First question that I have to ask: are you fluent in Ithkuil? If not – to what extent can you speak/read/understand it?

The only portion of Ithkuil in which I am “fluent” is the morphology. I do not know the lexicon by heart and do not have the time to learn to speak it fluently. I am fairly proficient in knowing the characters of the script but still need to look up the rules when writing it.

What background one needs to undertake such an enormous effort? Are you a professional linguist? How many languages do you speak or understand?

I have a bachelor’s (undergraduate) university degree in linguistics. I have continued to study linguistics as a personal hobby my entire adult life. I am not a linguist professionally. Besides my native language English, I speak French, Spanish, Italian and Portuguese sufficiently well to converse with natives (as long as the conversation doesn’t get too technical or specialized).

Have you invented other languages?

Prior to beginning the language which eventually evolved into Ithkuil, I invented several sketches of other languages mostly for fun. They were not serious efforts to address the purposes which Ithkuil addresses. Since 1978, all my conlanging efforts became oriented toward creating the language which eventually became Ithkuil.

The project took 25 years. How this idea came to you? Have you worked on the language on a regular basis, I mean – every day, every week, every month…?

Have you rebuilt many things from the beginning of the project?

At university, I studied linguistics, and it was there that I gained the knowledge and tools for understanding how languages are structured. However, the more languages I read about and studied, the more I came to realize how inefficiently most languages function in terms of conveying thought in both a precise and a concise manner. I also noticed that certain languages were subjectively “better” than others in the manner that they were able to convey a specific task. For example, I noticed how elegant and efficient the three-letter root structure of Semitic languages like Arabic and Hebrew were as a means of building words compared to European languages. I noticed how the perfective versus imperfective verbal aspect of Slavonic languages...
like Russian were able to convey certain verbal distinctions easily which languages like English had to use whole phrases to convey. In other cases, I found certain languages that grammaticalized thoughts that most other languages did not (such as the “4th person” distinction of certain American Indian languages). I also fell in love with all the exotic and difficult-to-pronounce consonant sounds of Caucasian languages like Abkhaz and Ubykh, as well as the numerous vowels of Uralic and Altaic languages. The idea came to me that I might try to create a language which “combined” the most efficient and interesting features of all the languages I was familiar with. And so the seed of the language which eventually evolved into Ithkuil was born. The more I worked on it over the years, the more of my own ideas went into it, as opposed to simply borrowing ideas from existing languages. Then, during the 1980s, I discovered the writings of the new “cognitive” school of linguistics that was beginning to arise in the United States. These writings opened up a whole new level of understanding regarding the relationship between human thought and language which led to a major overhaul and expansion of the language I was working on in my spare time. It was at this point that I got the idea that I would try to accomplish the seemingly incompatible goals of creating a language capable of conveying much more information than natural human languages do, while simultaneously being more brief and concise than natural human languages (previously, all versions of the language were very “long-winded”). The work was slow, painstaking, and often frustrating. Between the mid-1980s and the mid-1990s, I abandoned the work at least a dozen times out of frustration (aggravated by the fact that every time I thought I was getting nearly finished, I would decide to scrap about 75% of what I had and start over with better ideas). Sometimes several months would go by before I would pick up where I left off. The breakthrough came around 1996 when my interest was re-ignited by discovery of the writings of two other cognitive linguists, Guilles Fauconnier and Len Talmy. Their research and findings on the structure of human thought and language renewed my interest in wanting to finish the project. By 1999, the grammar was about 95% finished and it was time to start finalizing the script and the lexicon. Interestingly enough, it was at this point that I discovered Robert Heinlein’s description of “Speedtalk” from his novella “Gulf.” At first I was surprised and mildly disappointed that someone had already thought of doing what I was working on, but then I realized that Speedtalk was only a shallow attempt which worked at the morpho-phonological level of language only, while the language I was creating took the same principles and applied them to all the different structural levels of language. It took me another four years to reach the point where I felt the work was complete enough to show the world, then it took me another year to write it all up formally on the computer (the language was developed entirely using pencil and paper) and create a website.

- Have you used other conlangs or Artistic Languages as an inspiration for your project? Have you thought about some natural languages while making Ithkuil? The roots, for example, bear some resemblance with the Hebrew root system (however Hebrew roots always have 3 consonants)?

