

design  
informatics



THE UNIVERSITY of EDINBURGH

**Data Science For design**  
**Assignment3**  
**Group Report**  
**The Survey of Scottish WitchCraft**

Yue Tang s1736676

Zongcheng Zhu s1575008

Hongfu Li s1700261

## **Context**

Witch trials in early modern Scotland were the judicial proceedings in Scotland between the early sixteenth century and the mid-eighteenth century concerned with crimes of witchcraft. It should also be remembered that many 'witches' were defined as witches by their neighbours, through a process of gossip and quarrelling. Witches were believed to be malicious and vengeful. If someone suffered a misfortune after a quarrel, they might conclude that the other person had bewitched them in revenge. In trials involving neighbours' testimony, the accused witch is often seen to have lived with their reputation for a long time—twenty or even forty years. These witches were old when they were tried, but they were younger when they first acquired their reputation. It is not like the Harry Potter magic world which public are interested in. It included violence, abuse, torture and injustice. This is a dark chapter of medieval European history and human civilization.

## **Data Description**

Our database is a description of survey of scottish witchcraft database and it is a .mdb file, we export the database as the csv file to analyze. For the different aims of data holder, our group is focus on the trial data, so there are three related tables that describe the witch trial. The database consists of three levels. Each level contains a series of linked tables, some of which are reference tables that supply set lists of possible data for specific fields. Firstly, the level one is 'Accused' Description. The 'Accused' table contains biographical information about each accused witch. Secondly, the level two is the description of 'Case'. The witchcraft case records the series of events and specific accusations that emerged from a denunciation of a person for witchcraft involving either ecclesiastical or civil authorities, or both. Moreover, the level three is the trial process'. The first part of the third level of information in the database is the witchcraft trial. Another part called 'References', which lists all the primary references (manuscript and printed), examined by the researchers, that refer to an individual accused.

According to the huge scale of this database, our group is focus on the trials of witchcraft, and the people who involved in the trials. The table 'WDB\_Trial' concluded 3,211 data and the attribute 'trialRef' is the unique key to link another table 'WDB\_Trial\_Person'. The one trial related to one 'trialRef', but one 'trailRef' could related to several trial person. Therefore, we trying to find out the relationships and interesting things from our data.

## **Findings**

Our group is intended to analyze the database around the witch trial. In our data, it records 3,211 trials, but just 307 cases have been completed shown based on the sentence. Therefore, our findings are based on these 307 cases and the people who involved in the trial.

Firstly, in terms of the trail date, these trials mostly happened from 1563 to the early 17th century. There are three periods of time that the trials placed frequently that 1597, 1658-1660, 1697-1700. In our video, we use the galaxy to represent our time line, and these 3 periods are the brightest area in the galaxy. What we do not present in our video is that there are 4 types of Trial, but we do not know the detail of the type. However, from 1597 to 1649, the type 2 was the primary one and it placed in a lot of trials, followed by the type 1. Moreover, after the 1658, the type 3 is the mostly type and similar with type 1. Having considered that some witches have been executed, we find out that the process of trial to execute is quite fast such as happening in the same year. In addition, we can find that everyone who was involved in the 4 trial type was not arrested.

Secondly, based on the sentence, we find out that there just 307 cases have been recorded completely. According to the 307 cases, there are 67% witches have been executed and other one third included relased, pull to the horn, public humiliation, prison and hang. Among the executed witches, there are 4 differents way of

execution, which is the strangle with burn, beheading, burn and hang. The strangle with burn takes the most proportion about the execution way.

Thirdly, about the places of trial, the Aberdeen and Edinburgh are commonly happened about the trial. In our video, we make the stars move to the Scottish map from the galaxy. And the distribution of the stars is related to the number of trials in different places. What we have not presented in the video is that the relationship between the trial type and the places. The type 2 also takes the mostly proportion in each cities. Moreover, the type 1 and type 3 just happened in Edinburgh.

Last but not least, the trial table has an attribute named 'TrialRef' that one 'TrialRef' related to one trial, and one 'TrialRef' could be related to several trial person. What's surprised for us is that the most large number of person who involved in one trial is 17, but mostly is just one. For the person who have involved in each trial included different roles like chancellor, minister, defense, prosecutor. Among all trials, there has 247 prosecutors, which is the most proportion in all involvements. The number of chancellor is 141 followed by the prosecutor. Other roles such as defence, Sheriff-depute, minister, judge, and complainer have similar number around 20.

In conclusion, witches were not the people who have magic power but were treated very unfair. And the witch trials were unjust as well. We can find that many accused witches were sentenced to death. Actually, the data we have tells us many things related to witch trials and we have already shown them in our assignment 2 and 3. However, our data is not complete recorded so that we could not find deeper information. In the future, we may have more chances to work with the data holder and to find out more interesting thing about the Scottish witchcraft.

## **Video**

To tell the story, we made a video about what we have found out. The thing that we have not represented in our video that discussing at the other parts of this report.

Here is the link of our video:

<https://www.youtube.com/watch?v=wtzv-5tVpoQ&t=1s>