A POSSIBLE COUNTER - EXAMPLE TO F.A.H.Q.M.T.?
by
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In the body of the paper a set of criteria are given for possible counter-examples to M.T.

The passage given below fulfils all these criteria. It is an actual passage, it has a context, it is translatable by a human translator, and, in my view, it contains inversions and ellipses which make it liable to fault any normal type of M.T. programme for finding grammar-andsyntax.

Two types of test have been done on this passage. Firstly, a rough and ready attempt was made with an ad hoc thesaurus to semanticise as much as possible of the grammar or syntax, thus assimilating them to the semantic content which formed the subject-matter of the sentence. (The grammar and syntax which could not thus be semanticised was dropped; but context-structure lattices (cf. What is a thesaurus? Section $V$ ) were made of the separate sentences.

This test was done with a sorter and with a blackboard, and the packs of cards which were used in it exist; but the actual test, (which was repeated twice, with 2 packs) has not been written up yet. It is to be incorporated in our next report, the object of which is to give as full an account as possible of tests to date. Robey's Latin (2 vols.) Grammar was used to provide grammatical information for the test. The unexpected degree of success achieved by this test was due to a fact which we had not noticed before but which is extremely obvious once you have noticed it. This is that a particular function of any grammatical or syntactical device, in a language, will always intersect, thesauruswise, with something else in the sentence. Thus, Latin Ablative of Instrument will only occur in a sentence in which there is some other reference, beside the Ablative, to the instrumental idea. (That is why it is called an Ablative of Instrument; because, in contrast to other

Ablatives, it occurs in "instrumental" sentences.) As soon as a really detailed, (i.e. contextual) account is made of any grammatical form, such as is made in Robey's 2 -volume Latin Grammar, it becomes clear that the grammarian's only way of separating variants, (e.g. the Ablative of Instrument from the Ablative of Time When) is to contextualise them; to point out that the Ablative of Instrument occurs in "instrumental" sentences, and the Ablative of Time When in sentences is which the idea of time is already being discussed.

The (notorious) Latin construction of the Ablative Absolute faults this assertion: fortunately, there was no Ablative Absolute in the paragraph.

To sum up: Examination of this paragraph, and the succeedones, with an ad hoc Thesaurus shows reason to think that a writer tends to construct a separate sub-grammatical system for each paragraph, subtracting from his language those semanticisable grammatical devices which are semantically cognate to his subject-matter.

The second thesaurus-test which was done on this paragraph was an attempt to translate the first sentence completely, with a full thesaurus, The crushing labour of constructing the full dictionary-entries caused this fullscale attempt to be abandoned; the entry for "in" alone, which has 200 heads, took me over 6 weeks part-time work to prepare. The attempt, however, suggested a fresh translation for "omnis" in the first sentence (see note below): no mean feat in the case of a text which has been daily commentated on for 300 years.

The translation given below is by the present author. The words inserted for smoothness are shown enclosed in brackets; notice also how rarely either the grammatical forms or the sentence-lengths remain unchanged.

This first half-paragraph of Caesar's text is, of course, a known difficult passage. Nevertheless, this is what highquality non-mechanical translation is supposed to be like; i.e. a version which strikes out from, rather than grammatically clinging to the forms of the original text.

## PARAGRAPH 1.

Sentence 1

Sentence 2

Sentence 3

Sentence 4

GALLIA EST OMNIS
"Gaul, broad and large(1), divides D I V I S A I N P A R T IS into three parts. One of these is inT R E S : Q U A R U M U N A M habited by the Belgians; I N C O L U N T B E L G A E another by the Aquitanians; and the A L I A M A Q U I T A N I third by (a people who)in their own T E R T I A M Q U I I P S O R U M language are called Celts, whereas in L I N G U A C E L T A E in our language we (are accustomed to) N O S T R A G A L L I call them Gauls". A P P E L L A N T U R

