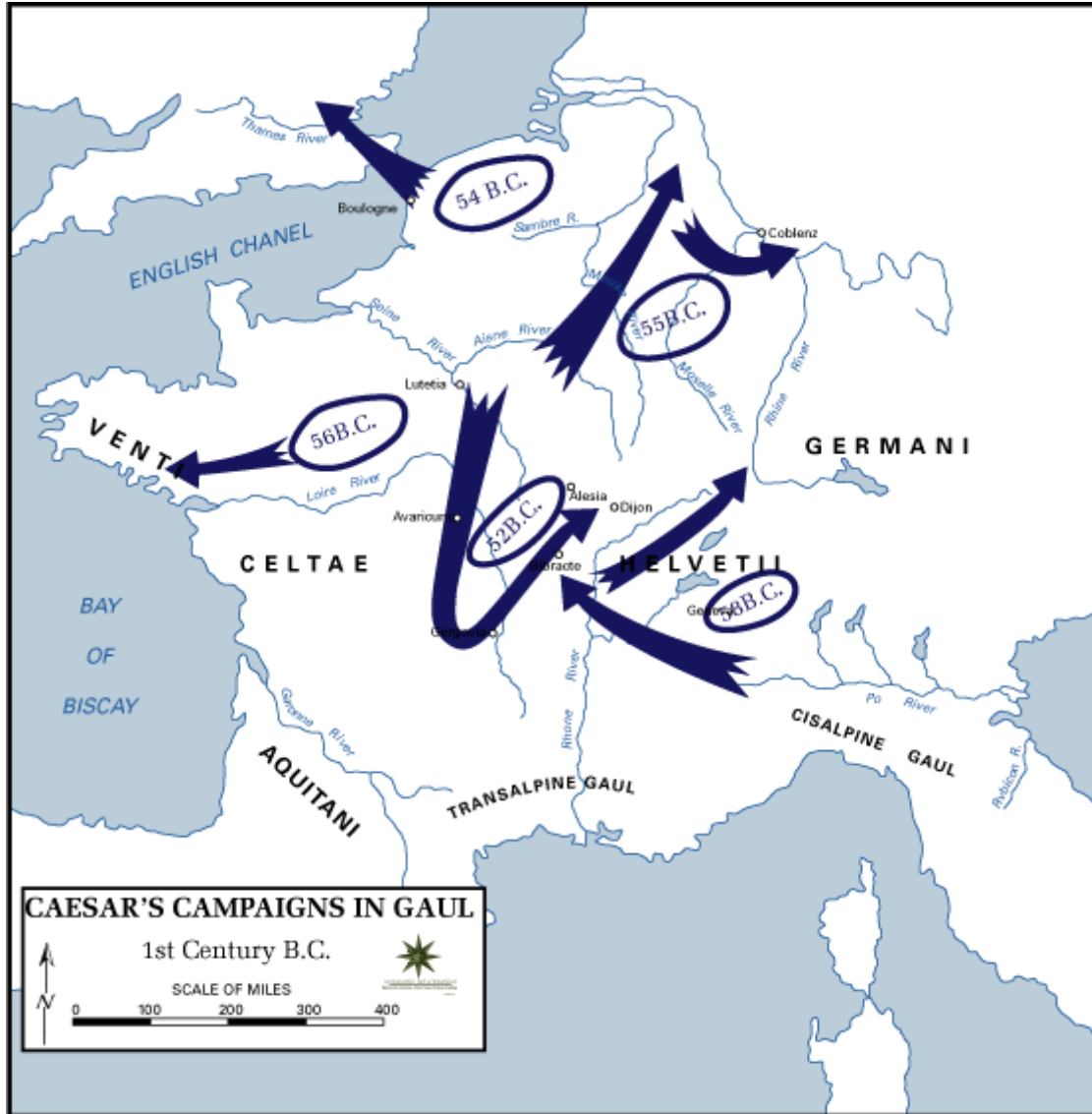


Data, Information and Knowledge



Europe 58 BC, the armies of the Helvetii, having pillaged neighbouring lands, were pursued by Julius Caesar and his legions.

When Caesar caught up with the Helvetii, they stood taunting him on the opposite side of the river Arar.

Caesar's officers urged pressing forward across the shallow river and engaging the Helvetii. As Caesar considered this, he noticed a wizened old Roman frantically scribbling on sheets of parchment. Caesar was intrigued.

"You there, what are you writing?"

The old man bowed, and handed a parchment to Caesar.

“This parchment is covered in numbers!” said Caesar “what is the meaning of this?”.

“There is no meaning” said the old man, “they’re just numbers, but if I show you this sheet, you will see the context of those numbers”.

Caesar took the sheet from the old man.

“You see, this sheet tells you what the numbers represent, so holding it above this one, you see what the numbers mean and you have data on your legions.

Caesar was intrigued. “So I can see the details of every centurion within these legions -their age, years of service, weapons specialism.... This is very interesting, but I can’t go through all these sheets, you’ve hundreds! After looking at a few I’ll forget what is on the first!”.

“That’s what this special sheet is for”. The old man offered another parchment.

“And what’s this?” asked Caesar.

“I call this the Aggravation sire, on account of the amount of aggravation it took to compile it”.

“The Aggregation?” said Caesar (who was a little deaf).

“err yes sire, the AGGREGATION” said the man, not daring to contradict the emperor.

“And what does this aggregation do then?” asked Caesar.

“Well, although the data is interesting, it isn’t accessible because there is too much. We have so many centurions and I have noted many facts on each. The aggregation represents all this data on a single sheet by summarising it”.

“Very useful!” said Caesar, “I can see the average age of a Centurion is 32, the highest number of men sick occurred on the 7th day of Janus, I’ve twice as many spearmen as swordsmen, the average encumbered weight of a centurion is 368 pondus...This gives me information on my centurions like never before, but what of the river?”

“Well” said the old man “Local knowledge can add interpretation to information. Yesterday I spoke to a man who once fought the Helvetii, he described them as being cunning and having won many battles by virtue of trickery”...

...“and this morning a woman told me that although the river is shallow, the bottom is soft with deep mud”. Indeed her husband had been fishing in the river only a few days ago and found himself nearly stuck fast”.

Caesar’s eyes narrowed. “And the weight of the husband?”.

“Barely 200 pondus Caesar”.

“Then this is a trap – if we cross the river my centurions will become stuck and the Helvetii will rush in unencumbered and slaughter my men”. Pass word, we will not advance”.

“Ah” said the old man, “Caesar has the wisdom of Minerva”.

“And you” said Caesar “are a very clever old man, enabling me to make the right decision like that”.

“Quite so” said the old man “You might even say I’m in the business of intelligence”.