



Glosa gathers support to become global tongue

EUROPEAN

Currently, more than half the EU's annual administration costs go on translating and interpreting the Union's nine official languages – not to mention the paper from tens of thousands of trees. Both financial and ecological costs are set to rise with the addition of four new members. The answer, say its supporters, is Glosa – a language of elegant simplicity, few words and no grammar that can be learnt in the space of a few days.

Birna Helgadottir

"Glosa is the international language you don't know you know," says Wendy Ashby, one of the two directors of Glosa for World Communication. She points out that most of the words of Glosa, which is Latin and Greek-based, are already international, and used in science and technology.

Glosa was first dreamt up by Lancelot Hogben, a professor of mathematics, in 1943. Unfortunately, the international community had others things, most notably

The fact that the world already has an international language – the one this article is written in – causes no little concern to those who want to preserve the linguistic culture of non-English speaking nations. At a European Union conference last year, it was concluded that "this trend towards one national language as a means of international communication constitutes a danger for cultural and linguistic diversity within a multicultural community".

But Glosa, insists its supporters, is a uniquely winning formula – mainly because it is so simple and easy to learn. "After half an hour's study, you could write a letter in Glosa, with the aid of a dictionary," promises Ashby. The language has a core vocabulary

To the untutored ear, it also sounds attractive – similar to Italian. "It is not intended to replace other languages," says Ashby.

TROPICAL PEN-PALS

Glosa-speaking children in Uganda urgently want pen-pals in Britain, according to Wendy Ashby of Glosa, based in Richmond, Surrey. Thirteen year old Gingo Daniel has written to her in perfect Glosa asking for contacts on behalf of all the children in his class at Kibuuka Senior Secondary School, Mpigi.

Since *Language Matters* reported on the language 'you didn't know you knew', teachers in Africa have been busy spreading the word on the advantages of learning this simple and effective means of communication. From primary age children to adult learners, Glosa seems to be equally acceptable.

Twenty teachers on the African continent, from areas as far apart as Tanzania, Ghana and Nigeria have been in touch with Wendy for more information about the language and details of contacts in Britain. Another secondary school in Tanga, Tanzania, is waiting to twin – to exchange Glosa letters and postcards – with a school in this country. Their native tongue is Swahili and they are learning English as well as Glosa. Students at Entebbe Teachers' Training College are also anxious to make contact with their British, Glosa-speaking contemporaries.

Onen Smith, who runs the Glosa Centre in Mpigi, lectures all over Uganda on a variety of topics but Glosa has become the main focus. He is in touch with journalists and teachers all over the country wanting information about the language but has to do all his

written work by hand. There are no computers, fax machines or telephones available in the schools. However, Onen has started a club with a capacity for 60 students from all over East and Central Africa. He feels that Glosa could take the place of French as one of the languages spoken in the country.

There are many keen to communicate with students in this country. So, come on British students, two lessons in Glosa and you could be writing letters to Africa and finding out how your contemporaries live and learn in the tropics.

Further information from Wendy Ashby, Glosa, PO Box 18, Richmond, Surrey TW9 2AU. Tel: 081 948 8417. Please mention *Language Matters* when you enquire.

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PLU GRAMA



Ben-veni a Glosa-an Sr. Kaihsu Tai. Na es fo hedo de lekto tu doxo; Glosa es u boni Internatio Auxi Lingua (IAL).

Gratia de tu plu qestio e proposi.

DE TAKO-GLOSA. U-ci es u mode de brevi plu Glosa lexi; qi pote brevi u textu a semi. Per Tako-Glosa (TG) id es posi de vice proxi panto Glosa lexi per solo mo, bi, tri, e rari ma de tri litera. Exempla GeoGrafi esce GG. Tu pote brevi multi lexi per apo plu vokali; qi es fo non-importa in lexi. exempla: exami PREPOSTEROUS. Apo plu konsonantaEOEOU; qi dona zero indika de PREPOSTEROUS. Nu apo plu vokali e tu gene PRPSTRS; qi es fo simi ad id matri PREPOSTEROUS. Vide plu exempla de TG in PGN 64. Id sti posi na pote gene bi-kron qantita de textu epi puta-me skuta, alo epi papira. Bi kron u qantita de info in fax.

