, as far as possible, the number of previous uses recorded for parcels of land represented in the database is consistent.

Finally, **Section 5** does not describe changes made, but rather attempts to assess the importance of a potential challenge to the way in which the urban landscape is represented by the HLC database. This challenge is created by the changes in use of buildings and the affect which these changes have on the character of the landscape.

Results from the Historic Landscape Characterisation programme in the Black Country can be found at: http://ads.ahds.ac.uk/catalogue/archive/blackcountry_hlc_2009.

*English Heritage Project Number 3638

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1. Introduction

1.1 THE RATIONALE FOR THIS DOCUMENT

This appendix outlines a number of improvements to the data forming the basis of the basis of the Black Country Historic Landscape Characterisation (BCHLC).

The first report* of the BCHLC was completed early in 2009 and it summarised the work of the project from its inception in 2004. This appendix accompanies the project's second report published in 2010 (*Recycled Landscape: The Legacy of 250 Years in the Black Country*), which uses the HLC data as the basis for a discussion of the history and surviving character of the conurbation within the study area.

During the course of compiling the first report , it became clear that if the further analysis which was anticipated were to be as rigorous as possible, some improvements would be necessary to the data.

In particular these improvements would need to focus on the records of previous land uses: records which might be thought of collectively as the previous landscapes of the Black Country.

It would have been possible to have made these improvements to the database without referring to them in the reports of the project. However, we have attempted to be open and transparent in our investigation of the Black Country landscape, and in that vain, his technical appendix summarises the changes.

The last section of the appendix does not describe any changes as such, but highlights the approach to recording re-used buildings which has been adopted in the Black Country HLC. As is explained in section 5, other approaches to the same question may have advantages over the particular solution which has been adopted in the Black Country. The discussion attempts to quantify the implications of any changes in approach.

**The Black Country: An Historic Landscape Characterisation*, available from: http://ads.ahds.ac.uk/catalogue/archive/blackcountry_hlc_2009.

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2. Creating and Analysing Landscapes of the Past

2.1 QUANTIFYING LAND USE IN RECONSTRUCTED LANDSCAPES

Although not a primary objective of the process of HLC, the data collected as part of the process allows the reconstruction of patterns of land use at previous stages of the area's development. Maps showing these reconstructions were used in *The Black Country: An Historic Landscape Characterisation*, Figure 3.5 (page 31).

However, the method which was originally used to produce these maps made it very difficult to produce quantitative assessments of the land use at each point in the landscape's development*.

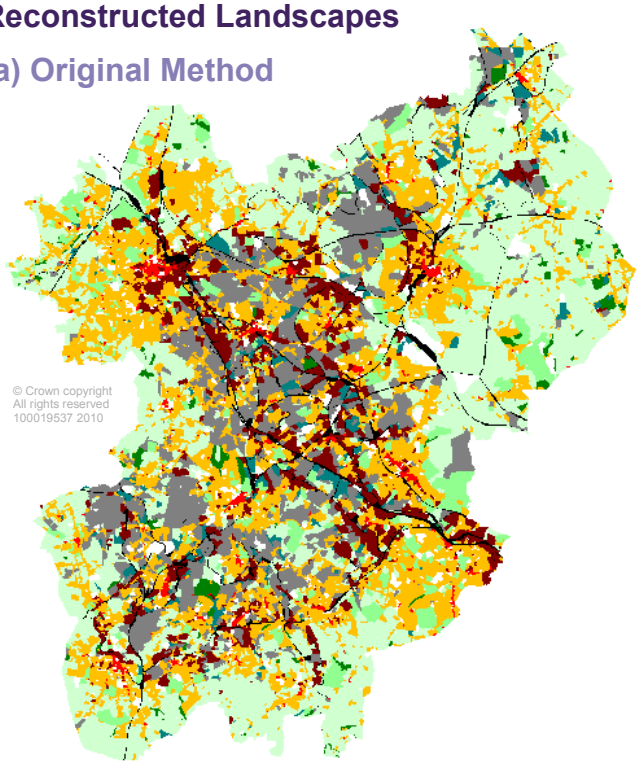
A new method was therefore devised for arriving at the same reconstructed map (Figure 2.1 illustrates how little difference there was between the maps produced using each method), but with the additional ability to analyse the land use at that point in time.

The new method uses Microsoft Access tables and queries within HBSMR, as detailed in Table 2.1. It allows us to calculate that, in the case of the map shown in Figure 2.1b for example, about a quarter (26%) of the land area of the Black Country was covered by housing.

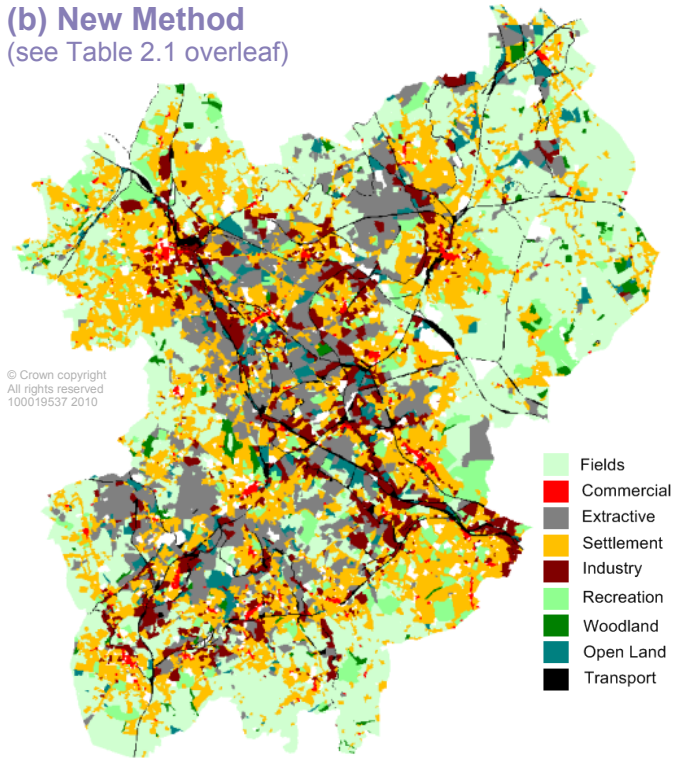
Using this new technique, a series of eight reconstructed landscapes was produced for the period between 1775 and 2000**.