As explained in the answer to the previous question, Ithkuil began as an attempt to “consolidate” the most efficient morpho-phonological features and morphological categories of various
natural human languages into one single language. It was not until this process was underway that I began incorporating my own ideas as well as concepts from theoretical linguistics and other disciplines into the work. Ithkuil's root-structure is indeed influenced by the Semitic triliteral root system. Certain features from North Caucasian languages were influential as well, as well as the perfective/imperfective distinction from Russian and other Slavonic languages. As for influences from other constructed languages, I was influenced by the distinction between alienable versus inalienable possession found in Suzette Elgin's Láadan language (also known as severable versus non-severable possession as seen in the difference between *my hat* versus *my voice*), as well as the hearsay categories from her language which influenced the Ithkuil category known as Validation.

- **Have you used the psychological or philosophical works as a basis for your project?**

  Ithkuil is influenced by the writings of the American cognitive linguists Lakoff, Langacker, Talmi and Fauconnier, all of whom in turn were influenced by findings from cognitive psychology. For example, George Lakoff's influential book *Women, Fire and Dangerous Things* relies heavily on the groundbreaking research of Eleanor Rosch, a psychologist whose work in the 1970s redefined how the human mind creates categories. As for philosophical influences, I have tried to avoid being influenced by the work of various philosophers of language or other writings on language by philosophers for two reasons: 1) I think most philosophers who write about language are not trained in linguistics and are therefore laughably (or dangerously) naïve in their understanding of language and the conclusions they reach about it (e.g., Wittgenstein, Russell) (one exception to this is the philosopher John Searle, whose book *Mind, Language and Society* provided me with ideas which constitute the bases for the Context and Illocution categories of Ithkuil -- see Sections 3.6 and 5.1 of the Ithkuil grammar). 2) since my own philosophical inclinations are toward an objective/realist philosophy, my interest in the interaction between language and the mind is for its own sake, not on how such interaction can be "twisted" into conclusions that deny reality or qualify it as arbitrary.

- **What is your criteria for choosing the roots? How do you build the taxonomy of concepts?**

  There are essentially two criteria: (1) adaptability to the derivational structures of the morphology and (2) consideration for what cognitive psychologists and cognitive linguists call "base-level categorization."

  The first criterion can basically be explained by performing the following analysis: I need an Ithkuil translation for the English word X. Before I simply create a root meaning X, is there any way I can use Ithkuil morphological categories or the 150 or so suffix categories to derive this word from a more general or primary word? If so, can that more general or primary word in turn be derived from another? And so, before one goes and create an Ithkuil root for "book" one first
remembers that a book is a collection or pages of writing bound together in a coherent fashion by which to convey a superset of information beyond the content of any specific page of the book. Well, Ithkuil morphology has all sorts of categories for designating coherent gestalt entities formed from interconnected subcomponents, so we realize we don’t need a word for book. Instead, all we need is the root for “writing/written message” declined into appropriate Configuraton and Affiliation categories, with consideration for the Context category given that the resulting entity only functions within the context of human social structures, with consideration for an additional suffix indicating that the entity has a container-like covering, etc., etc.

As for the second criterion, base-level categorization, this is best explained by example. Let’s take animals. First of all, identifying animals means dealing with a hierarchical taxonomy ranging from general to specific, for example:

mammal
equine
horse
thoroughbred
Arabian thoroughbred
Arabian thoroughbred gelding

As another example:

mammal
primate
monkey
chimpanzee
male chimpanzee
pet male chimpanzee

So, how should Ithkuil deal with such a hierarchy? The cognitive linguists in conjunction with research by cognitive psychologists show that human cognition tends to manifest what is called "base level" categorization, where a particular element in the hierarchy is psychologically viewed as being the most easy concept to grasp and understand, and is usually the first concept of the hierarchy learned by children, and usually represents the shortest, most common word in the speaker's language of all the elements in the hierarchy. This "base level" category (what psychologists call the most cognitively "salient" category level) usually appears in the middle of the range from general to specific. In the examples above, it would be the words "horse" and "monkey." Therefore, a person is far more likely to spontaneously say "Hey, there's a strange horse in the yard!" rather than "Hey, there's a strange equine" or "There's a strange Arabian thoroughbred." Likewise, a child at the zoo is more likely to say either "I want to see the monkeys!" or "I want to see the snakes!" than "I want to see the primates" or "I want to see the rattlesnakes and the pythons!"
Secondly, one of the purposes of Ithkuil is efficiency in communication (you might think of this simplistically as the "Speedtalk" factor). Since "base level" cognition implies that the concept "dog" or "spider" is going to be used by people more often and in more contexts than "canine" or "arachnid" it doesn't make sense for Ithkuil to only have roots for "canine" and "arachnid" with the words for "dog" and "spider" being simply derivations of these roots. It defeats the purpose of morpho-phonological efficiency if to say "I fear spiders", an Ithkuil speaker has to say literally "I fear the-most-common-arachnid-example."

Now, of course, you are probably thinking, surely the limit of 3600 roots does not allow enough roots to name all of the animals in the world at this "base level" category. No, of course it doesn't. But there is no need. Despite the thousands of different names of animal species, only about fifty or so are common enough to qualify for such "base level" categorization. Other animals are simply not sufficiently common or well-known to require such base-level naming. Therefore, it makes sense that Ithkuil have a root for 'bear' but it can probably do without a separate root for "wolverine" which it can name by derivational means from another root (quite possibly 'bear'). We see this in English with names of animals that are derivations or compounds such as "polar bear" and "sea lion" (the latter having nothing at all to do with a lion!). There simply aren't any base-level single-word names for these animals in English.

Finally, by establishing this "base-level" category at the level of the root in Ithkuil (instead of the stem), it allows me to use the stems to refer to contextual and supplementary manifestations of the root, i.e., male versus female, wild versus domesticated, the animal itself versus its function as food/prey/resource. In turn, I can use the SSD derivational suffix to generate words for associated concepts and products such as eggs, oil, fat, fur/feathers, flesh/meat, etc.

- When do you plan to finish the lexicon of roots and stems? Do you anticipate the extension of the lexicon, including new concepts (in a theoretical possibility that the language will be used)? Are you planning to develop the language any further?

I have approximately 800 roots identified now with all 18 stems for each root. (341 are currently listed on the website). I have about another 1000 roots tentatively identified but have not completely derived the 18 stems for each of these. My brother and I are writing a novel at present, which I anticipate will take up the next two or three years of my free time. Sorry, but I will not be able to return to work on the Ithkuil lexicon until then (although I definitely will be returning to work on it). As for developing the language further, I have developed ideas on redesigning the morpho-phonology to make the language easier to pronounce. Essentially, I have found a way to accomplish the same morphology, syntax, and lexicon using only 50 consonants and 10 vowels (currently Ithkuil has 65 consonants and 17 vowels). Unfortunately, this will mean having to recreate the website from scratch and reformulate all of the example sentences as well as reformulate the script as well. This will be a tedious undertaking and I will
not have the time to do this until several years from now. As for changes to the morphology, I only have a few minor changes I want to make. I am not pleased with one or two of the noun cases (they are too similar to others) and I want to change the way that the Focus category (see Section 3.5 of the grammar) is manifested (using word-order instead of an infix or other phonological marker). All in all, the language is structured almost exactly as I wanted.

- How did you came to the idea of your script? Is it based on some existing one? Do you have the handwriting version of the script?

