



CEOI News 1

August 11, 2001

Editors

Péter Hanák

Anita Horváth

Levente Karvalits

Péter Szlávi

Welcome to CEOI by Péter Hanák



Dear Contestants, Leaders and Guests!

Welcome to the *eighth* Central-European Olympiad in Informatics, or CEOI by its nickname. Most of you surely know that CEOI is the smaller *sister* of the International Olympiad in Informatics, the popular IOI. (Yes, CEOI must be *she* for she attracts so much more boys than girls!)

In 1996, Hungary hosted the *eighth* IOI, and now, *five* years later, Hungary organises the *eighth* CEOI. Perhaps, *eight* is our lucky number? Now, *eight* plus *five* is *thirteen*, which is the number of participating countries at the *eighth* CEOI. Somehow, the *thirteenth* country, in order of registration, is *Finland*. We are very happy that we can have them here for a few weeks ago some of us and many others enjoyed Finland's hospitality at the *thirteenth* IOI. Coincidence of the numbers? Perhaps *thirteen* is Finland's lucky number? Or Hungary's? Or ours?

Some of you may not know that Finland and Hungary are “relatives”, as far as the common root of our languages is concerned. The third country that also belongs to our Finno-Ugrian “language club” is Estonia, and they, too, accepted our special invitation to this CEOI. I am really glad that the teams of all the three Finno-Ugrian countries are here for I am always envious when I see how well, for example, the Slovaks, Czechs, Poles, Croatians, Slovenians and Serbs, or the Italians, Spanish and Portuguese understand each other while all of them are speaking their own mother tongue. Now, the *Estonian*, *Finnish* and *Hungarian* teams may come together, and may try to speak to each other. We'll wait and see what happens. I encourage them to do so, and later I would like to read or listen to their reports on how well they performed.

? [page 8](#)

The editor's notes

Interesting enough, besides technical and professional information, you will find several articles about a language family, namely about the *Finno-Ugric* language family in this issue. We hope that our readers will not regard it as taking an unfair advantage of the situation i.e. being at home, because we do not intend to exclude anyone from anything. Quite the contrary, we would like to open up a window to those who know little about these languages. And we would also like to take the chance for celebration.

The idea of writing about languages and language families flashed upon my mind when I learnt that the Finnish team had accepted the invitation to CEOI. (-: We were glad indeed. :) Thus the Hungarians, Estonians and the Finns might feel happy about finding some 'relatives' here. What is more, there are *just twice* as many Slavic people at CEOI as Finno-Ugric participants. Rare situation, isn't it?

And now, let's set out for adventures in the world of languages.

? [page 4](#)

The Estonian Team ...

Estonian teams have been participating in IOIs since 1992 and we have won 4 gold medals, 6 silver medals and 15 bronze medals.



The Estonian team was a guest in CEOI' 95 (Szeged) and in CEOI' 97 (Nowy Sacz, Poland). Our students have participated in CEOI' s Internet contests whenever it has been possible.




Indrek Jentson, Team leader



Short curriculum vitae:

- ? *occupation: software developer for Aproute Ltd.*
- ? *involved in organizing national olympiads of informatics since 1988*

- ? *deputy team leader of the Estonian team in international olympiads of informatics since 1992*
- ? *married with three children*
- ? *hobbies: reading (SF) and orienteering* 

Heno Ivanov, Deputy leader

Short curriculum vitae:

- ? *occupation: network manager of the Estonian Informatics Centre's Data Communications Department (ASO)*
- ? *member of the Estonian team in International Olympiads of Informatics in 1994 and 1995 (silver medal)*

- ? *involved in organizing national olympiads of informatics since 1996*



The Finnish Team ...



Finland

Finland is located in Northern Europe surrounded by Sweden, Norway, Russia, Estonia and the Baltic Sea. Finland has a population of a little over 5 million. The capital is Helsinki, which is also the biggest town in the whole country.


Finland is lead by the parliament and the president, the former making most of the decisions and the latter running the foreign policy.

(www-user.lut.fi/~etikka/official/finn/finninfo.html)

Finns have been participating at IOIs nearly from the very beginning and this year Tampere hosted IOI 2001. However, this is the first time they have come to compete at CEOI.

Team leader: Timo Knutila

Deputy leader: Samuli Laine

(*Editor*) 

The Hungarian Team ...

Hungary is a small country, one of the great survivors of history: states and empires have emerged and fallen around it, but it remained in the Carpathian Basin for 1000 years, speaking a language that resembles no other language in the world.

Visiting Hungary, you can experience an organic link between the old and new, between history and the present-day. But despite these links to the past, Hungary has always been perceptive to what was

new, different and to the future.