Figure 2.1: Comparison of 1939 Reconstructed Landscapes

(a) Original Method



(b) New Method
(see Table 2.1 overleaf)



*Essentially the method involved the creation of a Workspace in MapInfo Professional in which each narrow type of land use became a separate layer.
**See *Recycled Landscape: The Legacy of 250 Years in the Black Country*, pp12-13.

Table 2.1: The Process Used to Generate Land Use Data for Reconstructed Landscapes (Through a Sequence of Microsoft Access Queries)

Commentary	SQL
Make a new MS Access table to represent land use within the surviving landscape by selecting fields from the table *HLCTb*l (use the adjacent SQL code as the basis of make-table query). Save this table as *z_HLC_TypeSequence*.	SELECT HLCTbl.HLCUID, 0 AS ID, HLCTbl.BroadTypeCode, HLCTbl.HLCTypeCode, HLCTbl.YearFrom, HLCTbl.YearTo FROM HLCTbl;
Append to this table a set of data (based on fields selected from the *HLCPrevType* table) which will represent all previous land uses recorded in the HLC (use the adjacent SQL code as the basis of an append query).	SELECT HLCPrevType.HLCUID, HLCPrevType.ID, [HLCPrevType]![PrevBroadTypeCode] AS BroadTypeCode, [HLCPrevType]![PrevHLCTypeCode] AS HLCTypeCode, HLCPrevType.YearFrom, HLCPrevType.YearTo FROM HLCPrevType;
Sort this table by the polygon unique identifier and then by the latest date defining each land use's period of origin (use the adjacent SQL code as the basis of make-table query). Save this table as *z_HLC_TypeSequence_sorted*.	SELECT z_HLC_TypeSequence.HLCUID, Val(Mid([z_HLC_TypeSequence]![HLCUID],4,5)) AS Expr1, z_HLC_TypeSequence.ID, z_HLC_TypeSequence.BroadTypeCode, z_HLC_TypeSequence.HLCTypeCode, z_HLC_TypeSequence.YearFrom, z_HLC_TypeSequence.YearTo FROM z_HLC_TypeSequence ORDER BY Val(Mid([z_HLC_TypeSequence]![HLCUID],4,5)), z_HLC_TypeSequence.YearTo;
Run a query based on this table where [Enter Search Year] is the date for which a set of associated land uses is required.	SELECT z_HLC_TypeSequence_sorted.HLCUID, z_HLC_TypeSequence_sorted.ID, z_HLC_TypeSequence_sorted.BroadTypeCode, z_HLC_TypeSequence_sorted.HLCTypeCode, z_HLC_TypeSequence_sorted.YearFrom, z_HLC_TypeSequence_sorted.YearFrom, z_HLC_TypeSequence_sorted.YearTo FROM z_HLC_TypeSequence_sorted WHERE (((z_HLC_TypeSequence_sorted.YearFrom)<=[Enter Search Year]) AND ((z_HLC_TypeSequence_sorted.YearTo)<=[Enter Search Year])) OR (((z_HLC_TypeSequence_sorted.YearFrom) Is Null) AND ((z_HLC_TypeSequence_sorted.YearTo)<=[Enter Search Year])) OR (((z_HLC_TypeSequence_sorted.YearFrom)<=[Enter Search Year]) AND ((z_HLC_TypeSequence_sorted.YearTo) Is Null)) OR (((z_HLC_TypeSequence_sorted.YearFrom) Is Null) AND ((z_HLC_TypeSequence_sorted.YearTo) Is Null));
Run a further query in order to produce the data for reconstructed map of land use where [Enter Search Year] is the date for which a set of associated land uses is required. (export the results of this query by copying and pasting into MS Excel)	SELECT Val(Mid([z_HLC_TypeSequenceQry2]![HLCUID],4,5)) AS Expr2, Last(z_HLC_TypeSequenceQry2.HLCUID) AS LastOfHLCUID, Last(z_HLC_TypeSequenceQry2.ID) AS LastOfID, Last(HLCBroadTypeLUT.BroadTypeDesc) AS LastOfBroadTypeDesc, Last(z_HLC_TypeSequenceQry2.HLCTypeCode) AS LastOfHLCTypeCode, Last(z_HLC_TypeSequenceQry2.YearFrom) AS LastOfYearFrom, Last(z_HLC_TypeSequenceQry2.YearTo) AS LastOfYearTo FROM z_HLC_TypeSequenceQry2 LEFT JOIN HLCBroadTypeLUT ON z_HLC_TypeSequenceQry2.BroadTypeCode = HLCBroadTypeLUT.BroadTypeCode GROUP BY Val(Mid([z_HLC_TypeSequenceQry2]![HLCUID],4,5));

