

COLLABORATION WITH A GROUP OF TEACHERS

CONTRIBUTIONS OF THE INQUIRY

I now wish to present a summary of what, in my circumspect view, constitutes my contribution to the field of terminology. Terminology, as I have endeavoured to exhibit in this study, is the meeting place of conceptology, formal logic, linguistics, natural language and a subject field. I have grappled with problems in terminology in general and of the terminological elaboration or modernization of Luganda in particular.

To put it succinctly, my contribution resides in:-

- (a) the formulation and application of the PEGITOSCA Criterion,
- (b) the origination of the Periodic System of Conceptual Elements,
- (c) the construction of the Conceptual calculus on the basis of the Periodic System,
- (d) the construction of the Theory of Scientific Terminology on the basis of the PEGITOSCA Criterion and the Conceptual calculus,
- (e) the exposition of the universal significance the Concept Transformation Rules in the Principle of Concept Marking for the marking of concepts in scientific European and Luganda,
- (f) the extrapolation of the already existing Luganda . expression formation rules so as to further meet the PEGITOSCA Criterion,
- (g) the advocacy of a method of terminological . elaboration which is explicitly concept-based,
- (h) the development of terminological systems in Luganda,
- (i) the conceptual parallelisation of the Kiganda clan system to the European system of social hierarchisation implicit in the neo-Latin biological nomenclature in order to develop an even more systematic biological nomenclature in Luganda, and
- (j) showing that my proposals with regard to the terminological elaboration of Luganda are accommodable to a group of teachers of science and mathematics.

The hypothesisation of the Principle of Concept Marking afforded me empirical support for my Theory with T (the Theory), P (the Principle of Concept Marking), D (data) and R (result). I reasoned as in (1).

(1a) $T \Leftrightarrow P$

(1b) $P \rightarrow [D \rightarrow R]$

$T \rightarrow P$ from (1a)

(1c) $T \rightarrow [D \rightarrow R]$ from (1b)

In (2), I give a logical discussion of (1c) using the values 1 (for True) and 0 (False) as truth-values.

(2) $T \rightarrow [D \rightarrow R]$

1 1 1 1 1
 0 1 1 1 1

On the basis of (2), I can justifiably claim that T was sustained. Now, suppose I consider the auxiliary assumption that the Theory applies to all natural languages. Then the discussion would proceed as in (3).

(3) [T A L] → [D → R]

(a) 1 1 1

(b) 1 0 0

(c) 0 0 1 1 1 1 1

(d) 0 0 0

Cases (b)-(d) are possible negative scenarios. Ideally, one would have to examine the Theory for every natural language. However, if I assume that scientific conceptualisation is intrinsically possible in all languages of the world, then T should be tenable.

One perennial problem in terminological practice, as it emerged during my collaboration with linguists, and teachers of science and mathematics, is that of choice between an already established term (antecedence) and a coinage, or between a native term and a lugandisation. This PEGITOSCA-related problem was disposed of as follows.

In chemical and biological nomenclature, global internationality leads to Eurocentric internationality. Transparency is inevitably compromised.

Antecedence and systemicity may be mutually exclusive as in (4)

(4) *ekisire*: P + a + S + G = 3 + 2 - 2 - 2 = 1

akagulu -x: P + a + S + G = 3 - 2 + 2 + 2 = 5

For popular parlance, I do not reject *ekisire* (cf. Sec.VI.2 (16))

A coinage based on the native lexical stock may be imprecise as in (5)

(5) *kannabutonde*, Gk *physis* "nature":

T + P = 1 - 3 = -2 (rejected)

fizika: P + T = 3 - 1 = 2

At times an antecedent term may compete with a transparent coinage and an opaque lugandisation as in (6)

(6) *okubala*: P + r + a + T = -3 - 3 + 2 + 1 = -3

mathematika: P + r + a + T = 3 + 3 - 2 - 1 = 3

kannakubala: P + r + a + T = 3 + 3 - 2 + 1 = 5

where the receptors are secondary school learners.

If, however, Eurocentric internationality were a coveted state-of-affairs, then (6) could become (7)

(7) *mathematika*: 3 + I = 5

kannakubala: 5 + I = 3

The example in (8) shows that Eurocentric internationality can carry the day even where a long native coinage would be winning.

(8a) *kannajjululwabbugumu*: P + r + E + a + T = 7

thermodyunamika: P + r + E + a + T = 5

(8b) *kannajjululwabbugumu*: 7 + I = 5

thermodyunamika: 5 + I = 7

Some collaborators, especially linguists, contended that coinages like those in (4), (6) and (8a) would be unlearnable citing their (Eurocentric) non-internationality. By way of a polite rejoinder, I argue that if Chinese, a full-fledged language of modern science, technology and economics, is hardly capable of phonological assimilation of European terms like "geography", Ger. *Geographie* because of its basic monosyllabic structure, then Eurocentric internationality is not an absolute imperative.

School-going Chinese learn and get used to scientific Chinese just as school-going Luganda speakers will, with some effort, decipher their "strange, mysterious" specialised Luganda and end up internalizing science more firmly than they would otherwise be able to if most terms were adopted from English. Incidentally, science articulated in native German is not entirely easy, although it is easier than when it is couched in German replete with "foreign" words (of Greco-Latin origin).