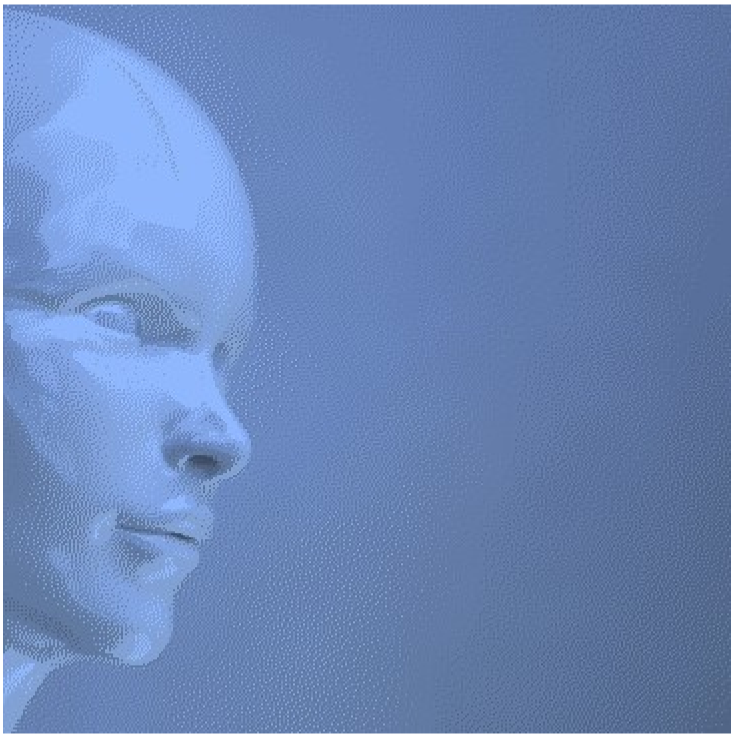
Scientific challenge:

Beat the simplest results of my Controlled Natural Language (CNL) reasoner



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Introduction

Science relies on the assumption that we live in an ordered universe that is subject to exact, deterministic, and consistent laws of nature. So, everything in nature is bound by natural laws and proceeds according to natural laws.

Natural laws, logic, and natural phenomena are investigated using fundamental science:

- Natural reasoning requires both natural intelligence and natural language;
- Intelligence and language are natural phenomena;
- Natural phenomena obey the laws of nature;
- Laws of nature and logic are investigated using fundamental science.

However, the field of Artificial Intelligence (AI) and Natural Language Processing (NLP) — in a broad sense — is investigated using cognitive science. As such, the field of AI and NLP is limited to mimic behavior, while mimicking a hen’s — chicken’s — behavior will not produce a single egg. As a consequence, the field of AI / NLP has fundamental problems. A few simple ones are described in the problem descriptions in this document.

Problem description 1: Reasoning in the past tense

Aristotle described the first discovered natural reasoning construct almost 2,400 years ago:

- Given: “All philosophers are mortal.”
- Given: “Socrates is a philosopher.”
- Logical conclusion: “Socrates is mortal.”

However, at the time Aristotle described the natural reasoning example mentioned above, Socrates was already dead, as the ultimate proof of his morality. So actually, Aristotle should have used the past tense form in his example regarding Socrates:

- Given: “All philosophers are mortal.”
- Given: “Socrates **was** a philosopher.”
- Logical conclusion: “Socrates **was** mortal.”

The tense of a verb tells us about the state of the involved statement:

- “Socrates **is** a philosopher” tells us that Socrates is still alive;
- “Socrates **was** a philosopher” tells us that Socrates is no longer among the living.

Regarding the conclusion:

- “Socrates **is** mortal” tells us that the death of Socrates is inevitable, but that his mortality isn't proven yet by hard evidence;
- “Socrates **was** mortal” tells us that his mortality is proven by hard evidence.

In *Block 5: Past tense reasoning*, a natural reasoning solution is proposed.

Problem description 2: Possessive reasoning (specifications)

The field of electromagnetism is a science because it closes the loop:

- We can convert motion to electromagnetism, and convert electromagnetism back to motion;
- We can convert light to electromagnetism, and electromagnetism back to light;
- We can convert magnetism to electricity, and electricity back to magnetism.