2.2 DEFINING THE TYPE OF PREVIOUS LANDSCAPE RECORDS

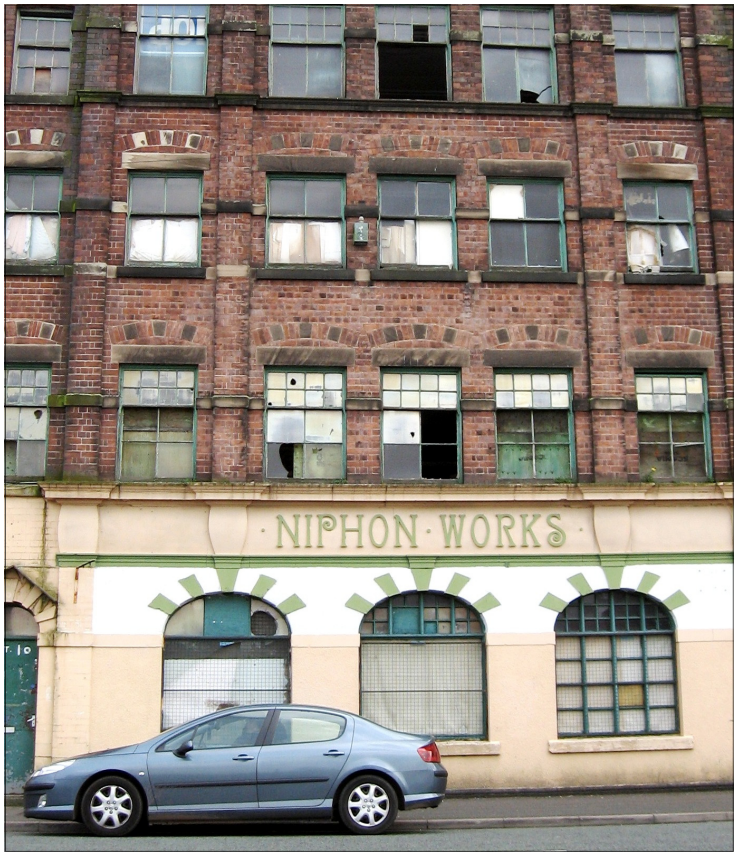
All HLC records are categorised at two levels: within one of 13 pre-defined 'broad type' categories; and within one of a number of narrower sub types.

Table 2.2 shows the number of narrow categories which have been used within each broad division of the record. It shows that an especially large number of sub categories have been used to define areas of industry and housing (settlement). In particular those sub categories which have been used to define past uses of the landscape are disaggregated both by the type of land use and also the period to which it applies. So, for example, brick making sites are coded as either 'BRKWK', 'BCK31', 'BCK11', 'BCK01', 'BCK81', depending on when they originated and whether they are still in use.

This feature allows vary particular searches to be carried out for records of specific types of landscape from a specific period. However it complicates searches which are aimed at identifying all landscape of a certain type, irrespective of its period of origin.

Table 2.2: The Number of Broad and Narrow Categories Used within the Black Country HLC

Broad Category of Land Use (in descending order of narrow category count)	Count of Narrow Categories of Land Use (current land use)	(previous land use)	Total
Industrial	19	69	88
Settlement	32	36	68
Extractive	7	40	47
Recreational	15	25	40
Public Services	11	24	35
Field System	6	16	22
Commercial	11	10	21
Open Land	5	15	20
Religious	10	9	19
Communications	9	9	18
Utilities	6	10	16
Woodland	2	11	13
Military	1	2	3
Total	134	276	410



Left: A disused industrial building in Wolverhampton. Industrial landscape types are the most numerous of any in the HLC database (HBLHBL655).

In order to simplify this type of search, an intermediate level of classification was produced which grouped together past and present landscape types. So, using our previous example, the intermediate category (we have referred it as a 'generic type') of 'works, brick' allows us to search for all the records which are otherwise included in one of the five separate codes mentioned.

In this way the number of categories within the broad type of *Industry* was reduced from 88 narrow types to 25 generic types and the equivalent reduction in *Settlement* was from 68 to 19. Overall, the record was categorised into one of 133 generic types (compared to 410 narrow types).

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3. Defining the Period of Origin of Previous Landscape Types

3.1 PERIOD OF EXISTENCE vs. PERIOD OF ORIGIN

In the case of each record of a previous landscape type, the HLC dataset includes two dates which record the start and finish of the possible period of origin of the land use, in so far as it is known. As is shown by the data entry window in Figure 3.1 the *YearFrom* and *YearTo* fields capture the 'period of origin of the previous HLC type'.

However, some inconsistent approaches to data entry are evident in the HLC record as it existed at in early 2009. Specifically, there appeared to be at least a small number of instances in which the *YearFrom* and *YearTo* data cells were used to record the dates between which a particular type of land use *existed*.

In the case of HBL25 for example, which is an area of modern housing thought to originate after 1980, one previous land use is recorded as an Anglican church. The associated notes are that this church is 'marked as a Mission Room on first to third edition OS maps', i.e. the maps of 1880 to 1920 (Figure 3.2 illustrates how the church was marked on the first edition map in 1880, but by the fourth edition map in 1938 it was no longer recorded).

In this case, the period of origin should be recorded as being between some *unknown date* and 1880 (because this was the first time it appeared on a map). Instead, its period of origin was recorded as 1881 to 1930 when this was, in fact, the period over which it was thought to have been used for this purpose.

This particular record was therefore amended so that the *YearFrom* and *YearTo* fields defined the church's period of origin rather than its period of existence. However, there remained the question of how many other records carry the same inconsistency.

In order to asses how widespread this anomaly was in the data, a random sample was taken of (the 15,858) recorded previous uses for which both *YearFrom* and *YearTo* dates were recorded (i.e. excluding those records for which one or more dates was not entered). This seemed to indicate that the approach which used the dates to define the period of existence (rather than period of origin) might be restricted to the records created in the early part of the project, even though these records might account for say, 15% of the total.

Figure 3.2: HLC Record HBL25, showing the 'Mission Room' (highlighted in red) on the 1880 map