The script can be analyzed at three levels: 1) aesthetic (the general “look” of the characters), 2) logical (how/whether the characters derive from one another or are logically related to one another), and 3) operational (how the script actually functions to convey a written form of the spoken language). On the aesthetic level, the look of the characters was somewhat influenced by the characters created by the designers of the Klingon script for the U.S. science-fiction television show Star Trek. I was a fan of this show growing up and always liked the general look of the characters of the fake Klingon language. (I should note that the current Ithkuil script is the fifth script I designed for the language—and the first I am satisfied with). On the logical level, the script is heavily influenced by the mutational principles found in two existing human scripts, the Ethiopic script (currently used to represent languages such as Amharic and Tigrinya) and the Brahmi script (an ancient script from India no longer used). Both of these scripts have “core” symbols that mutate (change) to derive other related symbols. Note that these two scripts are syllabries (the symbols represent a consonant+vowel syllable such as “ka” or “se”) but I was interested in them solely for their mutational principle because it works perfectly to represent all the consonantal and vocalic mutations of Ithkuil morpho-phonology. As for the operational level, the morpho-phonemic principle explained in Chapter 11 of the Ithkuil grammar is completely my own invention. I wanted the script to have the same sort of efficiency that the rest of the language has. I knew a boring old alphabet or syllabry would not suffice, and I do not consider a logographic script like Chinese to be logical. So I decided to utilize the mutational properties of the script to correspond to the morpho-phonological mutations of the language. Because those mutations convey grammatical (i.e. morphological) information while at the same time being based on a core phonological value (the basic consonants and vowels of the original stem), I realized the script could convey both phonological and morphological information at the same time, i.e., a morpho-phonemic script. The four previous scripts for Ithkuil were all alphabetic. The current fifth script was created beginning in 1987 with the final principles finished by 1994. The script was fine-tuned into its current state all the way until 2003. There is a handwritten version of the script that looks very different from the printed version, but it is not published. If Ithkuil were ever to be used in the real world, I see it being written by a database as output based on keyed input by the user. In other words, the writer would not write or “key” a certain Ithkuil symbol, but rather would select a particular root from a database and identify the particular forms of the 22 morphological categories which apply to the root as well as any suffixes. These would be keyed into a customized interface which would then formulate the resulting characters for the writer. As an example of what I mean, look at the diagram near the
beginning of Chapter 5 of the Ithkuil grammar that shows the grammatical breakdown of an Ithkuil verbal phrase as a listing of various Categories and their specific forms. It is the choosing of these forms from lists that a writer would perform via a custom computer interface; the computer would then generate the resulting Ithkuil characters.

- How many people “know” Ithkuil (to whatever extent) in your estimation? What is their opinion of it?

Based on the discussions on various internet bulletin boards I’ve seen in the 15 months since Ithkuil website was first released, as well as the fact that Ithkuil came in fourth-place in an end-of-2004 poll on the popular Langmaker.com website, I’d say at least 2000 people in the U.S.A. and Western Europe have at least heard of Ithkuil and know something about it. In Russian-speaking countries, Ithkuil was mentioned at the end of an article by a Mr. S. Kovlovskiy in the July issue of Komputerra magazine which purportedly has a readership of fifty thousand people. I have received at least two-dozen e-mails from Russian speaking persons since then asking me questions or telling me they want to (or are trying to) learn Ithkuil.

- Are you planning to translate some famous texts into Ithkuil as many others do? As an example I can give you “Hamlet” in Klingon. It would be an enormous fun, I guess…

I would like very much to translate such texts someday. Unfortunately, I am writing a novel right now during the very little free time I have. Therefore, I do not anticipate being able to do much work on (or fun with) Ithkuil until several years from now.

- Are you planning to advertise it, involve other people, publish a book, teach a course or any other activity to widespread the language?

I would like someday to create online lessons so people could study the language for themselves. The novel my brother and I are writing features Ithkuil in it as a language for a computer interface. I also gladly provide any information to others about Ithkuil whenever they ask, such as e-mail or via online interviews such as this one.

- Do you anticipate any possibility that there will be a person who will actually learn Ithkuil to achieve fluency? If yes, do you think there can be a community of people who will communicate in Ithkuil?

I believe learning to speak Ithkuil fluently would be incredibly difficult because of the massive amount of morphological information the language requires to be expressed that other languages do not. This would mean more than simply memorizing all these categories and their manifestations. It means having to maintain a conscious awareness of them when formulating any sentence in one’s mind. Consider: For a Russian or an English-speaker to say “it’s raining” in each other’s language is fairly simple except for the Russian perhaps wondering what the dummy
subject "it" represents. But in speaking the Ithkuil equivalent, one must consider how one knows it's raining (so as to use the correct Validation category), the pattern of the rainfall (so you'll know what value of the Phase category to use), whether the information is intended to convey a resulting consequence or interpretation on the part of the listener, etc., etc. So one might ask in frustration, what is Ithkuil for if no one can be expected to learn it? To this I respond as follows: Ithkuil is a foil (meant in the literary sense of the word) designed as a cautionary reminder to all those who would dare think (or claim) that existing human languages (usually one's own or their favorite auxlang) are the ultimate means of expressing human thought. By showing the world just how a human language COULD express what's really going on inside one's brain at a cognitive level, and by seeing the vast gap between what such a language is capable of expressing versus what actually gets expressed in natural languages (or natlang-style conlangs), hopefully such persons will come to reflect with humility what a hopelessly inadequate job natural languages make of the process. That is the purpose of Ithkuil: not to necessarily be learned and spoken, but to be reflected upon and studied for its value as a way of seeing just how much of what is going on at a cognitive level never actually gets expressed in real languages.

