A babó (The Hobbit)

On the Kalman Kando Technical College (which gave a three-year instruction) I took entrance examinations three times, and had an undergraduate relationship for more than six years (between 1991 and 1997). It succeeded in such a way that my first entrance examination failed (I reached only *one* point less than the official score), then in the next year already succeeded (but they took me only to the electrical engineer line, where I first started, then postponed a term), and finally I ran against it again (they took me to the informatics line). I endeavoured „periodically" stretching out my residence there the most (by several further term-postponements… and other tricks likewise), and in the meantime combining business with pleasure: on the one hand – as I reached a school achievement good enough – I usually got some money scholarship, and on the other hand I had also got some considerable sparetime. (As a matter of curiosity: for seven years I was called up to the recruiting committee for starting my regular military service every year, but I succeeded in averting it every year… After the diploma they finally caught me anyway of course.)

I mostly spent those above-mentioned years with game development. *(See the other articles of games!)* Having run out of my postponing possibilities, I got done with the last few semesters together, then finally, of course, had got to graduate. Yet I also neatly found my way to turn this event to the advantage of my most important passion again: I decided to write my thesis about it. (See my particular publishing called *Making Text Adventure Games*.) The most of the work within concentrated around programming the game *A babó (The Hobbit)*. (For more than half a year, while I shaped a peculiar, own rhythm of life for myself: I was

living then in 48-hour days, that was spending exactly and orderly my every second night with sleeping.)

This is an *Interactive Fiction* (or, as the household word in our parts, a text adventure game) adaptation of J. R. R. Tolkien's classical novel *The Hobbit*. (The word *babó* used in the title is one of the literary translations in Hungarian for the *hobbit* word.) It had been known world-wide already by the *Melbourne House* version long before, that is one of the foundation-stones of the entire genre. (From the beginning of the eighties, it was released for several computer machine types. It was one of the most popular and known adventure games.) The original game (as well as the book) was one of the most determinative basic experiences for me, too. Among other causes, that's why I chose this one.

The room descriptions and other chapters were partly directly drawn upon some texts from the book (in the excellent translation by Tibor Szobotka, and published by the Cicero Publishings, for the hundredth anniversary of the birthday of the author in 1992), partly mixed with my own texts. The plot and the main structure of events freely follow some of the *Melbourne House* adapted version. However, I did not remain faithful to them; I had already found that very old game too simple, and obsolete, thus I strived for a much higher technical level instead.

Firstly, I had got to write a Hungarian *parser*, that was more difficult than an English one. (The parser is the interpeter part of the program, and the Hungarian grammar is pretty *much* more complicated to handle in this respect than the English.) Furthermore, the old adaptation only contained the single figures of Bilbo and Thorin; I put all the thirteen dwarf characters into mine. Eventually just the latter was the other cause of my choice: that rare several-hero character of the novel made it suitable for my purposes. Namely, my original intention was to build a system being able to handle several different playing characters at the same time. This effort was an organic further development of the conception of *The Galleon (A gálya)*: you could control two characters there so far. Nevertheless you might merely switch between these two, while in the case of *A babó* all characters are running fully realtime, and really in parallel in space.

With a graphical screen divided into four windows, freely placing any of the fourteen heroes into each, you can simultaneously follow the progressing of events from their own different points of view: whatever you do by whichever of them, you may see that both through an inner and an outer eye (or more). (And the other characters you left alone are automatically controlled by the computer.) Every other (non-player) character in game – at least in a partial, condition-dependent and qualified way – may also be influenced and manipulated: you can say anything to them to do it instead of you. (But of course it is not wholly guaranteed that they will really do it every time…) Moreover, they are always doing something by themselves, too, so each running of the program must be a bit different; the course of the game never stays the same, nor entirely calculable.

The general way of interpreting is similar to the parser-variations applied in my former games (e. g. *A gálya* and *Az Alvilág Ura*), that is a single imperative sentence (the Hungarian grammar uses imperative mood; e. g. OPEN THE DOOR means NYISD KI AZ AJTÓT), the unnecessary elements of which may usually be omitted (NYISD AJTÓT – OPEN DOOR), however, there must not be any uninterpretable component in it. (Whatever the program does not understand, it promptly complains, and does not execute anything until you fix that. The only exception if you SAY something to another; in such a case the interpretation truly happens at the other person, and you do not get a direct report about it. These may even be embedded into each other recursively, e. g. MONDD MEG ÓINNAK, HOGY MONDJA MEG GLÓINNAK, HOGY NYISSA KI AZ AJTÓT – that is shortly: SAY OIN TO SAY GLOIN TO OPEN THE DOOR.) If your sentence is still defective (NYISD – OPEN), then the program asks you expedient questions about it ("What do you want to open?"), which you

only must give the answers to (AJTÓT – DOOR). Naturally you can only refer to such things that are actually reachable for you, and the system examines this right before anything else. (If there is no door within the range, you get a message like „You can't see any door." exclusively, instantly, before anything else would happen.) You may link together several single sentences, too, by using commas or other signs (e. g. the word ÉS – AND). *And so forth:* all of these are the general characteristics of an advanced and intelligent parser; this is just the same level, where the best creations of the IF game-world had already come to. (With the difference that Hungarian is an inflexional, agglutinative language, while English is not, therefore it is a considerably harder job to do the same. Another important and interesting issue of the inflexion is the nearly absolutely free and variable order of the Hungarian words within a sentence, that is fairly fixed in English.)

Nevertheless an IF not only consists of a text input (and a few answers to that), but also there is a built-up background-world behind, that must be imagined somehow through that. A kind of simulation: let us say that world-simulation. The idea of *layering* is being used in this context: that means in what depth and subtlety you succeed in rendering the texture of this world. It is forming out of the conjugate effects of several factors and applied tools (of which more anon; but not here), and I strived to shape it the most advanced, too. For example: each and every place or thing is closely examinable, or searchable, and may contain any further, hidden other objects else embedded in any depth at will – recursively again. A key-motive of the plot, the magic ring even enriches that with another special dimension in the present case: yonder certain invisibility by means of which a player on the one hand disappears from the others, and on the other hand sees more of them. (E. g. the program shows him the objects carried by the others, too, that would be hidden otherwise – moreover, he may even take them unobserved etc.) As well as a very flexible and *non-linear* course of the plot, that was also part of the original game indeed.

The program was written in MS-DOS environment, x86 Assembly (using a MASM Assembler compiler). (The Assembly level optimization was unconditionally needed because of the relatively weak hardwares of the age: programming on an average 486 machine, it was not too possible to reach the above results without this, also counting there the graphical screen usage, and the independent, parallel monitoring of the four windows in realtime.) Although it usually works under Windows, too; but not always. (A main problem is that the Hungarian keyboard set is „stuck" on a Hungarian Windows version, so it either must be set to English, or the program itself; on an English Windows that is no problem. But another is that the program would like to use the Scroll Lock key, that the Windows won't let to be set, so you must set manually, too.)

Or, another possibility for running under Windows (or further operating systems) is to do it not in native mode, but through a so-called *DOS Box* emulating environment instead. (And another final note: there is only Hungarian version of the game; no English, of course.)

The article on the internet: **http://istennyila.hu/eng/game/0011/0000.htm**

Games: **http://istennyila.hu/eng /game/**

The author's website: **http://istennyila.hu/**

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