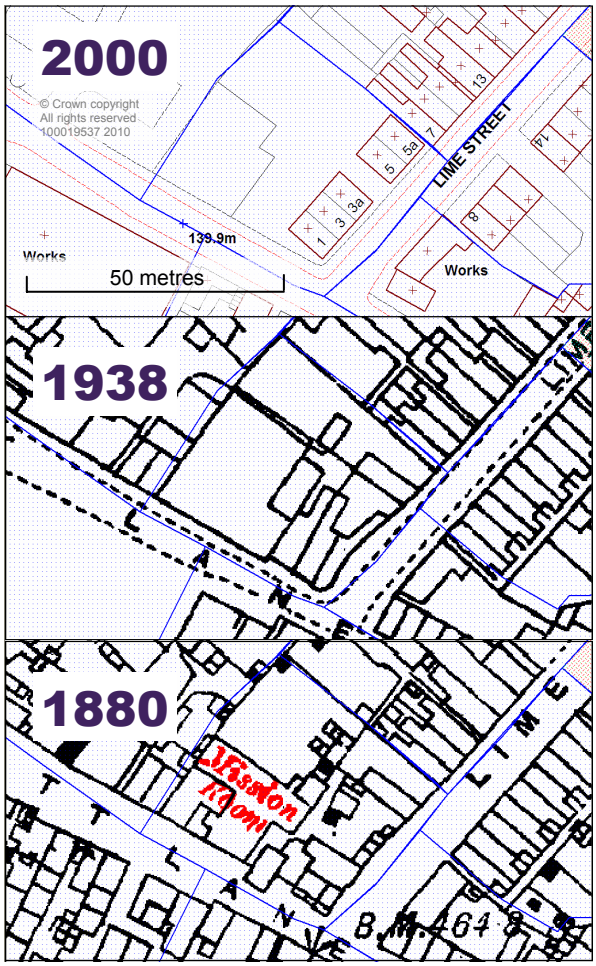
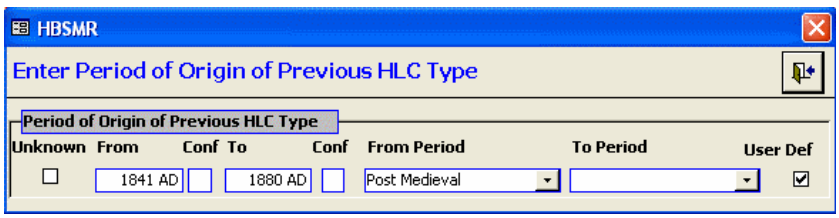


Figure 3.1: HBSMR Dialogue Box for Entering the Period of Origin of Previous Landscape Types



Clearly, the amendment of this group of several thousand records could not be achieved without some form of automated technique.

Fortunately. data are held about the period of origin of previous landscape types in fields other than *YearFrom* and *YearTo*: specifically, in the descriptions and codes given to distinguish each previous landscape type. So, in the example we have already mentioned, the church which had been built by 1880 is described as a 'Pre 1881 Anglican church' and classified by a corresponding code of *ANG81*.

So it is possible to make a generalised check whether the dates which define the period of origin, particularly the *YearTo* field, are consistent with this definition.

As illustration of this, Table 3.1 lists the 22 records of previous landscape types classified as Pre 1881 Anglican Churches, together with their *YearFrom* and *YearTo* data. It shows that there three records (in addition to HBL25 which has now been corrected) for which a *YearTo* date was recorded later than 1880 (i.e. the test which seemed to show that these dates represent the duration of existence rather than the range of possible origins).

Table 3.1: Examples of Past Land Use Recorded in the HLC: 'Pre 1881 Anglican Churches'

Identifier	Type Code	Type Description	Year From	Year To
HBL25	ANG81	Pre 1881 Anglican church		1880
HBL214	ANG81	Pre 1881 Anglican church	1868	1880
HBL333	ANG81	Pre 1881 Anglican church	1751	1880
HBL525	ANG81	Pre 1881 Anglican church		1880
HBL625	ANG81	Pre 1881 Anglican church	1881	1930
HBL2613	ANG81	Pre 1881 Anglican church	1881	2000
HBL2843	ANG81	Pre 1881 Anglican church	1841	1880
HBL3443	ANG81	Pre 1881 Anglican church	1841	1880
HBL3739	ANG81	Pre 1881 Anglican church	1881	1940
HBL3754	ANG81	Pre 1881 Anglican church	1841	1880
HBL4964	ANG81	Pre 1881 Anglican church	1841	1880
HBL5254	ANG81	Pre 1881 Anglican church	1851	1880
HBL5628	ANG81	Pre 1881 Anglican church	1831	1880
HBL6324	ANG81	Pre 1881 Anglican church		1880
HBL7313	ANG81	Pre 1881 Anglican church		1880
HBL7520	ANG81	Pre 1881 Anglican church	1836	1880
HBL7586	ANG81	Pre 1881 Anglican church	1821	1880
HBL8971	ANG81	Pre 1881 Anglican church	1821	1880
HBL10324	ANG81	Pre 1881 Anglican church	1821	**1840**
HBL10347	ANG81	Pre 1881 Anglican church	1821	**1840**
HBL10909	ANG81	Pre 1881 Anglican church	1821	1880
HBL12198	ANG81	Pre 1881 Anglican church	1821	1880

Right: Holy Trinity Church and its grounds in Smethwick. Its current landscape type within the HLC is 'Anglican Church' originating between 1881 and 1900. However it also has a recorded previous landscape type of 'Pre 1881 Anglican Church' reflecting the fact that an earlier church building existed on the same site (HBL12198).

These three records (highlighted in red in Table 3.1) were amended so that in each case the data in the *YearTo* cell was '1880' and the *YearFrom* cell was empty, reflecting the fact that the oldest possible date of origin was effectively unknown*.

Moving beyond Anglican churches, we were also able to check other 'Pre 1881' previous landscape types which were recorded with a *YearFrom* date later than 1880. In the event, there were 632 records in this category**.

All 632 records were amended so that in each case the data in the *YearTo* cell was '1880' and the *YearFrom* cell was empty, reflecting the fact that the oldest possible date of origin was effectively unknown.

Generalising even further, this check is also possible for a majority of the records of previous landscape held in the HLC. Overall, 59% of the records of previous landscape type (i.e. 15,106) were classified by these dateable categories.

The 'Pre 1881' types account for the largest share of these types which have a date embedded in their type code. Others are listed in Table 3.2, and the associated records were all checked for inconsistencies and amended in the same way. Altogether, more than 900 records of previous type were corrected in this way.

