Pip Thornton, PhD researcher, Royal Holloway, University of London

My contribution to researching value is based around how much words are worth in a digitally networked society, and how the language we use to communicate and express ourselves has become infused - and indeed compromised - by the pervasive and invasive neoliberal market logics of proprietary tech companies such as Google. It might seem like an obvious received wisdom to say that the value of language is subjective; irreducible to - and unconstrainable by - financial quantification, and that language is not fixed - in meaning or aesthetic value - but rather it is fluid, liquid, limitlessly deferable. But these are assumptions that do not take into account the forces and logics of what Frederic Kaplan (2014; see also Bruno 2012) has called ‘linguistic capitalism’, whereby words are given an economic value, and auctioned to advertisers through Google’s AdWords platform as tools with which to claim and colonise the prime locations on a search results page. In this way, the language that flows through digital space is not liquid at all, but is chained to an overriding economic value, irrespective of its value or worth in other contexts (Thornton 2017).

Figure 1.
Part of my response to this commodification of language is a critique of linguistic capitalism by means of artistic intervention. As I see it, in today’s digital economy, the words we submit through the platforms and portals of the web are stripped of their aesthetic, narrative value in favour of their exchange value, and this mediation of language by powerful and opaque companies such as Google has significant political, as well as cultural consequences. Language is – and has always been – a tool of power over both people and places, and we must strive to expose these tools of power whenever, and by whatever means, possible.

{poem}.py is my method of making visible the workings of linguistic capitalism by feeding poetry and other texts through the valorizing systems of Google’s search and advertising platforms (Thornton 2018). Google AdWords’ keyword planner gives advertisers a suggested bid price for words and phrases so they can enter the market at an appropriate price. I harvest these derivative prices, and use them to expose the contextual tensions in this linguistic economy, printing the monetised poems out as analogue receipts which become aesthetic artefacts in their own right. In this way, the {poem}.py project seeks to reclaim language from the algorithmic market, and return it to art.
Most and Least of Research Value/s
by Christian, Geoff, Pip & Google

SALE
30th Jun 2018 2:05PM
BATCH #: CRC32
AUTH #: 4150522913
AREA #: ALL

1 company values examples £11.80
1 wealth account £5.98
1 jansky £12.79
1 possible invention ideas £9.07
1 independant office £4.32
1 penn state personality test £5.32
1 and antacid definition £5.68

SUBTOTAL £54.96
TAX: N/A
TOTAL £54.96

APPROVED
Thank you for shopping at Google
CUSTOMER COPY
{poem}.py
Figure 2.

But as we all know, artistry is not restricted to poetry. Indeed, my contribution to this issue harnesses Christian Ulrik Andersen and Geoff Cox’s carefully crafted introduction, and reworks it in three ways. Firstly, and in keeping with the primary function of my project, I have fed the whole of the introduction though {poem}.py and produced a receipt (see Figures 1 & 3). In this way we can see that, to Google, the word value actually holds relatively modest amount of economic value, coming in at 15p a click (see Figure 4). In contrast, by far the most valuable word in the introduction is quantify, which commands a suggested bid price of £8.98. It seems then, that the process and mechanisms of valorization – the very means of value production (by quantification) – is where the true value of value lies. That this means of valorization relies on algorithmic systems of computation, rather than by human judgement, is perhaps confirmed by the fact that machines are worth 3.5 times more than humans in this digital marketplace (see Figure 5).
Indeed, given the subject matter (and its economic lexicon) Christian and Geoff’s introduction is an interesting text to analyse in this way, so I thought it needed further investigation/visualisation. I have therefore also used the text to experiment with two further methods. My second reworking utilises another function of Google AdWords, which is to suggest alternative keywords and phrases for whatever the keyword planner thinks you might be trying to advertise. This is in effect a way to reverse engineer how Google’s algorithm interprets the words we enter into the search bar. In the past I have gathered this data for poems and manually reconstructed the text into a reworked ‘co-authored’ poem, but this time I wanted to take a step back and let the market speak for itself. My second intervention therefore generates long-tail keyword suggestions for the individual (punctuation delineated) phrases within the opening sentences of the introduction. The first step was therefore to chop up the opening sentences and reconstruct them into a traditional poetic format:

**Most and Least of Research Value/s**  
by Christian, Geoff and Pip

There is value and there are values.  
There is the measure of wealth,  
metrified and calculated in numerous ways,  
and there are ideas,  
ethics,  
preferences of taste,  
and customs of ideology.