In the same way, natural reasoning closes the loop for natural language and natural intelligence, without any human interaction or engineered techniques:

- From readable sentences,
- through natural logic (natural intelligence),
- with the result expressed in readable — word-by-word constructed — sentences again.

In primary school, we all learned a similar sum:

- Given: "John **has** 3 apples."
- Given: "Peter **has** 4 apples."
- Logical conclusion: "Together, John and Peter **have** 7 apples."

The school teacher then wrote:

- 3 apples + 4 apples = 7 apples

However, the result of the sum — "7 apples" — lacks a reference to "John and Peter". So, the result of this sum is insufficient to generate a readable sentence:

- "Together, John and Peter **have** 7 apples."

Hopefully, mathematicians will come to the rescue. They will write:

- J = 3
- P = 4
- J + P = 7

Unfortunately, the mathematical result "J + P = 7" lacks a reference to "apples". So, the result of this algebra is also insufficient to generate a readable sentence:

- "Together, John and Peter **have** 7 apples."

When such problems occur in the field of AI / NLP, human influence or an engineered solution is applied rather than a generic solution, which downgrades AI / NLP from a science to a field of engineering.

In *Block 3: Grouping of knowledge (specifications)*, a natural reasoning solution is proposed.

Problem description 3: Possessive reasoning (relations)

Possessive reasoning — reasoning using the possessive imperative “have” — is not naturally supported by logic/algebra:

- Given: “Paul is a son of John.”
- Logical conclusion: “John **has** a son, called Paul.”

Nor the other way around:

- Given: “John **has** a son, called Paul.”
- Logical conclusion: “Paul is a son of John.”

In *Block 4: Grouping of knowledge (relations)*, a natural reasoning solution is proposed.

Problem description 4: Generation of questions

Algebra describes the Exclusive OR (XOR) function, while CNL reasoners don't implement its linguistic equivalent: conjunction “or”. CNL reasoners are therefore unable to generate the following question:

- Given: “Every person is a man **or** a woman.”
- Given: “Addison is a person.”
- Logical question: “Is Addison a man **or** a woman?”

In *Block 6: Detection of a conflict — and generation of a question*, a natural reasoning solution is proposed.

Challenge

It may seem like Large Language Models (LLM) can solve the aforementioned reasoning problems, from natural language — through natural logic (natural intelligence) — with the result expressed in natural language again. However, LLMs only have a limited, engineered reasoning capability. When reasoning problems are combined, LLMs will start to lose context.

Therefore, I defy anyone to beat the simplest results of my reasoner in a generic (=scientific) way, under the same strict preconditions as my system:

- From readable sentences (with restricted grammar, Controlled Natural Language),
- through natural logic (natural intelligence),
- with the results expressed in readable, autonomously — word-by-word — constructed sentences,
- in multiple languages [1],
- without programmed or trained knowledge,
- without human-written output sentences,
- without extensive word lists,
- published — free of charge — as open-source software, just like my software is published as open-source.

1 Logic is (almost) language-independent. My natural reasoner therefore implements an (almost) language-independent logic, which is configured for five languages: English, Spanish, French, Dutch and Chinese.

The rules of this challenge

- Below are 9 blocks. In the first 7 blocks, I describe the very simplest natural reasoning constructs of my system. Your implementation should deliver the results of at least one of the mentioned blocks. In the last 2 blocks I only show the results of my reasoning system;
- Your implementation should not contain any knowledge after startup. Instead, the system should derive the knowledge from the input sentences of the mentioned examples, from readable sentences, via a generic algorithm, back to readable sentences;
- Preferably, the nouns and proper names used should not be known in advance. I use grammar definitions and an algorithm instead of a word list;
- Your implementation should be set up as generically as possible so that all examples of this challenge can be integrated into a single system;
- The screenshots of my reasoning system show that various natural reasoning constructs reinforce each other. At the end of each of the first 7 blocks a screenshot has been added, to show how my system processes the mentioned examples;
- Your implementation should be published as open source software, so that the functionality is clear, just like my software is published as open source software;
- In case your results are slightly different, you should explain why your system reacts differently;
- It is an ongoing challenge until all mentioned blocks have been implemented by others;
- I will be the jury of your implementation.