H I OMNES LINGUA "These differ from one another (radically); I N S T I T U T I S , L E G I B U S in custom, law, and tongue. I N T E R SE D I F F E R U N T (Their territories also are geographically separated);
G A L L O S A B A Q U I T A N I S the river Garonne separates the Gauls G A R U M N A F L U M E N from the Aquitanians; the Marne and the B E L G I S M A T R O N A E T Seine separate them from the Belgians." SEQUANA D I VI D I T
H O R U M O M N I U M
"By far the most courageous(and formid-
F O R T I S S I M I S U N T
able) of these three are the Belgians.
B E L G A E, PR O P T E R E A
This is (firstly) because, (being furthest
Q U O D ACULTU AT Q U E
off geographically, they are the least in H U M A N I T A T E P R O V I N C I A E contact either with the culture or civilisaL O N G I S S I M E A B S U N T tion which we (ourselves) have developed in Gallia Narbonensis.

Sentence 5


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M I N I M E Q U E A D E O S
(Moreover,) they are least often
M E R C A T O R E S S A E P E
visited by merchants introducing
C O M M E A N T A T Q U E E A
(these commodities) that (make for)
Q U A E AD E F F E M I N A N D O S
effeminacy(2)
A N I MOS P E R T I N EN T
I M P O R T A N T
(They are strong, finally, because)
P R O X I M I Q U E S U N T
(their relations with) their nearest
G E R M A N I S Q U I T R A N S
neighbors, - the Germans, who are
R HE N U M I N C O L U N T
separated from them (only) by the Rhine
Q U I B U S C U M C O N T I N E N T E R
(is such as to enhance their manly
B E L L U M G E R U N T
qualities); it is one almost uninterrupt-
ed warfare."
\begin{tabular}{|c|}
\hline Q U A D E C A U S A \\
\hline This last factor (te \\
\hline H E L V E T I I Q U O Q U E \\
\hline (also) (in the case of) the \\
\hline R ELI Q U O S G A L O S \\
\hline (This tribe) (considerably) excels the \\
\hline V I R T U TE P R A E C E U N T \\
\hline rest of the Gallic (tribes) in courage, \\
\hline Q U O D FERE COTI D I A N I S \\
\hline because, (like the Belgians), they \\
\hline P R O E L I S C U M G E R M A N \\
\hline (also) are engaged in almost daily \\
\hline C O N T E N D U N T, C U M A U T \\
\hline skirmishes with the Germans, either \\
\hline S U I S F I N I B U S E O S \\
\hline stopping (Germanic) invasions or in- \\
\hline P R O H I B E N T A U T I P S I \\
\hline vading back. \\
\hline I N E O R U M F I N I B U S \\
\hline E L L M G \\
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\end{tabular}
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Notes:

1. When this first sentence was translated with a full thesaurus, without insertion by syntax, the set of permitted translations for "omnis" was the whole of the following:

Complete, in the main, entirely; consummate, world wide; widespread, for the most part; completeness, integration, unity, entirety, totality; all, complete, entire, whole; wholly, altogether, totally, throughout, every inch; comprehensive, sweeping: all.

The problem for the machine, faced by this set, is to produce, firstly, the best possible translation, and secondly, a unique output. The directive "Take only the prepositional phrases" would get the right answer: what is not solved is how to make the input text yield this directive.

The tendency of mechanised thesaurus-operations to throw up, intermittently, new and interesting translations (such as "for the most part" and "in the main" for this context of omnis) is exemplified also in the translation of incurvo, in the line from Vergil's Georgics, Agricola incurvo....etc.". given elsewhere in this volume. The translations "crooked", "bent", "twisted", for incurvo are highly interesting; they may be wrong, and as I think, they have not been given, up to now, by translators; but they make a much more vivid line of the whole passage in English,
2. This sentence is by J.H. Edwards (Loeb Classical Library). It is better far than anything which either I or the thesaurus could think of.