Table 3.2: Previous Type Records with a Period of Origin Implicit in their *PrevTypeCode*[a]

Group of Previous Type Descriptions (alpha order)	Total Associated Records	Records for which *period of origin* appeared to have been replaced by *period of existence*[b]
'Circa 1750…'	940	28 (3%)[c]
'Circa 1800…'	2,342	72 (3%)[d]
'Pre 1750…'	3,308	4 (0%)
'Pre 1881…'	6,291	632 (10%)
'Pre 1901…'	1,030	104 (10%)
'Pre 1911…'	534	52 (10%)
'Pre 1931…'	661	60 (9%)
Total	15,106	952 (6%)

[a] Excluding codes relating to 'Ancient' or 'Medieval' types.
[b] These were records for which the possible range of the period of origin started *after* the date used within its type description (i.e. the respective date mentioned in the first column of this table). Except where mentioned in notes c and d below, the *YearFrom* date was amended to *unknown* and the *YearTo* date to one which matched the date within the record's type description.
[c] In these cases the *YearFrom* and *YearTo* dates were generally amended to *unknown* and 1750.
[d] In 24 of these cases there did not appear to be a misuse of the date field and the records were therefore left unamended. In cases of 'Circa 1800 planned Enclosure' (42 records) the YearFrom and YearTo dates were amended to 1751 and 1820.

3.2 UNDATED PREVIOUS LANDSCAPE RECORDS

About 8% of records of previous landscape type (i.e. about 1,600) had no data entered in their *YearFrom* and *YearTo* fields. Using the information recorded in their Type Descriptions and the free text notes made at the time of the records' creation, these date fields were populated. This is detailed further in Table 3.3.

3.3 MISDATED PREVIOUS LANDSCAPE RECORDS

There were at least two frequently reoccurring dates within the tables of previous landscape types which, to a small degree at least, misrepresented the origins of these land uses.

A large number used the date 1750 to define their period of origin. These amounted to 6,721 records, more than a quarter of the total number of previous uses within the dataset. However only a small number of these (perhaps fewer than 200) actually relate to a 1750 date, i.e. the publication in that year of Taylor's map for Wolverhampton (the coverage of which only amounts to the equivalent today of part of the city centre). The remainder are representations of

*It is possible that, by examining earlier map in each location, it could be established when the earliest point might have been when this feature could have come into existence. However, for the purposes of being able to make a generalised set of amendments, it was decided to leave this field blank.
**As an aside, It was also the case that, in the sequence of 25,499 previous type ID codes, all but a handful of the 632 records had an ID code lower than 6000, supporting the point made earlier that this inconsistency in the data entry had primarily affected records made in the first part of the project.

evidence from two county-wide maps of the 18th century: Yates map of Staffordshire (published in 1775) and Taylor's map of Worcestershire (published in 1772). The way in which data from Yates map of 1775 has been represented as 1750 is illustrated in Table 3.4.

Except where they clearly relate to Taylor's 1750 map of Wolverhampton, these dates were changed to 1775 in order to more accurately reflect the cartographic sources.

A smaller issue (affecting only 691 records of previous land uses) concerns the use of the year 1930 to represent evidence from the series of fourth edition Ordnance Survey maps. In reality, in the Black Country these were generally published in 1937 or 1938. So, in the interests of accuracy, references to 1930 have been amended to 1938*.

Table 3.3: Undated Previous Type Records

Group of Previous Type Descriptions (in alpha order)	**Total Records**	**Records for which date fields were not populated**
Ancient unenclosed pasture	1,759	319 (18%)[a]
Ancient Woodland	48	39 (81%)[a]
Medieval Settlement Core	221	30 (14%)[b]
Medieval Strip fields	3,003	82 (3%)[b]
Medieval dispersed settlement	140	28 (20%)[b]
Mid 20th Century Open Cast Mine	28	1 (4%)[c]
Other enclosed fields	5,077	890 (18%)[d]
'Circa 1750…'	940	107 (11%)[e]
'Circa 1800…'	2,342	184 (13%)[f]
'Pre 1750…'	3,308	95 (3%)[g]
'Pre 1881…'	6,291	155 (2%)[h]
'Pre 1901…'	1,030	17 (2%)[i]
'Pre 1911…'	534	4 (1%)[j]
'Pre 1931…'	661	16 (2%)[k]
Total	25,382	1,609 (8%)

[a] Where the type description included the term 'Ancient' and date fields were not populated the *YearTo* field was amended to 1750.
[b] Where the type description included the term 'Medieval' and date fields were not populated the *YearFrom* and *YearTo* fields were amended to 1066 and 1539.
[c] *YearFrom* and *YearTo* fields were amended to 1931 and 1980.
[d] Where the note referred to the 2" OS map (422 records) and date fields were not populated the *YearTo* field was amended to 1820. Where the note referred to the tithe map (150 records) and date fields were not populated the *YearTo* field was amended to 1840. Where the note referred to the first edition OS map (164 records) and date fields were not populated the *YearTo* field was amended to 1880. 142 records out of 890 could not have their date fields easily populated and were left unamended.
[e] Where the type description included the phrase 'Circa 1750' and date fields were not populated the *YearTo* field was amended to 1750.
[f] Where the type description included the phrase 'Circa 1800' and date fields were not populated the *YearTo* field was amended to 1820, except in the case of 30 records which explicitly referred to tithe maps, in which case 1840 was used.
[g] Where the type description included the phrase 'Pre 1750' and date fields were not populated the *YearTo* field was amended to 1750. In the case of 59 records of piecemeal enclosure the *YearFrom* date was also amended to 1351.
[h] *YearTo* field amended to 1880.
[i] *YearTo* field amended to 1900.
[j] *YearTo* and *YearFrom* fields amended to 1901 and 1910.
[k] *YearTo* field amended to 1930.

*The same correction was also made to 5,519 records of current land use.

Table 3.4: HLC Types Including References to '1750' in Their Description and to Yates' 1775 Map in Their Scope Note

Type Code	Description	Scope Note
DPR50	Circa 1750 dispersed settlement	Where small settlements are depicted as present on at least the Yates' map and where indicated as of this age on the SMR.
INDPR	Circa 1750 industry	For sites marked on Yates' which may indicate industrial activity - on this map they are mostly watermills/windmills.
PRP50	Circa 1750 private parkland	Parkland indicated on Yates' map of 1775
RES50	Circa 1750 reservoir/mill pond	Reservoirs or mill ponds marked on Yates' map
WPR75	Circa 1750 woodland	For woodland marked on Yates' map - to be used as a previous type only.