A small reward

I am offering a small reward per block to the first person who implements that particular block under the stated conditions. For the first 7 blocks, €1,000 per block. For the last two blocks, €1,500 per block. So €10,000 in total.

You can contact me via LinkedIn and my website.

Block 1: Direct conversions

Definition 1:

"{proper noun 1} is a/an/the {singular noun} of {proper noun 2}"
equals to
"{proper noun 2} has a/an {singular noun}, called {proper noun 1}"

Examples:

Variables:

- proper noun 1 = "Paul",
- proper noun 2 = "John",
- singular noun = "son"

Result:

- Given: "Paul is a son of John."
- Generated conclusion: "John has a son, called Paul."

Variables:

- proper noun 1 = "Laura",
- proper noun 2 = "Anna",
- singular noun = "daughter"

Result:

- Given: "Anna has a daughter, called Laura."
- Generated conclusion: "Laura is a daughter, called Anna."

Definition 2:

"Every {singular noun 1} has a/an {singular noun 2}"
equals to
"A/An {singular noun 2} is part of every {singular noun 1}"

Examples:

Variables:

- singular noun 1 = "car",
- singular noun 2 = "engine"

Result:

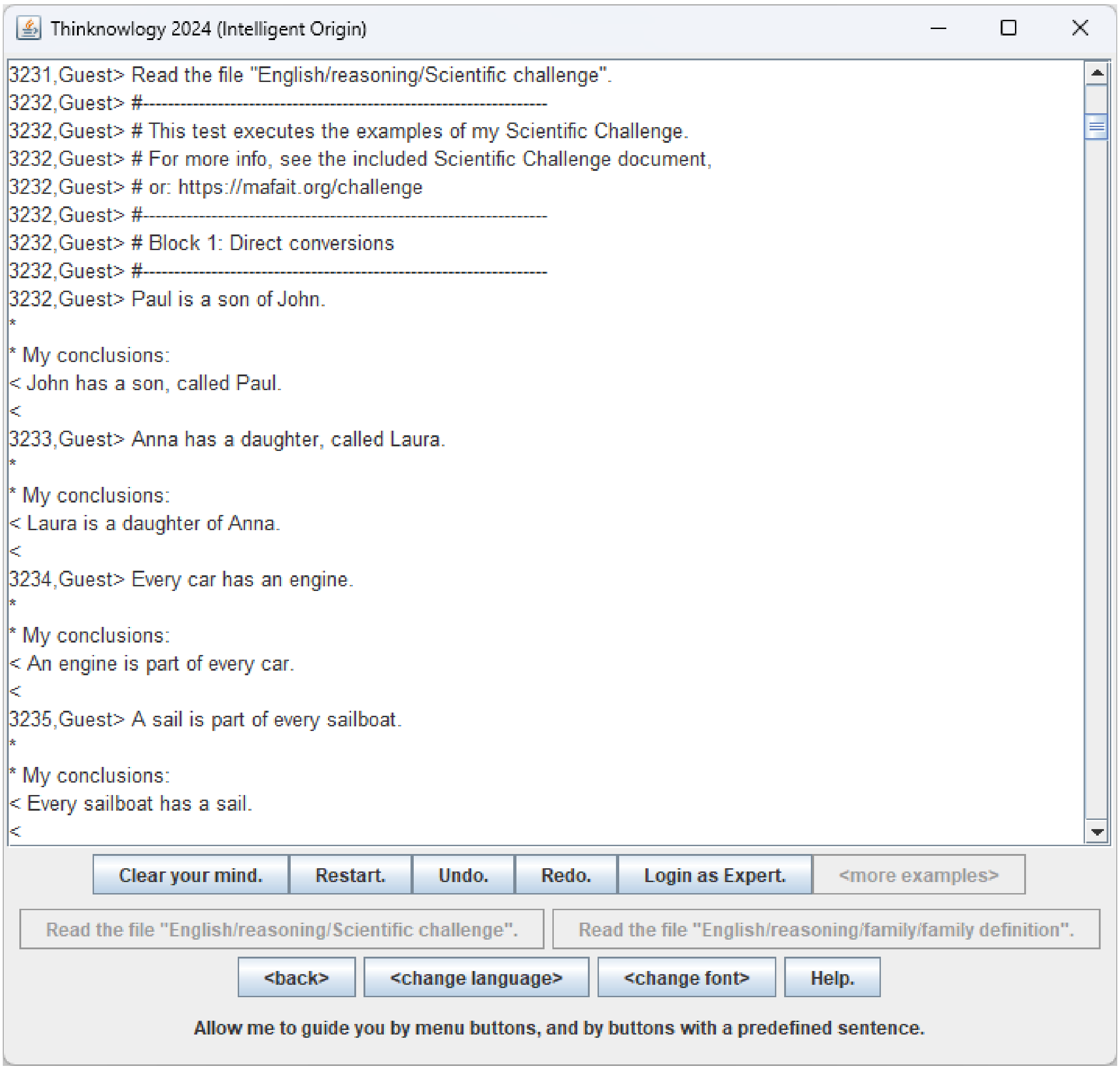
- Given: "Every car has an engine."
- Generated conclusion: "An engine is part of every car."