- Do you think there is a chance that a baby can be brought up to be a native Ithkuil speaker? I mean, the possibility that the baby will speak Ithkuil, not the possibility that someone will actually try such an enterprise.

This question presupposes that there is someone sufficiently fluent in Ithkuil to be able to teach the baby and converse with him/her once the baby becomes fluent. Assuming such a guardian could attain the necessary fluency, then yes, I believe the baby could be raised to be a native speaker of Ithkuil. This is because current research in infant language acquisition shows that the infant human brain is primarily a pattern recognizer, adapted to learn ANY language. Degree of "difficulty" or "simplicity" is meaningless to the infant brain; it is ready to learn the patterns specific to any language no matter how complex. Frequency, consistency, and sufficiency of input over time, as well as feedback and reinforcement by the teaching source are all that are required. There is nothing in the structure of Ithkuil that is inconsistent with the types of structures found in other human languages.

- How long does it take for you to make an Ithkuil sentence?

It takes me approximately 10 to 15 minutes to translate a simple sentence and up to an hour for long complex sentences. It then takes another five to fifteen minutes to look up the rules for writing the sentence in the script depending on how long the sentence.

- How long and how hard have you practiced to pronounce Ithkuil sentences?

It takes me about three or four attempts to be able to speak an entire Ithkuil sentence without making a mistake. Actually, it is not the exotic consonants and vowel combinations that give me
the problem, it's the tones. I can often pronounce the vowels and consonants correctly on the first or second try (I’ve loved pronouncing complex Caucasian-style ejectives and consonant clusters since I was a teenager), but remembering to pronounce words with high, or broken tone when required doesn’t come naturally.

- In this issue we will also talk about several other conlangs, such as the minimalistic “language of good” called Toki Pona and “logical language” Lojban. It seems that Toki Pona with its supersimplification approach is an exact opposite of Ithkuil. Have you ever heard of it? What is your opinion then? And what do you think about Lojban?

I looked at Toki Pona for the first time about six months ago, after reading about it in other conlang discussion groups. While I appreciate the idea of simplification as a way of fostering initial communication and goodwill, it is definitely 180 degrees away from the purpose and scope of Ithkuil. For me personally, I do not see how anyone could ultimately be satisfied with either creating or using a language like Toki Pona. It represents a sad compromise in the level of communication between people compared to the level at which language COULD be used for communication. As for Lojban, I studied symbolic logic (the predicate calculus) at university. I knew then that symbolic logic was NOT how I wanted Ithkuil to function. Languages such as Loglan and Lojban which are based on the predicate calculus are very interesting and precise symbol-manipulation systems, but they do not address the levels of language which represent the interrelationships between concepts that Ithkuil represents (the ability to designate exact interrelationships and derivations of secondary concepts from primary concepts), nor the semantic vagueness and cognitive intentionality problem which I discuss at length in Sections 0.3 through 0.5 of the Introduction section of the Ithkuil website.

- Lojban was invented to prove (or disprove) the Sapir-Whorf hypothesis. Do you believe in this hypothesis? What do you think will happen (theoretically) to the people and the community that will communicate in Ithkuil?

I believe in the “weak” form of the Sapir-Whorf hypothesis (that the grammar of one’s native language influences the way one thinks and interprets external reality). There has been lots of research in the last 25 years or so which I think clearly establish the basis for the weak version of the hypothesis. On the other hand, I definitely do not believe in the “strong” version of the hypothesis (that the grammar of one’s native language determines the way one thinks and interprets external reality).