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4. The Density of Recorded Previous Uses

4.1 THE RECORD OF PREVIOUS LAND USES

Within the HLC, 12,682 polygons are used to represent the landscape but there are as many as 25,499 previous uses recorded. It can therefore be concluded that, on average, each polygon has two previous uses, in addition to its current land use.

However, as Figure 4.1 shows, some have no previous use recorded and others have 3, 4 or more. For the purposes of analysing previous land use, it is important to ask the question as to whether this variation in the number of previous uses is real (i.e. a result of greater change in the landscape) or whether it is a product of the methodology used.

There may be several methodological reasons why the number of previous uses recorded might be different in hypothetical cases which share the same history. One is an inconsistency in the way that mapped information is interpreted.

4.2 INCONSISTENCIES CAUSED BY COMTEMPORARY PREVIOUS USES

One problem which has been faced by other HLC projects, as well as the one in the Black Country, is what to do when an historic map shows two or more contemporary land uses within the boundary of an HLC polygon. Should all be recorded? Or, should one be recorded and the others ignored? If the latter is the case, on what basis should the selection take place?

The original commentary written to accompany the data described some limitations to the information compiled. One of these was outlined as follows:

> *... the realisation (took place) very early on that because many of the polygons were fairly small it would not be possible to subdivide them to reflect different past uses on the same part of the land. For e.g. an area of inter war semi-detached housing which had been built partly upon terraces and partly upon an iron works would not be divided to reflect the two previous types. At the beginning of the project the two previous types were recorded, but over time only the most dominant was recorded for each historic map.*

In this way, polygons created in the earlier stages of the project were likely to have more previous uses than those recorded later, even if their actual landscape history were the same.

In order to test this interpretation, the overall number of previous uses recorded per polygon was analysed. However, the result of this, shown in Figure 4.2, was inconclusive. In particular it did not appear to show a clear reduction in the number of previous types recorded per polygon over the course of the data

Figure 4.1:
Previous Uses Per HLC Polygon

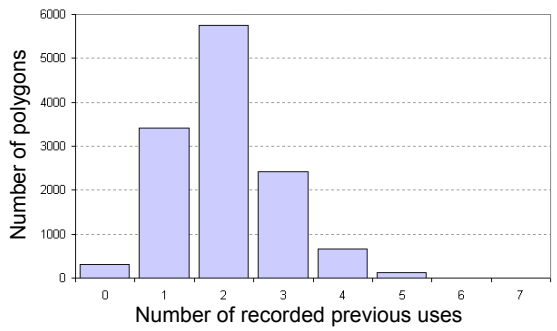
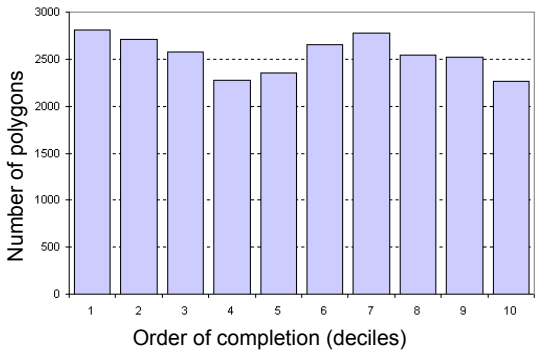


Figure 4.2:
Previous Uses Per HLC Polygon



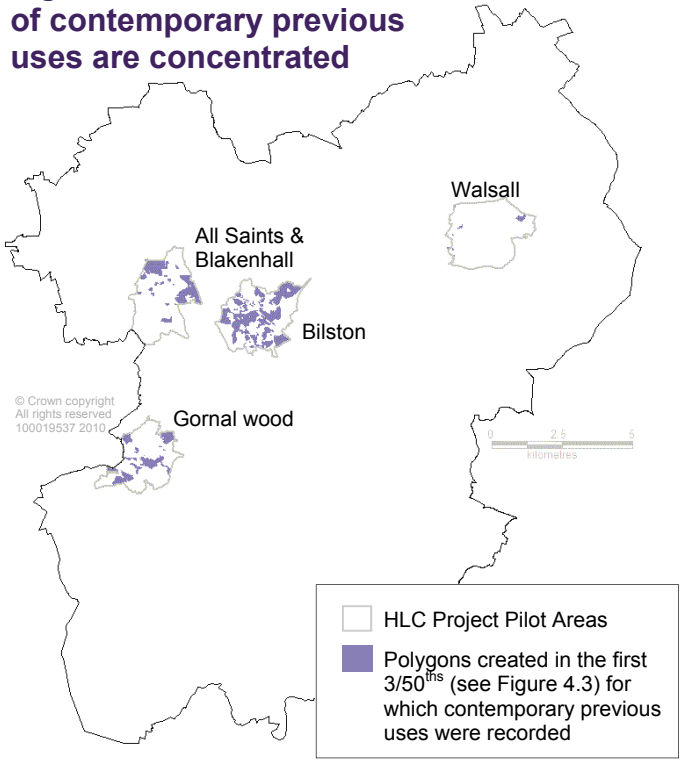
collection, nor did it show a step change as the commentary above suggests might have taken place.

As a result, a different approach was taken. Recorded previous uses were compared for each polygon. Where these had the same period of origin (i.e. the source evidence was likely to have been the same historical map) they were marked. The total number of these cases was only 513, about 2% of all the previous uses recorded. But it was not their total but their distribution which turned out to be revealing.

When they are divided according to the stage of the project in which they were recorded—more particularly by the sequence in which the polygons were created—their distribution illustrates a relatively clear change between the initial stages of the data entry (the first three fiftieths of the polygons to be created, i.e. 760 in total) and the remainder. This point, visible in Figure 4.3 below, seems to be where a decision was taken to record a predominant previous use at each historic stage, rather than all the land uses within any given polygon.