I then ran the new ‘poem’ through the Google AdWords keyword planner, replaced each line with the most economically valuable suggested keyword/phrase, and rewrote the poem, which came out as follows (see also Figure 2 for an image of the reworked intro-poem with suggested bid prices for top alternative keywords):

**Most and Least of Research Value/s**  
by Christian, Geoff, Pip & Google AdWords

Company values examples.  
Wealth account,  
jansky,  
possible invention ideas,  
independent office,  
penn state personality test,  
and antacid definition.
My third reworking takes the first paragraph of the introduction, feeds each individual word through the keyword planner, and then reconstructs the text in order of monetary value. The result is a paragraph shrunken by repetition, yet structurally bloated with commercial worth. As we have seen above, quantify is the most valuable word (£8.98); rightfulness the least (£0.00). The words in this piece are in order of suggested monetary value; all I have done is add punctuation. The result is a reworking - or re-rendering - of the text, exposing the hidden commercial influences of the words we use in our everyday lives.

**Most and Least of Research Value/s REDUX**

Quantify by customs with infrastructures of scale. It tied can imply ideology is when together contemporary. That but in such how on from Thornton, two reworking preferences or understand giving to this. The, and well, Pip technical metrified; prefer perform associated processes happens certain. Are a ethical surplus ideas something value? Likewise wealth; nothing one do affords like particular circulation. Here introduction new ways what there measure calculated beauty. We ten really taste easy numerous themselves; conflations ironicized, valorization, aesthetical rightfulness.

The interventions and reworkings I have presented here aim to reveal the paratextual forces and economic logics that, in an age of ubiquitous digital technology, mediate and control what is one of the most vital human technologies; that of language. And when the value of words becomes irretrievably enmeshed with the logic of the market, we must do all we can to shine a light on those who own and benefit from that market. I'm looking at you, Google.
Most and Least of Research Value/s
by C. U. Andersen & G. Cox

SALE
30th Jun 2018 7:59PM
BATCH #: CRC32
AUTH #: 3409575360
AREA #: ALL

| 7 | there | £0.42 |
| 25 | is    | £12.50 |
| 33 | value | £4.95  |
| 69 | and   | £20.70 |
| 9 | are   | £1.98  |
| 19 | values | £2.85 |
| 66 | the   | £20.46 |
| 1 | measure | £0.06 |
| 49 | of    | £53.41 |
| 2 | wealth | £0.28  |
| 1 | metrified | £0.26 |
| 1 | calculated | £0.06 |
| 21 | in    | £9.45  |
| 1 | numerous | £0.01 |
| 6 | ways  | £0.48  |
| 2 | ideas | £0.36  |
| 2 | ethics | £0.40 |
| 3 | preferences | £1.02 |
| 2 | taste | £0.04  |
| 1 | customs | £1.80 |
| 1 | ideology | £0.52 |
| 12 | that | £5.64  |
| 3 | two  | £1.11  |
| 4 | can | £3.48 |
| 7 | be  | £16.45 |
| 3 | associated | £0.75 |
| 1 | together | £0.48 |

2 | they | £0.52 |
1 | operate | £0.23 |
2 | kinds | £4.82 |
2 | socialities | £0.50 |
1 | exchanges | £0.54 |
1 | might | £0.33 |
1 | imagine | £0.32 |
1 | recognize | £0.67 |
1 | subsumed | £0.00 |
1 | human | £0.10 |
1 | nonhuman | £0.00 |
1 | assemblages | £1.04 |
1 | machine | £0.35 |
1 | imaginaries | £0.00 |
1 | possible | £0.18 |
1 | engender | £0.04 |
1 | radical | £0.38 |
1 | systems | £0.07 |
1 | responded | £0.02 |
1 | volume | £0.02 |
1 | active | £0.16 |
1 | precarious | £0.16 |
1 | claiming | £3.45 |
1 | nor | £0.11 |
1 | points | £0.36 |
1 | itself | £1.41 |

SUBTOTAL £522.78
TAX: N/A
TOTAL £522.78
APPROVED
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{poem}.py

Figures 4 & 5.

Notes

[1] Making Christian and Geoff’s introduction into a poem was not hard, indeed the first two lines have a distinctly Shakespearean feel to them: “There is value and there are values / There is the measure of wealth.”
Works cited


