

# Welcome

## Abstract

Door middel van de Maps willen we u op de hoogte houden van ontwikkelingen, ook om daarmee onze leden te danken voor hun trouwe steun aan de  $\text{\TeX}$  ontwikkelaars. Verder bieden we ruimte aan lezers die anderen laten delen in hun ervaringen met  $\text{\TeX}$ , MetaPost, fonts en aanverwanten. Aarzel dus niet ons artikelen te sturen. Een halve pagina is al heel leuk, meer mag ook, graag zelfs. Het hoeft geen ‚zware kost‘ te zijn want het is voor lezers bijvoorbeeld al heel interessant te lezen hoe anderen  $\text{\TeX}$  gebruiken. Dus een artikeltje als „dit doe ik met  $\text{\TeX}$ , zo doe ik dat en nu kun jij het ook“ is zeer welkom! Hoewel het internet tegenwoordig een belangrijke bron van informatie is, blijft papier een functie vervullen binnen de vereniging. Dat past immers bij  $\text{\TeX}$ !

The  $\text{\TeX}$  ecosystem has evolved in a typesetting environment that can be used for a wide variety of documents. But, in this maps there are some articles that, as can be expected given  $\text{\TeX}$ 's objectives, discuss rendering math.

In the Lincos book, the Dutch mathematician Hans Freudenthal describes a language (system) that can be used to communicate with aliens. There is a strong focus on communicating math. Just browsing the book is fun already. Now, imagine that you have to typeset this or an article based on it. Say that Hans writes it, then Taco has to make sure it gets rendered properly in the maps style. After that Frans starts proofreading. All three need to check proper spacing of the formulas. That can become a tedious cycle.

But . . . this document was published in the 1960s when there was no  $\text{\TeX}$ ! How much easier life has become. On the next page we show an example: page 98, definition 3 01 8, about commenting. More on this book can be found at

[https://en.wikipedia.org/wiki/Lincos\\_language](https://en.wikipedia.org/wiki/Lincos_language)

and a scan of this book can be downloaded from:

[https://monoskop.org/images/8/85/Freudenthal\\_Hans\\_Lincos\\_Design\\_of\\_a\\_Language\\_for\\_Cosmic\\_Intercourse\\_Part\\_I.pdf](https://monoskop.org/images/8/85/Freudenthal_Hans_Lincos_Design_of_a_Language_for_Cosmic_Intercourse_Part_I.pdf)

Given the care that Don Knuth paid to his books and  $\text{\TeX}$  being able to do well there is very little excuse for authors that embed math in documents today to produce sloppy output. Nevertheless we can easily run into badly rendered math on the web today. However, it is all about paying attention and Freudenthal and Knuth both show us the way. Hopefully this Maps will pass your quality criteria.

\*  $t_1 Ha \text{ Inq } Hb . t_1 t_2 \text{ Fit } p^t : Hb \text{ Inq } Hc . t_3 t_4 Ha \text{ Inq } Hb . t_1 t_2 \text{ Fit } p^t :$   
 $Hc \text{ Inq } Hd^t . t_4 t_3 Hb \text{ Inq } Hc : t_3 t_4 Ha \text{ Inq } Hb . t_1 t_2 \text{ Fit } p^t *$

are better suited for this purpose. We shall send a great many texts from which this will become still more evident.

3 01 8. Comments on some texts may be very useful. E.g. on the first talk of 3 01 2:

\*  $Hc \text{ Inq } Hd : t_1 t_2 Hb \text{ Inq } Ha . 10x = 101 . \rightarrow . x = 101/10^t$   
 $Hd \text{ Inq } Hc \text{ Ben } *$

A comment on the second talk of 3 01 2:

\*  $Hc \text{ Inq } Hd^t$   
 $t_1 t_2 Ha \text{ Inq } Hb . ? x . 10x = 101 : \wedge : t_2 t_3 Hb \text{ Inq } Ha . 101/10^t :$   
 $Hd \text{ Inq } Hc \text{ Ben } *$

Another comment on the second talk of 3 01 2:

\*  $Hc \text{ Inq } Hd^t . t_3 t_4 Ha \text{ Inq } Hb : \forall x . t_2 t_3 \text{ Fit } x . \in \text{Ben}^t$   
 $Hd \text{ Inq } Hc \text{ Ben } *$

A comment on the third talk of 3 01 2:

\*  $Hc \text{ Inq } Hd^t . t_2 t_3 Ha \text{ Inq } Hb : Hb \text{ Inq } Ha 101/10 . \in \text{Ben}^t$   
 $Hd \text{ Inq } Hc : \text{Fal}^t : t_2 t_3 Ha \text{ Inq } Hb : \forall x . t_1 t_2 \text{ Fit } x . \in \text{Ben}^t$   
 $\neg : t_2 t_3 Ha \text{ Inq } Hb : Hb \text{ Inq } Ha 101/10 . \in \text{Ben}^t$   
 $\leftrightarrow^t : t_2 t_3 Ha \text{ Inq } Hb : \forall x . t_1 t_2 \text{ Fit } x . \in \text{Ben}^t *$

From these comments the receiver will learn what liberties a person may take when quoting other people. One could add a hypercomment put into the mouth of still other persons and containing behaviour rules on honest quoting.

In a former version of Lincos we distinguished between literal and free quotations by means of a special notation which was dropped later on. Literal quotation is a rather unimportant limit position. We shall develop a means of comparing the exactness of quotations ('Err', 3 09 1, 3 19 1). This will prove to be more useful. If needed, literal quotations may be characterized by 'Err . . . = 0'.

3 02 0. We shall here treat interrogative sentences:

3 02 1. Many interrogative pronouns and adverbs can be treated in the following manner:

\*  $t_1 Ha \text{ Inq } Hb . ? x . 100x = 1010^t :$   
 $Hb \text{ Inq } Hc . ? y : t_1 t_2 y \text{ Inq } Hb . ? x . 100x = 1010^t :$   
 $Hc \text{ Inq } Hb Ha *$