

(XV. MECHANICAL TRANSLATION)

might be generated in two different ways — corresponding to its two different meanings:
They extract the fat with ether —————> Ether extraction (like "smallpox vaccination")
This apparatus extracts the ether—————> Ether extraction (like "arms shipment"),
the compound "ion trap" may also be generated in two different ways but seems to have only one meaning:

This coil traps ions —————> Ion trap (like "doorstop")
This trap is for ions —————> Ion trap (like "flour sack").

Another difficulty, at present, is that in several cases a given type of source sentence appears to yield two or more kinds of compound by means of different transformations, but not all of these source sentences appear to undergo all of the transformations involved. Thus, for example, the source sentence X + V-es + N may, in some cases, be transformed into the compound V-ing + N, as in:

He drinks the water —————> Drinking water
She wears this apparel —————> Wearing apparel

and many other cases into N + V-ing, as in:

He chews tobacco —————> Tobacco chewing
They eat apples —————> Apple eating

but not all sentences underlying the second type of compound yield compounds of the first type, as in:

She reads minds —————> Mind reading but not * Reading mind
He dodged the draft —————> Draft dodging but not * Dodging draft.

Finally, exact specification of all of the required grammatical transformations necessarily awaits the preparation of a complete grammar of English.

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References

1. For explanation of linguistic terms see Quarterly Progress Report, April 15, 1957, p. 133, and references cited therein.