



Flax

Flax is a language learning software that analyses large data sets using text mining techniques such as collocation measures. In short, collocations are two or more words that are commonly used together often in the form of an adjective + noun (*e.g. red herring*) and noun + noun (*e.g. sibling rivalry*)

The software shows collocations in order of frequency i.e. collocations that occur most often. It also allows the user to view the sentences the collocation appears in, so as to provide context.

At present Flax analyses Wikipedia articles to determine collocations. However, instead of Wikipedia, this software could analyse data from Addington such as Addington Times.

The collocations identified within the data from Addington Times would highlight reoccurring topics, providing a better understanding of the priorities of the community. The ability to contextualise the data also allows us to tell a story, capturing the evolving heritage of Addington.

For example, if we type 'heritage' into Flax the following collocations occur in order of frequency. Immediately, we can see that when people spoke about a 'heritage', it was most often in relation to 'cultural heritage'– this reflects a priority

adjective + heritage	cultural heritage	1714	Jewish heritage	354
	rich heritage	291	architectural heritage	236
	natural heritage	188	common heritage	179
	German heritage	176	industrial heritage	173
	Irish heritage	164	musical heritage	162
			>>> more	
heritage + noun	heritage site	590	heritage railway	476
	heritage buildings	227	heritage centre	127
	heritage railroad	117	heritage line	87
	heritage value	85	heritage property	79
	heritage significance	66	family heritage	65
			>>> more	

Flax then allows the user to look at the 1714 sentences in which 'cultural heritage' appears in order to better understand the context. In this example, we can see that cultural heritage is spoken about in relation to industry.

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			>>> more		
industrial heritage	173	industrial heritage museum	5	important industrial heritage sites	3
industrial heritage site	3	important industrial heritage site	3	industrial heritage sites	2
strong industrial heritage	2	British industrial heritage	2	local industrial heritage	2
long industrial heritage	2	significant industrial heritage	2	industrial heritage discovery centre	1
old industrial heritage	1	significant industrial heritage buildings	1	industrial heritage trail	1
Japanese industrial heritage	1	varied industrial heritage	1	national Dutch industrial heritage monument	1
great industrial heritage	1	industrial heritage park	1	industrial heritage centre	1
original industrial heritage	1				
industrial mining heritage	1				
nineteenth-century industrial heritage	1				

Located immediately south of Manchester city centre, it is an area with **significant industrial heritage**.
Cleveland has a **significant industrial heritage** arising from its central role in the 19th century iron boom that led to Middlesbrough growing from a hamlet into a major industrial town in only a few decades.

Capisco

Capisco is a 'smart' search engine that relies upon semantic clustering as a method to communicate data. It is presently used by the HathiTrust Digital Library to search for articles in its digital archive. To understand the basic workings behind the software, I will use an example:

A student is undertaking a project on 'Niue' - a small island nation in the South Pacific Ocean. To begin with he/she searches using the word 'Nuie' which brings up all the articles with the word in. However, Niue is just one name for island - another name is 'The Rock of Polynesia', 'Savage Island' etc. So, Capisco recognizes all the possible words used to reference Nuie. However, there is a problem, the phrase 'Savage Island' may not always be referring to Nuie, so Capisco then uses semantic clustering to contextualize of the word so it knows when 'savage island' is being used within the context of Nuie. This ability to contextualize the word means that the even the word Nuie is not highlighted unless it is relevant to the island - as Nuie could mean something different in another context.

Capisco can be used to tell stories from large amounts of text data by breaking it down into manageable bite size amounts that would otherwise be too big and complex to digest. The application of the software is to be explored further.

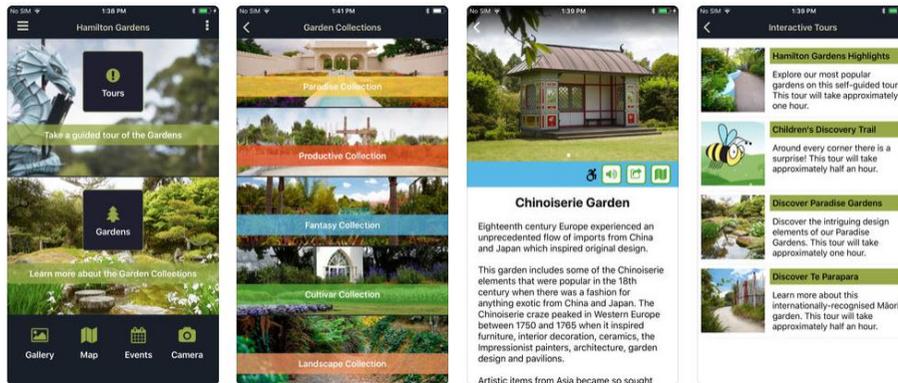
The screenshot shows the HathiTrust Semantic Search interface. At the top right, there are links for 'Semantic Search', 'Worksets', and 'Expert Mode'. The HathiTrust Digital Library logo is on the left. The main heading is 'HathiTrust Semantic Search' with the instruction 'Enter your terms separated by a '|'' below it. A search bar contains the text 'Niue | Samoa | James Cook' and a magnifying glass icon. Below the search bar, there are two columns of search results. The left column lists results for 'Niue' (13 docs), 'Niue International Airport' (0 docs), 'Niue national football team' (0 docs), 'Music of Niue' (0 docs), 'LGBT rights in Niue' (0 docs), 'List of birds of Niue' (0 docs), and 'Niue at the 2006 Commonwealth Games' (0 docs). The right column lists results for 'Niue national rugby league team' (0 docs), 'List of mammals of Niue' (0 docs), 'Niue national rugby union team' (0 docs), 'Postage stamps and postal history of Niue' (0 docs), 'The Church of Jesus Christ of Latter-day Saints in New Zealand' (0 docs), 'Niuean records in athletics' (0 docs), and 'Women in Niue' (0 docs). At the bottom, there is a filter bar with 'Niue', 'Samoa', and 'James Cook' selected, and a 'Find Documents' button.

Tipple

Tipple is a mobile location-based software which collects, archives and curate's data. In our view, there are two mobile apps which could be appropriated for the purposes of capturing Addington's heritage.

Hamilton Gardens

Using the basic premise of the 'Hamilton Gardens' app, a mobile app could be developed so that when people are in a specific location in Addington a notification appears on their phone telling them about the story behind the place/object – this could be in text or audio format. This mobile app could be used as a guided tour or in a more impromptu fashion whereby a notification only appears when you in a relevant area.



Catch a Carp

The second app that could be repurposed is Catch a Carp which asks people to submit data on carp sightings. It is a simple three click app which requires people to record the number of carp spotted, the location of the carp and a photo of the carp. This could be revised for the purposes of Addington.

1) likes/dislike 2) multimedia (text/photo/audio) 3) location.

The parameters of Tipple are yet to be explored in full, but the ability to include user-content is seen as key in order to ensure people living in Addington have a sense of ownership of it, so continue to use it.