2. Qo-ka na freqe vide Latino e Greko lexi in Glosa?

Latino pa es un Internatio Lingua in Europa tem multi cent-anua; e pan Euro-lingua habe plu kilo de Latino lexi. Pleisto lexi in boni English nova-papira es Latino. Ka-co pan civi; qi kredi mu dice English; reali dice Latino. Plu exempla; insurance, financial, government, City, Citizen, civic, current, abstract, interest, debt, legislation (pan lexi qi fini per -tion es Latino).Ex u-ci tu pote logi; Plu Euro-demo uti plu Latino lexi; e audi mu per radio; singu di.

ANTI-CO; Modern Science e Technologi nu habe u fo mega vokabulari de plu milion lexi... holo ex Greko mu.

Oligo Greko lexi in English;..... school, astro-nomy, police, Metro-politan, story, pan-orama, kaleido-scope, tele-scope, micro-scope, techno-logy, drama, theatre, comic, disco-theque, chemistry, physics, etc. Brevi; Greko es mega ma internatio de Latino.

Tem na vendo un idea de Glosa a plu Euro-demo; qi uti plu kilo Latino lexi; e qi audi, uti e lekto multi kilo de Medika, e tekno-lexi.

Ka-co na uti multi de plu-ci Latino lexi. Anti-co, na ma-amo plu Greko lexi, kausa plu Greko Lexikon es fo fo ma mega de Latin.

Para-via, plu skienctisti uti plu lexi ex KLASIKA GREKO, kausa mu habe ge-fixa e stabili semani;

kontra-co plu semani de plu moderni Greko lexi lento muta komo in pan vive lingua. Boni-fortuna, Sokrates ex Paleo Helas sio pote lekto u nova-papira ge-tipo in moderni Heleni! No-posi de dice u-la de ali hetero lingua.

Kaihsu Tai proposi; vice dice "Glosa habe zero gramatika" na debi dice "Glosa uti tu gramatika." Kausa; id es fo facili de ki ex Glosa a Zhong Guo (Cinese) lingua! Glosa e Zhong Guo uti proxi iso sintaxi.

An proposi; vice uti plural NA; na uti MI-PLU; e pro VI na uti TU-PLU. Fo logika, sed ma-longi! U-la es u mode de Zhong Guo.

Posi, Kaihsu Tai ne pa stude Deutsche alo Ruski. Si plu ami de plu-ci lingua pa trans fero mu gramatika ad-in Glosa; id sio fini in deino konfusi de plu paleo komplexi gramatika

Prof. Hogben pa proposi na ne uti u plu-form de "tu", kausa id sio posi gene asocia ko Deutsche "Sie". U demo-mode in Deutsch es "du" pro tu, e thou; sed Deutsch no facili permito "du" a-kron bi civi ski bene alelo. Hogben no pa amo u-la; e dice in Glosa na debi pan-tem uti singu tu kausa na dice a singu civi in poli-pe. Na akorda kon an.

No! Karo Kaihsu Tai! examina u Ruski gramatika! E tu fu logi; id sio no-posi de uti tu proposi.

Id sio funktio kaso Zhong Guo kausa homo Glosa Zhong Guo es fo logika lingua; e habe zero gramatika; sed id sio no-posi in ali Euro kaso.

E Kaihsu Tai plus proposi na loka plu tem-lexi (PA, NU, FU) po verba homo Zhong Guo. Sed, itera, u-la sio fo no-facili pro pleisto Euro demo.

No! Na dice itera; Panto-pe; qi veni a Glosa; nece linqi pan no-puri a porta. Lase mu veni in....puri!

Kaihsu Tai fini an grama; "...Mi doxo Glosa es u lingua fo facili de gene ski; mega ma facili de plu-la so-ge nima logika lingua; e su-toto fu gru pro IAL. Glosa volu ma publika; e ma demo disci u lingua. Per u-ci mode Glosa fu es u vive lingua."

Multi gratia Kaihsu Tai pro tu fo stimula grama; e su-toto de tu plu ami lexi de Glosa, e tu auxi publika Glosa in tu mero munda. Na este fo hedo; tu unio ko plu hetero civi in Taiwan; qi dice Glosa. Place; plu pluso fu-proposi!

Sa. Chiang Hui-i in Taipei Glosa Grega nu-pa bali a na u-ci stori. In English "The Snipe and the Clam

KAPELA E PANOPEA

Just as a clam came out to bask in the sun a snipe pecked at its flesh. The clam closed its shell, and gripped the snipe's beak.

"If it doesn't rain today and it doesn't rain tomorrow, you will be a dead clam," said the snipe.

"If you cannot free yourself today, and you cannot free yourself tomorrow, you will be a dead snipe" said the clam.