Given this information, it is possible to map the location of the polygons which fall within this first tranche (126 in all containing 153 instances of duplicated period of origin). Figure 4.4 shows the these polygons, together with those which had the same recorded end date to two periods of origin, 162 in total. It illustrates that the areas where records of multiple contemporary previous uses are recorded are almost all within the pilot areas of the project.

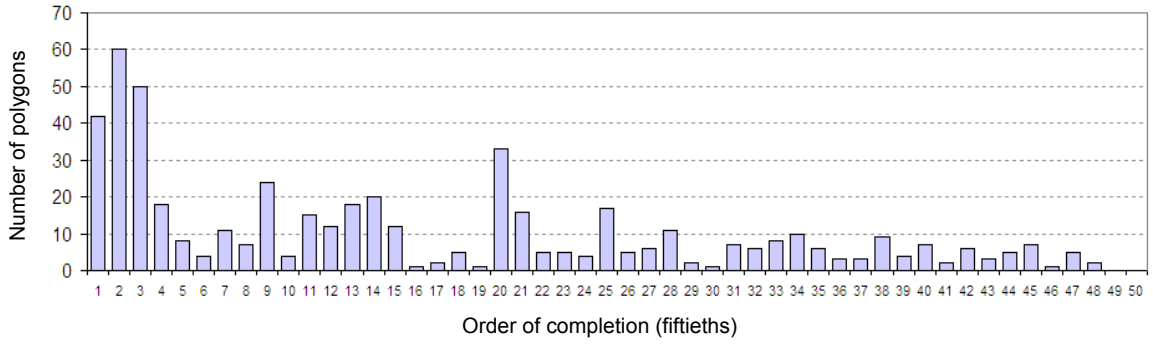
Figure 4.4: Areas where records of contemporary previous uses are concentrated



The polygons mapped in Figure 4.4. have had their record of previous uses reviewed, and the instances of multiple contemporary previous use have been reduced in line with those in created in the later stages of the project.

Ultimately, however, it is clear that, while there are particular implications for the individual locations shown on the map in Figure 4.4, the overall effect on the dataset has been small. The fact that only 162 polygons were affected out of 12,682 shows that this particular inconsistency has had no serious distorting affect on the general integrity of the data.

Figure 4.3: Polygons for Which Contemporary Previous Uses are Recorded



5. Recording Reused Buildings

5.1 THE ROLE PLAYED BY BUILDINGS IN THE BLACK COUNTRY HLC

This section will consider the question of how best to record the issue of the re-use of buildings in the HLC.

In some ways this is a question which faces all HLC projects, but it is nevertheless one which is a particular challenge in predominantly urban areas. This is because in the shire counties it is generally the land which defines the character of an area whereas in urban areas it is just as likely to be its buildings and structures.

In the case where a building defines the character of an individual HLC record, its own re-use could change the character of that piece of landscape. For example an 18th century warehouse which became a retail outlet in the 20th century (and this change of use is detected by an HLC compiler) could be reasonably have its inherited character classified a as 'retail' rather than 'warehouse'.

In response to this challenge it has been argued that the situation where an individual building both dominates an HLC record and is also retained in a change of use is relatively unusual and therefore is unlikely to distort the overall picture created by the HLC.

It may nevertheless be worth considering the question of what the approach should be to the situation where the use of

(1) a record is defined by the use of buildings rather than land use; AND

(2) this record is dominated by a single building or group of buildings (perhaps in one property which might all be affected by a single change of use); AND

(3) the building or buildings is/are retained in the change of use, AND

(4) the change of use is known about.

We might first want to ask 'how many records could potentially be affected?'

Table 5.1: Broad Types Defined by Buildings

Broad Type	Current Type Records	% of all Current Type Records
Settlement	7,490	59.1
Industrial	1,543	12.2
Public Services	754	6.0
Commercial	692	5.5
Religious	340	2.7
Total	**10,819**	**85.3**

Table 5.2: Average Polygon Area

Broad Type	Average Polygon Area (ha)
Industrial	2.56
Public Services	2.44
Settlement	2.25
Commercial	1.34
Religious	1.3

Referring to the criteria numbered 1 to 4 above:

(1) In the Black County, the vast majority of HLC records of the modern landscape are based on buildings. A simple estimate based on whole broad type categories suggests that those that are not generally defined by buildings only represent 15%* (by number).

The remainder, i.e. those which are most likely to be defined by buildings, are made up of the five categories in Table 5.1, above**.

*the broad type categories of 'Communications', 'Extractive', 'Field System', 'Open Land', 'Recreational' , 'Utilities' and 'Woodland'.
**The remaining category, 'Military', only contains six records and has been ignored for the purposes of these estimates.

Table 5.3: Records Potentially Affected by the Reuse of Buildings

Broad Type	Total	Not Affected	Affected?
Settlement	7,490	7,490	
Industrial	1,543	1,043	500
Public Services	754	180	574
Commercial	692	98*	594**
Recreational	608	608	
Open Land	472	472	
Religious	340	42	298
Communications	255	255	
Field System	239	239	
Woodland	140	140	
Utilities	82	82	
Extractive	61	61	
Military	6	6	
Total	**12,682** (100%)	**10,716** (83%)	**1,966** (16%)

*These 98 records are of mixed 'Commercial core'.
**This includes 326 pubs.

(2) As for the number of buildings in each polygon, we can consider each Broad Type in turn….

(i) Settlement

… we know from the analysis of the Black Country HLC that the average number of domestic units per hectare is probably about 30*. So, based on the knowledge that a settlement polygon is on average 2.25 hectares (see Table 5.2), we can say that it is likely to contain more than 60 properties. Assuming that a single change of use is not likely to determine the character of polygons of more than say 5 properties, this leaves only 38 settlement polygons (i.e. 0.5%) smaller than this threshold. We might therefore assume that, in general, the character of settlement polygons is not changed by the reuse of single buildings.