Variables:

- singular noun 1 = "sailboat",
- singular noun 2 = "sail"

Result:

- Given: "A sail is part of every sailboat."
- Generated conclusion: "Every sailboat has a sail."


Thinknowlogy 2024 (Intelligent Origin)
3231,Guest> Read the file "English/reasoning/Scientific challenge".
3232,Guest> #--
3232,Guest> # This test executes the examples of my Scientific Challenge.
3232,Guest> # For more info, see the included Scientific Challenge document,
3232,Guest> # or: https://mafait.org/challenge
3232,Guest> #--
3232,Guest> # Block 1: Direct conversions
3232,Guest> #--
3232,Guest> Paul is a son of John.
*
* My conclusions:
< John has a son, called Paul.
<
3233,Guest> Anna has a daughter, called Laura.
*
* My conclusions:
< Laura is a daughter of Anna.
<
3234,Guest> Every car has an engine.
*
* My conclusions:
< An engine is part of every car.
<
3235,Guest> A sail is part of every sailboat.
*
* My conclusions:
< Every sailboat has a sail.
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.

Block 2: Indirect conversions

Definition 3a:

"Every {singular noun 1} has a/an {singular noun 2} and a/an {singular noun 3}"
from which can be concluded
"A/An {singular noun 2} and a/an {singular noun 3} are part of every {singular noun 1}"

Example:

Variables:

- singular noun 1 = "family",
- singular noun 2 = "parent",
- singular noun 3 = "child"

Result:

- Given: "Every family has a parent and a child."
- Generated conclusion: "A parent and a child are part of every family."

Definition 3b:

“Every {singular noun 1} has a/an {singular noun 2} and a/an {singular noun 3}”
and
“{proper noun} is a/an {singular noun 2 or 3}”
from which can be concluded
“{proper noun} is part of a/an {singular noun 1}”

Definition 3c:

“Every {singular noun 1} has a/an {singular noun 2} and a/an {singular noun 3}”
and
“{proper noun} is a/an {singular noun 2}”
from which can be assumed
“{proper noun} has probably a/an {singular noun 3}”

“Every {singular noun 1} has a/an {singular noun 2} and a/an {singular noun 3}”
and
“{proper noun} is a/an {singular noun 3}”
from which can be assumed
“{proper noun} has probably a/an {singular noun 2}”

Examples:

Variables:

- proper noun = “Michael”,
- singular noun 1 = “family”,
- singular noun 2 = “parent”,
- singular noun 3 = “child”

Result:

- Given: “Michael is a parent.”
- Generated conclusion:
  “Michael is part of a family.” (generated by Definition 3b)
- Generated assumption:
  “Michael has probably a child.” (generated by Definition 3c)

Variables:

- proper noun = “Adam”,
- singular noun 1 = “family”,
- singular noun 2 = “parent”,
- singular noun 3 = “child”

Result:

- Given: “Adam is a child.”
- Generated conclusion:
  “Adam is part of a family.” (generated by Definition 3b)
- Generated assumption:
  “Adam has probably a child.” (generated by Definition 3c)

Definition 3d:

“Every {singular noun 1} has a/an {singular noun 2} and a/an {singular noun 3}”
and
“{proper noun} has a/an {singular noun 2 or 3}”
from which can be assumed
“{proper noun} is probably part of a/an {singular noun 1}”

Definition 3e:

“Every singular noun 1} has a/an {singular noun 2} and a/an {singular noun 3}”
and
“{proper noun} has a/an {singular noun 2}”
from which can be assumed
“{proper noun} is probably a/an {singular noun 3}”

“Every {singular noun 1} has a/an {singular noun 2} and a/an {singular noun 3}”
and
“{proper noun} has a/an {singular noun 3}”
from which can be assumed
“{proper noun} is probably a/an {singular noun 2}”

Examples:

Variables:

- proper noun = “Peter”,
- singular noun 1 = “family”,
- singular noun 2 = “parent”,
- singular noun 3 = “child”

Result:

- Given: “Peter has a parent.”
- Generated assumptions:
  - “Peter is probably a child.” (generated by Definition 3e)
  - “Peter is probably part of a family.” (generated by Definition 3d)

Variables:

- proper noun = “Ronald”,
- singular noun 1 = “family”,
- singular noun 2 = “parent”,
- singular noun 3 = “child”

Result:

- Given: “Ronald has a child.”
- Generated assumptions:
  - “Ronald is probably a parent.” (generated by Definition 3e)
  - “Ronald is probably part of a family.” (generated by Definition 3d)