Hungary is one of the first participants of CEOI. Participating in IOIs from 1989, we welcomed the idea of a Central-European contest, which would serve an ideal means to prepare for the international olympiad. Adopting this concept, we have been participating in CEOIs with younger teams, some members of whose qualified for IOI participation in later years. Having organized CEOI' 95, this year Hungary welcomes the CEOI community the second time. ☒

László Gulyás, Team leader



The leader of the Hungarian team participating in CEOI2001 is László Gulyás, who is a Research Fellow at the Computation and Automation Research Institute of the Hungarian Academy of Sciences. After being a contestant at IOI'90 and IOI' 91, he became member of the organization

committee of the Hungarian National Contest in Informatics.

Since 1993 he has been taking part in the training of the Hungarian IOI (and CEOI) teams. He was the deputy leader of the Hungarian teams participating in IOI' 96 and in IOI' 97.



Tamás Kozsik, Deputy leader




The deputy leader is Tamás Kozsik, who is a teaching assistant at the Department of General Computer Science of the Eötvös Loránd University.

His research interests are programming methodology, programming languages, functional and aspect-oriented programming.



Weather ☒

3 day forecast

	Today	Sat	Sun
	 Rain	 Partly cloudy	 Sunny
High	20	22	21
Low	15	12	13

The URL:

http://weather.yahoo.com/forecast/Siofok_HU_c.html

where you can complain about forecast. :-)

Venues

Addresses

Zrínyi Secondary School	Rákóczi Ferenc u. 30.
Concert and Exhibition Hall (Synagogue)	Ady Endre u. 14.
Students' hall of residence	Vízslaparki út 48.
Halász-csárda	Rákóczi Ferenc u. 47.
Swimming pool	Mártírok u. 78.

Important Addresses

From page 1? **B**rowsing through the Internet, you may come across loads of exciting articles related to this topic. We've chosen 3 of them. The third one is of special interest since it was written by a Hungarian lecturer to the University of Helsinki back in 1935. ☒

About Finno-Ugric Languages

Hungarian Pronunciation

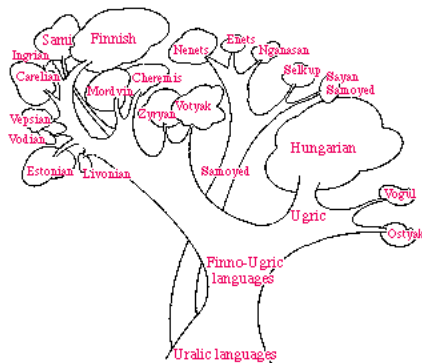
a - short like in done
á - long like in father
e - short as in set
é - long like in lake
ö - as in first
õ - same as ö but longer
ü - like in the French word future
û - same as ü but longer
c - ts as in bats

cs - ch as in change
gy - di as in during
j - y as in yes
ly - y as in yes
ny - ni as in onion
s - sh as in sheep
sz - s as in sky
ty - ti as in tube
zs - like French jour or English measure ☒

(see: http://www.inyourpocket.hu/Hungary/Hungary_language.shtml)

Finno-Ugric Languages

(see: <http://eunuch.ddg.com/LIS/InfoDesignE97/paivir/finnish/finnuqr.html>)



Within the Finno-Ugric languages, there are two major groups, the Finnic languages and the Ugric languages. Languages of the Finnic branch are spoken in the region between northern Norway and the White Sea, the whole of Finland, Estonia and parts of Russia. The main language of the Finnic branch is **Finnish**, with over 5.5 million speakers in Finland, Sweden, Russia and the United States. **Estonian** is spoken by over 1 million people, mainly in Estonia. Around 25,000 people speak **Sami** (formerly known as Lappish) in the north of Scandinavia.

The main language of the Ugric branch is **Hungarian** (or **Magyar**) with nearly 11 million speakers in Hungary and a further 3 million speakers in surrounding areas and through emigration. Two other Ugric languages are **Khanty** (or **Ostyak**), with over 13,000 speakers and **Mansi** (or **Vogul**), with around 3,000 speakers. Both of these languages are spoken east of the Urals, around the River Ob. ☒

The remaining Finno-Ugric languages are spoken within Russia. **Karelian**, **Vepsian**, **Ingrian**, **Livonian**, and **Votic** are spoken in the Kola Peninsula in the north, and southwards towards the Gulf of Riga. Of these, Karelian is the most widespread with over 100,000 speakers. Vepsian has some 2,000 speakers. Ingrian, Livonian, and Votic all have very few speakers, and may not survive for long.