Neither one would give way, and eventually a fisherman caught both the clam and the snipe.

八十 鷓蚌相爭

蚌方出曝，而鷓啄其肉。蚌合而拊其喙。

鷓曰：“今日不雨，明日不雨，即有死蚌。”

蚌亦謂鷓曰：“今日不出，明日不出，即有死鷓。”

兩者不肯相舍，漁者得而并禽之。

〈戰國策·燕策二〉

PLU ETI-NOTA

Panopea es u mega tunela "klam". Baro a 5 Kilogram.

Panope es u mari-nimfa in Heleni mitologi.

Tridakna es u giga (enormo) "klam". Tridacna gigas pote habe baro de 250 Kg. Tri = 3. G. dakno = L. morda, English = bite.

Kron Panopea pa veni te fru sola; u Kapela pa beka id karni. Panopea klude id ostraka; e sasi u Kapela beka.

"Si id ne pluvi nu-di; e id ne pluvi fu-di; tu fu es u morta Panopea;" pa dice Kapela.

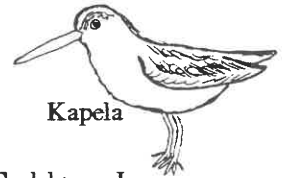
"Si tu ne pote libe se nu-di; e tu ne pote libe se fu-di; tu fu es u morta Kapela;" pa reakti Panopea.

Ambi ne pa cede; a fini u piski-pe pa kapti Panopea e Kapela.

Panopea



Kapela



I have been enjoying the issues of PGN. Congratulations on their quality!

Some questions;

Is there really a choice between Latin e Heleni Glosa as implied in Glosa Summary? (I lean of course to the latter.)

Has anyone yet got to translating extensive works such as the Bible (a truly difficult task) or Shakespeare or such?

John F. Schilke, M.D. Oregon, USA

Science and Technology especially Medicine turn now exclusively to Greek for new terminology.

For one thing, Greek compound words are usually more compact than the corresponding Latin; and the Greek Lexikon is much bigger than the Latin.

Latin poets had to borrow many Greek words simply because they had no corresponding Latin ones

Medical works such as the Lancet are full of Greek.

If any reader prefers the Greek let them use it. We too prefer it. In his book "The Vocabulary of Science" Prof. Hogben listed both.

No, we have not yet any extensive literature in Glosa; but clearly as the number of Glosaphiles increases many of them will be writing original and translated works.

That is for the future.

For now it's our job to popularise and advertize the language.

I think our first works will be in the educational field especially aimed at the Third World. Glosa 1000 can deal easily with any science textbook, and as our experience with the very bright African students is showing they learn very quickly indeed.

We are quite certain that Glosa can easily cope with bibles and Shakespeares etc, and when more people are meeting regularly and chatting in Glosa many of them will undoubtedly feel impelled to write in the language, some have already translated brief excerpts which we publish from time to time.

We ourselves have no literary pretensions whatsoever, but find it an amusing exercise to translate some Shakespeare or Goethe into Glosa. It forces us to search for nice phrases and rhythms! Such searches are useful and stimulating. This PGN includes brief examples of translations from Chinese and Shakespeare.

U QESTIO DE TEKNO-GLOSA

I can read Glosa articles easily! but find a little more difficulty in writing Glosa.
I enclose a typical low-tech report with a list of some words I found difficult to translate.

I came across "shovel" L. for spade is PALA, but a spade is not a shovel. How do we convey the concept of shovelling which is not digging?
Reg Frank, Barnsley, England

SHOVEL. There are quite a number of L. and G. words for this. I suggest Pala, which was originally a flat blade with a handle. The artists had no trouble adapting this to name their PAL-ette.

SPADE comes from an old IE. root SPA, for something flat and wide. From this comes L. SPATULA, A SPOON. Spoon is Germanic from Ger. SPAN, a wide chip of wood. Our ancestors were never long without a name for a new implement. They found the nearest known thing in shape or / and function, adopted it, and, if necessary slightly adapted it to make a distinction. Early botanists had to name all sorts of complex bits of plants. Zoologists too had to name the multitude of anatomical features of say a worm or insect.
Reg's letter contains a long piece of what he calls low tech article on his own professional subject of glass technology. Here is an extract with my suggested translation.
Ron Clark.

Iron melting temperatures were too low. At low temperatures the iron is too viscous. Solid matter originally in the ingot, needs time to float to the surface, where it can be skimmed off. So what is called slag often appeared in the machined surfaces of glassware moulds and caused marks on the surfaces of bottles and other articles.