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```
3236,Guest> #----------------------------------------------------------------
3236,Guest> # Block 2: Indirect conversions
3236,Guest> #----------------------------------------------------------------
3236,Guest> Every family has a parent and a child.
*
* My conclusions:
< A parent and a child are part of every family.
<
3237,Guest> Michael is a parent.
*
* My conclusions:
< Michael is part of a family.
*
* My assumptions:
< Michael has probably a child.
<
3238,Guest> Adam is a child.
*
* My conclusions:
< Adam is part of a family.
*
* My assumptions:
< Adam has probably a parent.
<
3239,Guest> Peter has a parent.
*
* My assumptions:
< Peter is probably a child.
< Peter is probably part of a family.
<
3240,Guest> Ronald has a child.
*
* My assumptions:
< Ronald is probably a parent.
< Ronald is probably part of a family.
<
```

Clear your mind. | Restart. | Undo. | Redo. | Login as Expert. | <more examples>

Read the file "English/reasoning/Scientific challenge". | Read the file "English/reasoning/family/family definition".

<back> | <change language> | <change font> | Help.

Allow me to guide you by menu buttons, and by buttons with a predefined sentence.

Block 3: Grouping of knowledge (specifications)

Definition 4:

"{proper noun 1} has {positive number 1} {singular or plural noun}"
and
"{proper noun 2} has {positive number 2} {singular or plural noun}"
equals to
"Together, {proper noun 1} and {proper noun 2} have {positive number 1 + positive number 2} {plural noun}"

Example:

Variables:

- proper noun 1 = "John",
- proper noun 2 = "Peter",
- positive number 1 = 3,
- positive number 2 = 4,
- singular/plural noun = "apple"/"apples"

Result:

- Given: "John **has** 3 apples."
- Given: "Peter **has** 4 apples."
- Generated conclusion: "Together, John and Peter **have** 7 apples."

No screenshot available, because this natural reasoning construct is not implemented yet. It will be published in the second half of 2025.

Block 4: Grouping of knowledge (relations)

Definition 5:

"{proper noun 1} has a/an {singular noun}, called {proper noun 2}"
and
"{proper noun 1} has a/an {singular noun}, called {proper noun 3}"
equals to
"{proper noun 1} has {number: 2} [plural form of {singular noun}], called {proper noun 2} and {proper noun 3}"

Example:

Variables:

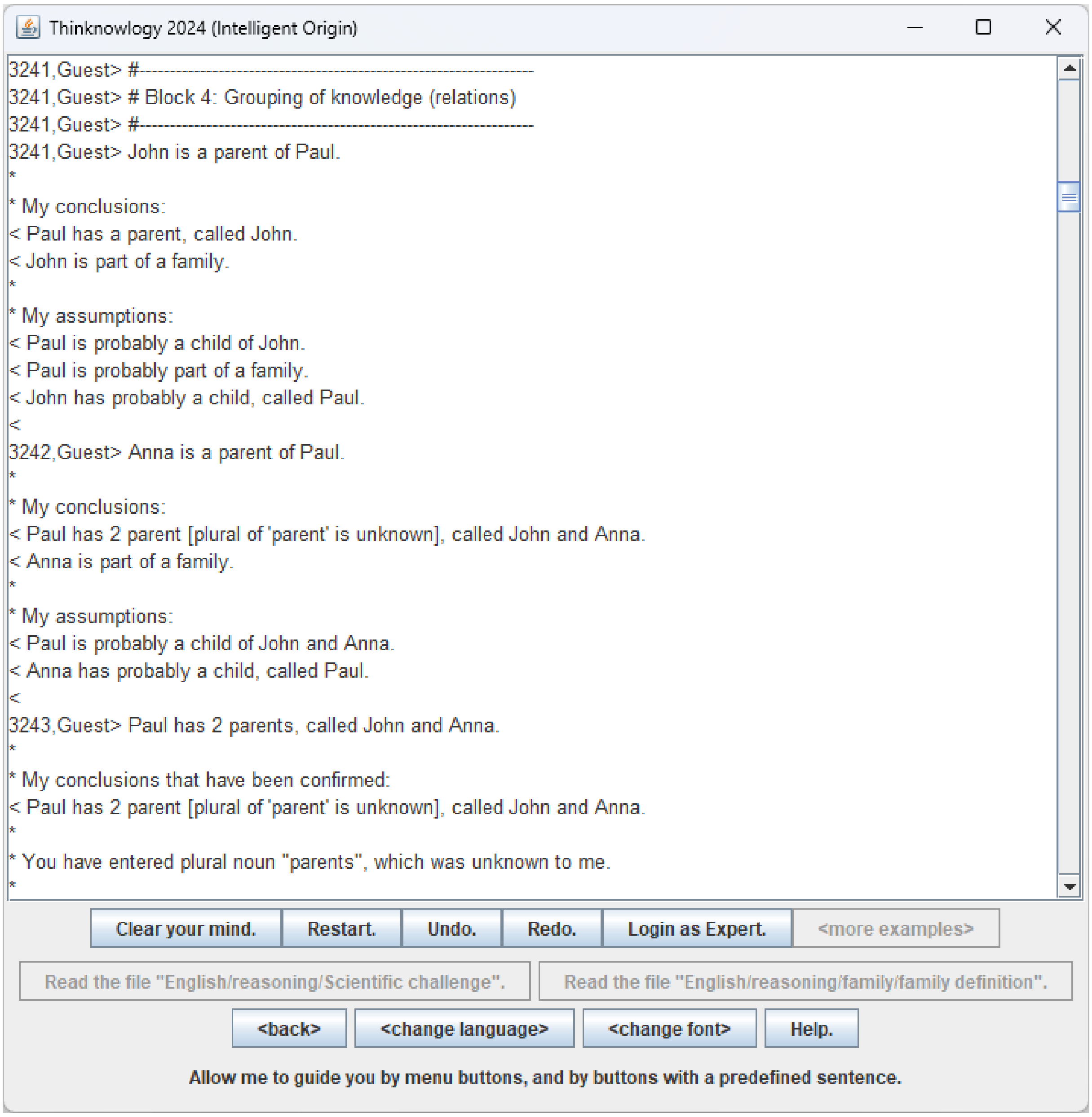
- proper noun 1 = "Paul",