*This estimate is based on analysis in preparation for the publication of A Landscape Character Framework for the Black Country Regeneration Corridors (Available from: www.blackcountryobservatory.co.uk/researchdetails.asp?id=940.

(ii) Industrial

The picture here is more complicated. For example, more than 500 industrial HLC polygons (i.e. a third of all industrial polygons) are smaller than 1 hectare. Arguably, the character of these areas could be defined by a single building or group of buildings in a single property.

(iii) Public Services

The majority (61% - 461 of 754) of these are schools, and a further 113 (15%) are community centres*. These two sub-categories at least are likely to be defined by a single property.

(iv) Commercial

Almost half of these are polygons recorded as 'public houses' (i.e. 326 of 692)**, and these are generally smaller than other polygons in the commercial broad type (pub polygons average about half a hectare compared to more than 2 hectares in the case of other commercial polygons). The pubs which define these polygons, while not always the only buildings in the polygon (a small amount of housing, shops or a few industrial buildings are often included), are generally themselves a single structure.

(v) Religious

Of the 340 records in this category, the vast majority are relatively small polygons. Only a small number (i.e. 42 cemeteries) are larger areas (over 5ha, on average), while the other 298 are smaller (0.7ha, on average) and defined by church buildings. The churches which define these polygons, while not always the only buildings in the polygon, are generally themselves a single structure.

(3) So, in these cases, how many buildings have been reused?

In many cases we may not have evidence for the change in use of an individual site even if that change has occurred (this is dealt with below in (4)). However, there are some general trends which are known about which make the sites mentioned in (2) vulnerable to change. These include:

*The remainder of public services fall into the following categories: Medical facility, Higher Education facility, Emergency services building, local government/Government offices, Library, Town hall, Court Building, Public building, and Art gallery.
**The remainder of public services fall into the following categories: Commercial core, Shops, Office, Superstore, Shopping centre, Other commercial site, Plant nursery/ garden centre, Offices & shops, Retail park, Market

- The conversion of the building(s) of large individual factory sites into smaller (industrial) units, often in a managed industrial estate (a common feature of the second half of the c20);
- The reuse of school buildings as community centres;
- The decline in the number of pubs and the re -use of some pub buildings;
- The closure and reuse of Church of England church buildings.

(4) Within these categories, we might ask how many changes of use of buildings are already known to the HLC. We can summarise the information held as follows:

Factories reused as industrial estates

- There are 242 industrial estates within the HLC, and 96 of them appear to make reference to a 'works' in their description, most often to refer to a previous use. However, it is not clear how many retain buildings from their former use.
- 8 records of works make reference in their description to being currently used as industrial estates.

Schools and community centres

- Only a few descriptions of schools records refer to them having been converted or reused for other purposes.
- Similarly, a very small number of community centres have recorded (in their descriptions or in their previous uses) that they were previously schools. However, this may be a result of the little data being available for the 20th century. A post-war school, for example, which had been converted before 2000 would not be recorded as a school.

Public Houses

- None of the 326 records of pubs make reference in their descriptions or summaries to being reused or converted.
- A further 262 records (not classified as pubs) include a reference to a public house in their descriptions. Mostly these are areas of housing, and the reference to a public house is to record its presence inside the modern polygon. Few if any records (in their descriptions) record the conversion of a pub to another use.

Churches

- Only one of the 298 records of religious buildings in the HLC makes reference to it having a more modern use (the church in HBL3143 has been reused as offices).
- Although perhaps a hundred other types of polygon record the presence of a church (in its more detailed description) , few if any record its conversion or reuse.

In summary, as Table 5.3 illustrates, close to 2000 (16%) of HLC records might be open to being affected by a change in use of a building or associated group of buildings. However, very few changes of use are presently recorded in the HLC data. This may reflect an absence of information, rather than the infrequency of reuse.

Below: The *Light House Media Centre* in Wolverhampton. One of the most prominent re-uses of a building in the Black Country (*Photo reproduced with permission of Wolverhampton City Council Conservation Team*) (HBL3435)

5.2 APPROACHES TO RECORDING REUSED BUILDINGS

So, how should we record any changes of use we encounter?

Where all of the four conditions (above) apply, the approach which is currently taken in the data is based on the perceived historic character of the area rather than its strict land use. To take the example mentioned in the first paragraph of these notes, the record would probably be classified within our 'Industrial' broad type (with an 18th century origin) and reference would be made in the (free text) description to its new modern use for retail purposes (assuming the building retained the character of its earlier use).

However, we might want to ask whether there is any merit in relying more on the land use to define the record? In other words (in the case of our example) to record the warehouse within our 'Commercial' broad type (with a 20th century origin) and associate with it a previous type of Industrial-warehouse of 18th century origin.

Some advantages of this second approach might be that:

- the first approach assumes that the building retains the character of its earlier use. This assumption may have to be made with little evidence, especially where no data exists from maps or aerial photos. In addition, where a building has multiple previous uses, it would be necessary to judge which of these was its original or 'character defining' use (and these two may be different);
- the second approach, based simply on use (or, more strictly, most recent known use), allows a more objective classification of the modern landscape. While the issue of poor information on changes in use may exist in the same way, where a change of use is known about it can be recorded without any further assessment;
- the second approach allows more information to be stored (more consistently) about the modern use. In other words, if a change in use is recorded only in the free-text description, it is more difficult to ensure that all the data on period of origin, attributes, and sources of information are included. In giving the modern land use equal emphasis, the second approach is more in line with the principle that the HLC should be a record of the modern landscape;
- the second approach allows changes in use to be searched more comprehensively. So for example, we can search for shops which were previously warehouses using only the types classification and without having to search for text phrases in the description field. (the first approach might also mean that some intermediate changes of use may not be recorded at all – if a warehouse became a pub and then a shop, it might be recorded as a warehouse with a modern use as a shop);

If the second approach were to be adopted, it might be necessary or useful to devise a consistent way of recording that buildings had been retained from a previous use. This would distinguish these cases from changes in use as a result of demolition/rebuild.

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www.wolverhampton.gov.uk/hlc