They melted iron using vertical cylindrical furnaces called cupolas. A mixture of ingot iron, scrap iron and coke is dropped into the furnace until nearly full. First lay a bed of wood to get the coke burning, blow air through. Coke burns. Heat melts the iron. All very simple.

Molten iron collects in the bottom. When sufficient has been melted a man opens up a hole in the side previously plugged with heat-resistant material, and iron pours out into a container, from which it is poured into sand moulds. If the men take too long, iron temperature reduces, the iron gets viscous, and castings will contain faults.

There has to be a correct ratio of coke to iron all the way up the furnace. Easiest way to get this is to weigh out batches of iron. I got them to make baskets for measuring out the coke. Load coke, then iron, then coke, and so on. There has to be an adequate blast of air, obtained by attending to the air centrifugal blower, and to piping between blower and furnace.

Reg plus volu ski; komo Glosa translati plu Anglo lexi ... foreman, manager, director.
Proxi panto-ci veni ex Latino. Manage veni ex L. manu, 'to handle' e a fini de 'handle,' krati, plu ergo-pe.

Na pote translati Manage per direkti; e manager per direktora. Foreman veni ex plu Germani radi. U 'foreman' krati u grega (gang) de plu ergo-pe. Foreman mi proposi cef, 'chief' ex L. kapita, head.
Grega-cef es tro longi.

Pleisto komerci e financi lexi veni ex Latino; e kine facili e gluko ad-in Glosa.

Plu feru-liqi temperatura pa es tro mini. A plu mini temperatura u feru es tro visko. Solidi-ma ex baci nece habe tem te flo a sufacia, ex qi pe pote apo id. Seqe-co qod es ge-nima slag freqe pa acide in ge-makina sufacia de plu vitri-ra plasti e pa face plu maku epi plu sufacia de plu botilia e plu hetero ra.

Mu pa sti liqi feru in plu orto kilindra furna ge-nima kupola. U mixa de baci-feru, sipa-feru e kok gene kade in furna a-kron proxi ple.

Prima pe loka stra de ligni te sti igni u kok. Fla aero dia. Kok igni. Termo liqi u feru. Fo simpli.

Liqi feru kolekti in funda. Kron sati feru pa gene liqi; un andro apri u fora in latu, pre ge-klude per termo-resista-ma; e feru fusi ex ad-in vasa; ex qi id gene fusi ad-in plu arena-plasti-va. Si plu andro uti tro tem, feru temperatura gene mei; feru gene visko; e plu plasti-va fu habe plu defekti.

Nece es u certa rati de kok a feru holo dista ana in furna. Maxi facili mode te gen u-ci es de ponde plu mero feru. Mi pa sti mu face plu rami-va pro metri ex u kok. Kargo kok; po-co feru; po-co kok; e dura. Nece es u sati forti fla de aero; qi veni ex aero-centri-fuga fla-me; e pe nece kura plu tubi inter fla-me e furna.



Stonehenge,
Wiltshire, Britain.

STONES, ROCKS and PEBBLES



Krokodilus

There are at least 100 Latin and Greek words denoting these. For now we consider only the commonest here.

Kementu L. This L. word refers to rough stone chips, though it has now been transferred to the binder cement. But in GL we can keep the original meaning of stone chips

Kalci L. pebble, gravel. The diminutive KAL-KUL-us gives us calcula-te, which was helped by the use of pebbles. From this too we get the element Calcium, the element of chalk, and the chemical symbol Ca.

Gema of course for a precious stone. In Glosa it also means bud, its original L. meaning.

Glarea L. for gravel, occurs in a number of plant names as glareosus.

Kroka pebbles. Croco-dile is G. for pebble-worm, worm here referring to a longish animal. This is a nice onomatopoeic word.

Lapida L. stone, piece of rock. Best reserved for building stones as in the English word describing a tumble-down cottage as de-lapida-ted.

Lito G. gives us the mega-liths of Stonehenge and other such intriguing rings. Also occurs in paleo-lith-ic and neo-lith-ic for Old- and New Stone Age. Litho-graph.

Petro, G. stone. Petro-logy is the general study of rocks, their origin, and everything about them. So we can use it for all sizes of rock, Petro-leum is G. for rock-oil. Gives us the name Peter, Pierre, meaning as strong and reliable as a rock. Petri-fy means, to turn to stone.