As for a hypothetical community of Ithkuil-speakers, I do not think Ithkuil would serve the purpose of being the primary day-to-day language for a community, as it would quickly degenerate into a “vulgar” version of the language within a few generations due to its complexity. I see Ithkuil as being a specialized language used for specific purposes where exactitude and clarity of cognitive intention is called for, e.g., political debate, the teaching and discussion of scientific disciplines, the discussion of philosophy, the written presentation and
preservation of history (perhaps including the nightly news). As such, it would be a "learned" language (like learning of computer programming language) whose structure would be consciously preserved by its speakers. An analogy might be the way that the Roman Senate continued to use Classical Latin in its debates for centuries despite the fact that by the second or third century A.D., those very same senators spoke a completely different language at home, the Vulgar Latin of the masses (which became the basis for the modern-day Romance languages into which Vulgar Latin evolved).

- In the modern world, where English became the de facto international language, do you think there is still a need to invent other international languages? Is there any chance that people will still study Esperanto, or it will eventually disappear?

I wish Esperanto would be revived and replace English as the de facto international language, but I think it is too late. This saddens me deeply for two reasons: (1) English is not very easy to learn (especially if one wants to speak it well), and (2) English as the international language has had the undesirable effect of helping to make most Americans ethnocentric and culturally elitist. To learn another language is to gain a new way of looking at the world as well as insight into other cultures. Because Americans don't have to learn other languages now, many of them are denied this exposure to other cultures and points of view. This is unfortunately reinforced by the current decline in our education system, subjective belief in our "superpower" status, the shortsighted unilateralness of our current government and foreign policy, and our perceived technological prowess leading to a superficial sense of cultural superiority. All of this blinds many Americans to the idea that there is anything to be learned from the rest of the world's people and cultures. Very sad.

- Do you have any new conlang plans?

No, I first want to finish the Ithkuil lexicon and have some translation fun with Ithkuil before I work on another languages. There is also the revision to Ithkuil morpho-phonology that I mentioned above that I want to explore, but it will be some time before I can do so.

Thank you very much, John!

You're very welcome. It is a pleasure and an honor for me to have so many people in the Russian-speaking world interested in Ithkuil.

N.B.#2: Below is a John's follow-up to the interview above clarifying and correcting several points (D. Boozer: LCS Librarian)

Vladimir:
I have reviewed the old interview I gave to Michael. My previous answers to the following questions are now obsolete:

1) When do you plan to finish the lexicon of roots and stems? Do you anticipate the extension of the lexicon, including new concepts (in a theoretical possibility that the language will be used)? Are you planning to develop the language any further?

2) Do you have any new conlang plans?

My revised answers to the above two questions are as follows:

The online Ithkuil lexicon now features 16200 stems derived from 900 roots. These are almost all of the roots for which I have fully completed derivations. Additionally, there are about 1000 tentatively identified roots for which I have not yet derived their 18 stems. It is my intention to eventually complete these roots as well. I don’t know if I’ll ever finish all 3600 roots, however. As for extending the lexicon, I truly believe that 3600 roots is more than sufficient, given the nearly infinite derivational possibilities which the language’s morphology allows to be applied to any given root.

In 2007, I introduced the long-promised revision of Ithkuil called Ilaksh. Its creation was motivated by the numerous emails and other comments I received asking for an easier-to-pronounce version of the language. At the same time, I used the opportunity to make some adjustments and changes to the grammar.

While working on Ilaksh, it occurred to me that the morpho-phonological structure of Ilaksh could be applied to a new version of Ithkuil as well, allowing Ithkuil to be made even more concise than it is now. This new effort would essentially be similar to Ilaksh but without the constraints on the number of vowels and consonants. I am currently working on this new version of Ithkuil (call it Ithkuil 3.0) very slowly in my spare time. It will not be ready for many years.

As for the novel I was writing with my brother, we finished it in early 2006 and asked five or six people we know to read it. A couple of them thought it was great but the others thought the first half of the novel was too slow and “preachy.” We have therefore written a new outline for the entire first half of the novel (which will in turn require some revision of the second half as well). Unfortunately, at that point, we found that our Muses had abandoned us and we have not actually yet sat down to write the new version of the novel. Maybe in a couple of years.

Best wishes,

John Quijada
Sacramento, California

p.a. I will send you some pictures of myself in a separate e-mail.