Further in Russia, scattered around the central Volga, are **Mordvin** (or **Erza**), **Mari** (or **Cheremis**), **Udmurt** (or **Votyak**), and **Komi** (or **Zyryan**). Mordvin is the most widely used, with 800,000 speakers. Mari is spoken by over 600,000, Udmurt by over 500,000 and Komi by approximately 250,000 people.

**The Relationship between the
Finnish and the Hungarian
Languages**
by Gyula Weöres

When a Finn and a Hungarian meet usually either one asks: Is it true that the Finnish and the Hungarian languages are related? This kind of question is hardly asked when linguistically closer speakers like Finns and Estonians meet, because they understand each other to some extent even though they both speak their own languages. But the relationship between Finnish and Hungarian is completely different. It only means that they belong to the same language family, it is at the closest something like how the English language is related to the German language. To recognize a linguistic relationship of this kind requires linguistic expertise and is beyond the competence of a layman.

To notice similarities between Hung. *fej* (head) = Finn. *pää*, Hung. *fészek* (nest) = Finn. *pesä*, Hung. *fél* (to be afraid) = Finn. *pelkää*, Hung. *fakad* (to become fulfilled) = Finn. *pakahtua* and other words is considerably more difficult, if you are not aware that letter *f* at the beginning of a word regularly matches Finnish *p*. Or, letter *n* in Finnish is often replaced by *ny* in Hungarian, as in Finn. *niellä* (swallow) = Hung. *nyelni*, Finn. *miniä* (daughter-in-law) = Hung. *meny*. Long *o*, met at the end of a Hungarian word, has previously been a diphthong *öü* or *eü* and even more previously *ev*. The consonant *v* in this is still often met in words like, e.g. Hung. *ko* [the accusative case *követ*] (stone) = Finn. *kivi*, Hung. *to* (tree base) = Finn. *tyvi* and Hung. *vo* (son-in-law) = Finn. *vävy*.

If they had allotted a little bit more time to acquaint themselves to Finnish–Hungarian vocabulary comparisons resulting from linguistic research, they had noticed, in addition to those astonishingly close similarities, that there are even a bigger number of related words which are not right away recognized as such, e.g., Hung. *kéz* (hand) = Finn. *käsi*, Hung. *Vér* (blood) = Finn. *veri*, Hung. *Méz* (honey) = Finn. *mesi*, Hung. *szarv* (horn) = Finn. *sarvi*, Hung. *vaj* (butter) = Finn. *voi*, Hung. *eleven* (alive) = Finn. *elävä*, Hung. *Menni* (to go) = Finn. *mennä*, Hung. *Reped* (to be torn) = Finn. *repeää* etc. which give a direct hint to a common origin.

(See: <http://www.pp.clinet.fi/~pkr01/sounds/hungary.html>)

What is the cause for these dissimilarities and is it possible to prove a relationship between the Hungarian and the Finnish languages at all? First of all, we have to notice the very large geographical distance between the peoples, one living on the coast of Gulf of Finland and the other one living in the Danube valley. Secondly, the separation of these two peoples took place a very long time ago. The scattering of the Finno-Ugric family of peoples from their ancestral home occurred about 4,500 years ago, which can be compared to the divergence of Germanic languages only about 2,000 years ago.



Programme for August 11, 2001

	Contestants	Leaders, observers, guests
7.30	Breakfast at the students' hall of residence	
9.00	Practice time in the computer lab	
11.00	Opening ceremony. Cultural programme in the gymnasium.	
12.00	Reception in the gymnasium	
15.00	Sightseeing (departing from the students' hall of residence)	
19.00	Dinner at Halászsárda	
20.00	Leisure activities, sports and games	20.00 Selection and translation of tasks for the 1 st session of the
22.00	The end of the day	

The Menu for Today

Breakfast (short list):

- ? Tea, milk, hot chocolate, juice;
- ? Jam, honey, fruit;
- ? Cheese, butter, sausage, salami;
- ? Fried bacon

Lunch (Reception at Zrínyi Miklós Secondary School)

- ? Buffet lunch including Goose Liver, Smoked Pork Tongue, Fried Turkey Breast, Fried Chicken Leg, Pork Chops, Sirloin Steak, Ham Filled with Chicken Liver or Cottage Cheese, Cheese Slices Filled with Chicken Liver or Cottage Cheese, Salamis and Sausages, Salads, Jellied Trout, Game Pörkölt (a kind of stew), Turkey Stew, Hortobágy Pancakes (stewed minced meat in pancakes with gravy and sour cream), Fruit, Biscuits, Pies, Pastries
- ? One glass of champagne

The venue of dinner



Entrance of the Halászsárda

Dinner:

- ? Turkey breasts with mushroom, rice
- ? Salad
- ? Jacket apple
- ? Mineral water/a glass of



beer

The Events and their Venues

Event	Venue
Welcome Party	Zrínyi Secondary School, gymnasium
Closing ceremony	Concert and Exhibition Hall (Synagogue)
Accommodation	Students' hall of residence
Competition	Zrínyi Secondary School, 2 nd floor
Lunch, dinner	Halászsárda
Folk dance	Zrínyi Secondary School, gymnasium
Leisure activities	Swimming pool

Free Time Activity Schedule

10th August	14.00	Free time	Free time with your guide.
	20.30	Free time	Sports activities (see below), a walk in the city, etc.
11th August	15.00	Sightseeing	Guided tour
	20.00	Quiz party in the school gym to get to know each other	Each team consists of two nations and their guides. You can get extra points if you prepare a performance typical of your culture. Musical instruments available.
12th August	20.30	Folklore program in the Village Museum	Folk dance, folk music. Tasting Hungarian food and drinks.
13th August	08.30	Trip to Lake Balaton	Swimming, sunbathing, (water)sports activities.
	20.00	Film night and sports games	In the Physics Lab (2 nd floor) you can watch an American film: "Sixth day" about human cloning with a lot of computer effects. In the gym you can do various sports.
14th August	20.30	Garden party in the forest	Sports activities, music, campfire, bacon toasting.
15th August	08.00	Trip to Keszthely (Group A)	
	08.00	Trip to Rádiháza (Group B)	A visit to a stable (horse riding and riding on a carriage).
	15.00	Free time	Shopping, sports activities
	21.00	Farewell party at Club Aztec	
16th August	08.00	Trip to Keszthely (Group B)	
	08.00	Trip to Rádiháza (Group A)	A visit to a stable (horse riding and riding on a carriage).
	15.00	Free time	Shopping, sports activities

If you need any information, ask the sports guide the day before. **06-30-267 6091** (Mr. Levente Karvalits)
Your guide will help you out with his/her cellular phone.

Leisure Activities

Place	Activities
School Gym and Courtyard	You can play basketball, volleyball, table tennis, soccer, feet-ball, and badminton in the gym and outside in the courtyard.
Weight-lifting room	Under the gym you will find a weight-lifting room.
Tennis Centre	If you would like to play tennis , ask the sports guide the day before. 06-30-267 6091. Your guide will help you out with his/her cellular phone.

Local swimming pool	Swimming, sunbathing, sports activities. Free with your ID card.
Lake Gebart Beach	Swimming, sunbathing, sports activities. Free with your ID card. Use local buses.
Gebart Thermal Bath	Swimming, sunbathing, sport activities. Free with your ID card. Use local buses.
Lucullus Pub	In the basement of your hotel you can find a darts and pool club. (Open 12.00-23.00) You have to pay yourselves for the games.
“Krumplirózsa” Cafe	Club in the city centre with cho-cho and pool 10.00-22.00

We would like to invite the competitors for friendly soccer and basketball matches on Monday (in school) and on Tuesday at the picnic in the forest.

Sports facilities are available on:

12 th August	15.00-19.00
13 th August	20.00-22.00
15 th August	15.00-19.00
16 th August	15.00-18.00

From page 1?

**Welcome
to CEOI
by Péter Hanák**



But let us be back to IOI. Someone, shortly before the *fifth* IOI, discovered that IOI may be *interpreted* as a binary number, and then it equals to *five*. Someone else, shortly before the *eighth* IOI, discovered that if we append another O and another I to IOI we get **IOIOI**, and if we lower the Os, we will get **I₀I₀I**, which very closely resembles the *five* circles of the Olympic Games. It is the proof that the IOI is member of the Olympics family, isn't it? Another *interpretation*, and what a *meaning*!

Great scientific discoveries often lead to new ones. It was no different at the *eighth* IOI. When the song *Old MacDonald Had a Farm* was played at the closing ceremony, someone discovered that the end of its *refrain* resembles to *i-o-i-o-i*, and, indeed, it could be chanted like that. At *that* very moment the *anthem* of the IOI was born. Since then, it has been sung everywhere, in Beijing, Cape Town, and in Antalya. You will often hear its *refrain* for we have chosen it as the sound signal of the *eighth* CEOI, and I hope you will sing it, too, when we make excursions, or simply gather for an evening party.

If we *look* at CEOI as a binary number whose bits are marked with O and C=E=I, then CEOI equals *thirteen*. *Thirteen* participating countries. *Thirteen* neighbours. However, if we look further at the *true interpretation*, the *true meaning* of CEOI, then it is, obviously, *competition* and *friendship*. Hopefully, it is also *excitement* and *satisfaction*. Finally, *nice atmosphere*, *humour*, and *good memories*.

Good luck!

Péter Hanák
President of the eighth CEOI