Psefo G. pebble. Provides us with the scientific study of the way people vote...opinion polls...psefology. Like Kalcuka this comes from the elementary

use of pebbles in early days of counting, before we were allowed to use the Hindu numbers.

Pumici L. gives English pumice, the light, porous, volcanic rock.

Rud-us L. stone debris from broken delapidated buildings etc. from which Glosa gets RUDE for rubbish. The botanical specific name ruderal-is is applied to plants growing amongst wayside bits of stone and brick. Anglo-derivatives; rude, rudimentary, e-rud-ite means 'un-rude-d'.

Saxi L. rock occurs in many plant names, mostly in Saxifrage for plants often growing amongst rock-frag-ments.

Skopu-lus L. from G. skopelos; a projecting rock or crag, cliff, ledge, from which somebody could observe G. SKOPE.

Scrupu-s L. a sharp stone, therefore an uneasy conscience, giving English word scrupulo-us for a person having it. I suggest Glosa uses SKRUPU for a sharp stone or rock; and SKRUPULO to describe the psychological state.

Siici L. hard stone, flint, from which chemist get their Silika (chem. formula Si). This is the chief constituent of sand, for which Hogben in Interglossa proposed SILI. Now of course it is world-famous as the stuff of the electronic chip, perhaps to be replaced by organic molecules in near future.

Tofu-s L. for a small porous rock, which many gardeners will know as TUFa, especially useful in rockeries, because of its appearance and its porosity therefore ability to hold water.

All these and many more all occur in great numbers of animal and plant names.

Ron Clark

GLOSA INSIGNIA



38mm. metri insignia kon aku.

30p + posta preci.

NEO GRAM-AMI

Poli gratia de PGN e Glosa insignia. Mi amo Glosa; sed a-nu mi ne habe poli gram-ami. Mi es andro; habe 41 anua; e ergo in hoteli. Plu interese: lekto, nekto, kolekti plu posta-bileta, posta-stampa (epi grama-ve) e ali-ra de filateli. Mi kolekti plu pikto posta-karta; e habe interese de plu hetero-ra. Place graf a mi. Sr. Gao Zhen-xing, 50 - 9 Jiaxingstr. 266031, Qingdao, Shandong, P. R. China.

SHAKESPEARE

SONNET 18

*Shall I compare thee to a summer's day?
Thou art more lovely and more temperate.
Rough winds do shake the darling buds of May;
And summer's lease hath all too short a date;
Sometime too hot the eye of heaven shines
And often is his gold complexion dimm'd;
And every fair from fair sometime declines
By chance or Nature's changing course untrimm'd;
But thy eternal summer shall not fade
Nor lose possession of that fair thou ow'st;
Nor shall Death brag thou wand'rest in his shade,
When in eternal lines to time thou grow'st.
So long as men can breathe or eyes can see,
So long lives this, and this gives life to thee.*

SLEEP. HENRY IV Part 2

*O sleep, O gentle sleep,
Nature's soft nurse, how have I frighted thee
That thou no more wilt weigh my eyelids down,
And steep my senses in forgetfulness?
Why, rather, sleep liest thou in smoky cribs,
Upon uneasy pallets stretching thee,
And hushed by buzzing night-flies to thy slumber,
Than in the perfumed chambers of the great,
Under the canopies of costly state,
And lulled with sound of sweetest melody?
O thou dull god, why liest thou with the vile
In loathsome beds, and leav'st the kingly couch
A watch case or a common 'larum bell?
Wilt thou upon the high and giddy mast
Seal up the ship-boy's eyes, and rock his brains
In cradle of the rude imperious surge,
And in the visitation of the winds,
Who take the ruffian billows by the top,
Curling their monstrous heads, and hanging them
With deafening clamour in the slippery clouds,
That with the hurly Death itself awakes?
Canst thou, O partial sleep, give thy repose
To the wet sea-boy in an hour so rude;
And in the calmest and most stillest night,
With all appliances and means to boot,
Deny it to a king? Then, happy low, lie down!
Uneasy lies the head that wears a crown.*

SONNET 18

Mi pote qe kompar tu ad estiva di?
Tu es ma kali, e ma modera.
Rugo venti seis plu dulce Mai gema
E sola-tem hab fo fo brevi fru.
Plu kron tro term u ciela oku noc,
E freqe gen an kriso facia teg.
E pan kali ex kali mo-kron mei
Per fortun alo Natur muta ge-nok.
Sed tu fo dur estiva ne fu mor,
ni lose habe de tu auto kali;
Ni fu Morta dic; tu vaga in an skot
Kron in plu dura lin a tem tu kresc,
Tem plu Homi spir e vid oku
Tem viv u-ci; qi dona vit a tu.

SLEEP

Somni, dulce somni
Natura moli kura-fe, kom mi pa sti tu anti
ke tu pa sto kata mi oku-teg
e los mi este in oblivio.
Qo-ka, Somni, tu kumbe in plu fumi do,
Epi no-gluko kli prolongi tu,
Ge -lula per plu buzi mosk a somn,
De in plu fragra -do de grandi-pe,
Infra plu kanapi de pluto stat,
Ge-lula per son de dulce melodi?
O tu xeno deo, qo-ka tu kumbe ko vulgu
in plu putri kli; e linqi u regi kli
un horo-me alo komuni vigi kodo?
Tu qe fu epi alt vertigi masta
Klude plu oku de navi ju, e lul an psik
in babi-kli de rug imperi undu;
E in visita de plu venti;
Qi rap plu rugo undu a plu krest,
Kurva mu plu mega kef, e pende mu
ko kako fono in plu glisa nef
e in plu mega soni Morta auto gene vig?
Qe tu pote, o no-justi Somn, don tu relax
ad aqa navi-ju in ta rugo horo;
E in maxi paci e no-soni nokt
Ko panto auxi-ra e ru
Ne don id ad u rex? So hedo bas kumbe!
Non-hedo kumb u kef; infra koron.

KLORO DINAMO

Kron homi face plu kemi-ma e farmako; an freqe nece uti plu mega temperatura e baro. Anti-co kron u kloro fito face plu miliona de fo-komplexi kemi-ma; id uti solo plu kloro folia. Plu-ci kloro folia es kloro; kausa mu ne volu u kloro mero de leuko foto; mu reflekti id. Mu volu solo plu ciano e rubi mero. Mu trakto plu-ci in. Id es plu-ci non-kloro foto; qi funktio in kloro folia te face prima u glukose molekula; e po-co plu miria de fo fo komplexi farmako. Pan-ci aktivi acide in sola-tem a plu ordinari temperatura e baro; e minus soni.

U famo fisicisti Richard Feynman multi anua retro pa proposi; plu kemisti debi stude, e posi mimi, plu-ci no-poluti minus soni mode de kloro fito. E nu, a fini, plu kemisti proto de obe an konsili.

Un holo procesi es ge-nomi FOTO-SINTESI ...sintesi per sola-dina.

Un antena de u radio pote gene taxo de trakto in se plu elektro-unda. Homo-co, u kloro folia habe plu grupa de oligo centi de pigmenta-antena; qi imbibe plu non-kloro foto unda---sola energi. U-ci ge-kapti energi gene kanali a plu kemi-reakti-centra in folia.

In plu-ci centra es plu molekula; qi uti un energi te divide plu hetero molekula ad-in plu positivi (oxidizi) e negativi (reduci); e id es plu-ci positivi e negativi qi; kine fo-tako te gene re-nexi, gene duce de face plu molekula, ge-volu pro na ,epi via.

Plu bio-kemisti tenta mimi pan-ci foto-imbibe molekula; ko buta de dirketi u-ci elektro-energi de face plu-la molekula Homi volu.

U grega de plu Italiano kemisti succede de face plu dendro-forma molekula; qi fu imbibe u sola energi. Mu nomi plu ci DENDRIMERO mimi plu nu familiari polimero.

U buta nu es de tegu plu dendro-rami ko plu foto-absorbo molekula; tende u ge-kapti energi fu flu ad-in trunka; topo id fu unio ko plu miliona simi-flu.

Plu hetero recerka-pe cirka 1985 pa face plu dendrimero ex organika molekula; qi es ne facili de krati.

Plu Italiano-pe pa detekti; pe pote face plu dendrimero ex plu metali-komplexi; in qi u metali ion (un elektro atomi) gene nexi a plu molekula ge-nomi liganda.

Multi de plu-ci metali-komplexi reflekti, bali ex certa kroma(qi na vide) e imbibe plu hetero kroma..

Pe nece uti u-ci ge-kapti energi tako; kausa, hetero, id fu gene lose in forma de termo. Na nece

kapti un energi in oligo nano-sekunda (mo kilo-miliona = 10^{-9} sekunda). U-ci energi pote gene transfero solo ex ge-excite atomi ad hetero mei ge-excite energi. Si pe nexi plu gru unita, id es posi de forma u speci skala kata qi un energi flu; a fini de gene direkti a certa molekula.

Plu-ci dendrimero, anti mu es mega molekula, es fo fo mikro; e te gene sati energi; qi fu ergo pro plu homi volu pe nece face plu molekula komplexi de plu komplexi.

Plu kemisti pa succede de face u dendrimero de 649 atomi inklude 13 metali atomi. Multi hetero atomi es Nitrogen. Vide infra pikto.

Per in-fixa hetero metali atomi, pe pote krati plu qalita de u skala. Singu atomi in komplexi es reali u mero info.

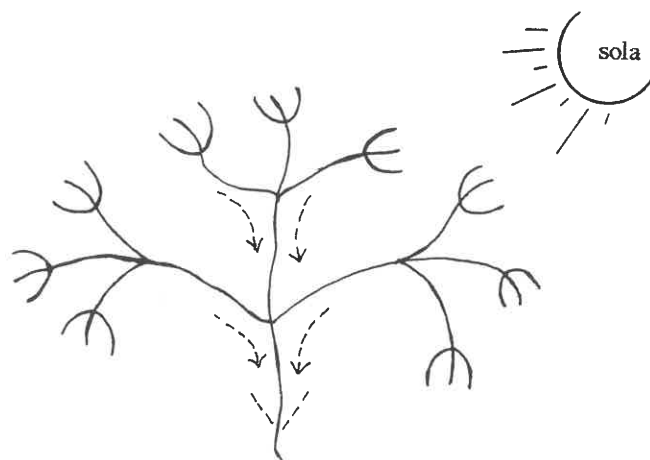
U buta es; te kapti u maxi qantita de sola energi; e bali id kata skala iso tako de posi. U ma mega u dendrimero u mega u qantita de foto energi ge-kapti. Nu-fu mu pa succede de face u maxi mega dendrimero---id habe 1,090 atomi peri 22 rutenium ioni. Id metri 5 nanometra trans. Nu plu bio-kemisti face u ma mega molekula ko 46 metali ioni. Nu mu tenta de krati u direkti de energi dia plu dendrimero.

Id es klari; dendrimero ge-basi epi plu metali-komplexi pote kolekti sola energi; e koncentra id ad idio-topo de u supra molekula komplexi.

Plu-ci foto kolekti antena fu gene uti; te muta foto ad elektro-energi; mu fu es u fo mei-precu mode de nu plu mega-precu solidi-stato-me.

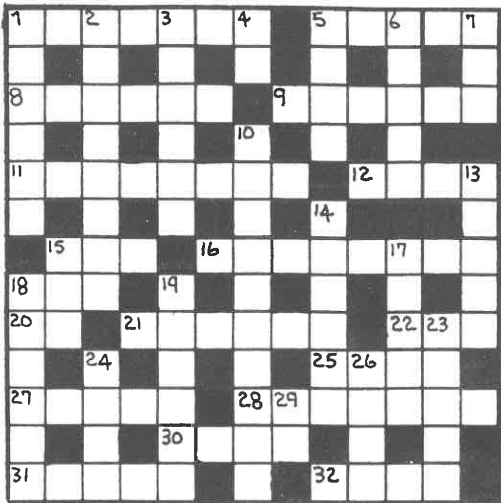
Plu-ci dendrimero fu probabli dona dura re-neo kemi- e elektro energi; alo akti komo plu molekula puta-me.

U pluso uti fu es posi; plu medika-kemisiti pote fixa plu farmako in plu space de dendrimero; qi fu bali id ad idio mikro-mero de u vive celu.



Dendrimero

KRUCI-VERBA 69



Horizontali

- 1 Gravi. 7
- 5 Id tena valuta.
- 8 Frukti prepara te vora. 6
- 9 Mero fito, 6
- 11 Landa ko mo kratu. 8
- 12 Kiklo, regio.
- 15 Tropi e seka u tera. 3
- 16 Face plu-ra. 8
- 18 Leva plu labia.
- 20 Tem-verba. 2
- 21 Mega zoa de Afrika foresta.
- 22 Loka-verba. 3
- 25 Amfibia. 4
- 27 Piro-ma. 5
- 28 Latino zoa. 7
- 30 Fo pro. 4
- 31 Cereali; mega ge-vora in Cina e India. 5
- 32 Vora-ma. 4

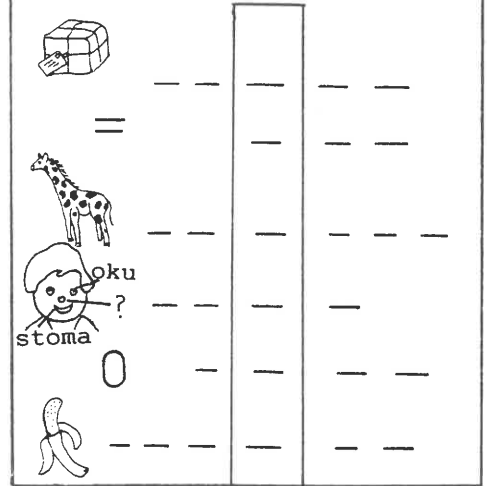
ENIGMA PAGINA

Vertikali

- 1 Indika. 6
- 2 De grafo plu bibli e poesi.
- 3 Debi habe. 6
- 4 Non-ex. 2
- 5 Mero facia. 4
- 6 Morfo. 5
- 7 Bibe-ma. 3
- 10 Duce. 10
- 13 Gusta simi citro. 5
- 14 Brevi generali info de uno-ra.
- 15 Fru, filo. 3
- 17 Mode de viagia.
- 18 Infra tera kavita. 6
- 19 U-ci pato freqe proto per algo faringi. 6
- 23 No-neo. 5
- 24 Kloro-lo. 4
- 26 Bi. 4
- 29 Forma kontra signifi. 2

ELEKTI-U-LITERA

Grafo plu nima de 6-ci ra. Plu litera in kolumni fu dona a tu u frukti.



Grafo u Glosa verba infra singu English verba levo. Nexi mu kon alelo e face hetero Glosa verba dextro. EXEMPLA:

ON + SKIN = External layer of skin

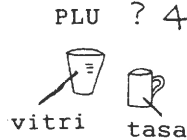
EPI + DERMA = EPIDERMA

HOT + TIME = Central Glosa for summer.

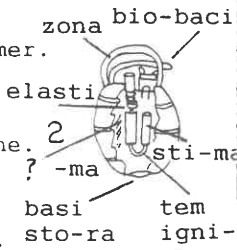
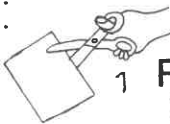
INTESTINE + STONE = Stone (concretion) in the intestine.

YELLOW + LEAF = Yellow pigment in leaves.

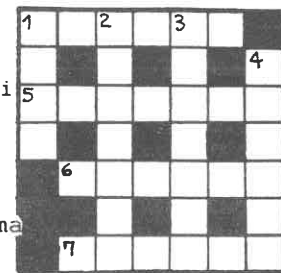
PLU PRE SOLUTIO: hetero-doxo. feбри-fuge. trans-gresi.



Vertikali



PIKTO-VERBA 61



Horizontali
An ---?--- ana monti.



ELEKTRO-KLAVI



PLU VESTI manu-ve infra-ve

PLU ? mama-ve pedi-ve nekto-ve

potato pepo 6 ? daukus faba cepa kefa-ve

PLU GLOSA NOTA

Preci inklude posta preci:

- 6 PGN intra Britain £5-40
- 6 PGN " plu hetero Euro-landa..... £6-30
- 6 PGN " USA, Afrika, Kanada, India.(aero) .£10-20
- 6 PGN " " ..(mari) ..£7-20
- 6 PGN " Australasia(per aero)... £11-10
- 6 PGN "(per mari) ... £7-20

Place bali PGN abona-valuta in £ Sterling a:
Glosa, P.O.Box 18, Richmond, Surrey,
TW9 2AU. Britain.

PLU PRE SOLUTIO: Kruci-verba 68 H: 1, monstra. 5, Felis. 8, saluta. 9, austru. 11, kupra. 13, arma. 15, du. 16, ave! 18, representa. 21, eko. 22, Tipula (crane fly) 23, nu. 26, alti. 27, oti. 28, manu. 31, iriga. 32, imagina. V: 1, musika. 2, nuli-pe. 3, tetra-penta. 4, ab. 5, flu. 6, lito. 7, spatula. 10, matri-patri. 12, uva. 14, misili. 17, ana. 19, metali. 20, rostri. 24, ulula. 25, mari. 29, -fa. 30, ma. PIKTO-VERBA 60. H: 1, kresta. 5, brevi. 6, strata. 9, -ra. 10, eko. 11, bi. V: 1, kubi. 2, elektro. 3, trika. 4, kerati. 7, -ra. 8, -ve. ELEKTI U LITERA: valuta, vermi, Genu, oku, fumi, folla. = LEGUMI