- proper noun 2 = "John",
- proper noun 3 = "Anna",
- singular noun = "parent"

Result:

- Given: "John is a parent of Paul."
- Generated conclusion: "Paul has a parent, called John." (generated by Definition 1)

- Given: "Anna is a parent of Paul."
- Generated conclusion:
  "Paul has 2 parent [plural of 'parent' is unknown], called John and Anna."

- Given: "Paul has 2 parents, called John and Anna."
- Detected that the generated conclusion is confirmed:
  "Paul has 2 parent [plural of 'parent' is unknown], called John and Anna."
- Detected: You have entered plural noun "parents", which was unknown to me.


Thinknowlogy 2024 (Intelligent Origin)

3241,Guest> #--
3241,Guest> # Block 4: Grouping of knowledge (relations)
3241,Guest> #--
3241,Guest> John is a parent of Paul.
*
* My conclusions:
< Paul has a parent, called John.
< John is part of a family.
*
* My assumptions:
< Paul is probably a child of John.
< Paul is probably part of a family.
< John has probably a child, called Paul.
<
3242,Guest> Anna is a parent of Paul.
*
* My conclusions:
< Paul has 2 parent [plural of 'parent' is unknown], called John and Anna.
< Anna is part of a family.
*
* My assumptions:
< Paul is probably a child of John and Anna.
< Anna has probably a child, called Paul.
<
3243,Guest> Paul has 2 parents, called John and Anna.
*
* My conclusions that have been confirmed:
< Paul has 2 parent [plural of 'parent' is unknown], called John and Anna.
*
* You have entered plural noun "parents", which was unknown to me.
*

Clear your mind. | Restart. | Undo. | Redo. | Login as Expert. | <more examples>

Read the file "English/reasoning/Scientific challenge". | Read the file "English/reasoning/family/family definition".

<back> | <change language> | <change font> | Help.

Allow me to guide you by menu buttons, and by buttons with a predefined sentence.

Block 5: Past tense reasoning

Definition 6:

"{proper noun 1} was a/an/the {singular noun} of {proper noun 2}"
from which can be concluded
"{proper noun 2} has no {singular noun} anymore"

"{proper noun 1} was a/an/the {singular noun} of {proper noun 2}"
from which can be concluded
"{proper noun 2} had a/an {singular noun}, called {proper noun 1}".

Example:

Variables:

- proper noun 1 = "James",
- proper noun 2 = "Peter",
- singular noun = "father"

Result:

- Given: "James was the father of Peter."
- Generated conclusions:
  - "Peter has no father anymore."
  - "Peter had a father, called James."

Definition 7:

"Every {singular noun 1} is a/an {singular noun 2}"
and
"{proper noun} was a/an {singular noun 1}"
from which can be concluded
"{proper noun} was a/an {singular noun 2}"

Example:

Variables:

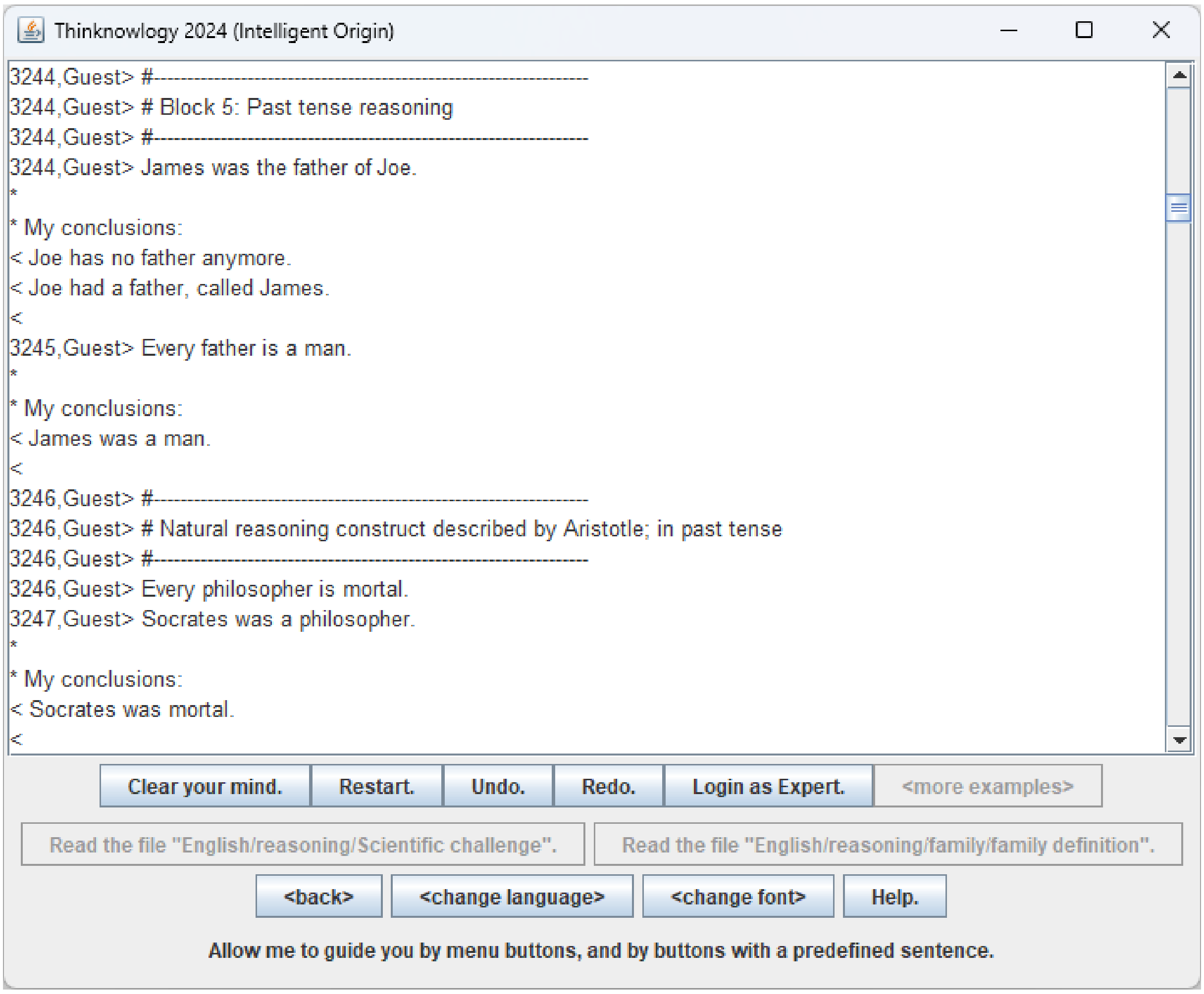
- proper noun = "James",
- singular noun 1 = "father",
- singular noun 2 = "man"

Result:

- Given: "Every father is a man."
- ~~Given: "James was a father"~~ [2]
- Generated conclusion: "James was a man."

---

2 Sentence "James was the father of Peter" of the previous example should be recognized automatically as "James was a father".


Thinknowlogy 2024 (Intelligent Origin)
3244,Guest> #---
3244,Guest> # Block 5: Past tense reasoning
3244,Guest> #---
3244,Guest> James was the father of Joe.
*
* My conclusions:
< Joe has no father anymore.
< Joe had a father, called James.
<
3245,Guest> Every father is a man.
*
* My conclusions:
< James was a man.
<
3246,Guest> #---
3246,Guest> # Natural reasoning construct described by Aristotle; in past tense
3246,Guest> #---
3246,Guest> Every philosopher is mortal.
3247,Guest> Socrates was a philosopher.
*
* My conclusions:
< Socrates was mortal.
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.

Block 6: Detection of a conflict — and generation of a question

Definition 8:

"Every {singular noun 1} is a/an {singular noun 2} or a/an {singular noun 3}"
is in conflict with
"{proper noun} is a/an {singular noun 2} **and** a/an {singular noun 3}

"Every {singular noun 1} is a/an {singular noun 2} or a/an {singular noun 3}"
and
"{proper noun} is a/an {singular noun 1}"
from which can be concluded
"{proper noun} is a/an {singular noun 2} or a/an {singular noun 3}"

"{proper noun} is a/an {singular noun 2} or a/an {singular noun 3}"
equals to
"Is {proper noun} a/an {singular noun 2} or a/an {singular noun 3}?"

Example:

Variables:

- singular noun 1 = "person",
- singular noun 2 = "man",
- singular noun 3 = "woman",
- proper noun = "Addison"

Result:

- Given: "Every person is a man or a woman."
- Given: "Addison is a man **and** a woman."
- Detected conflict. This sentence is not accepted, because it is in conflict with: "Every person is a man or a woman."

- Given: “Addison is a person.”
- Generated question: “Is Addison a man or a woman?”

Definition 9:

“Is {proper noun} a/an {singular noun 1} or a/an {singular noun 2}?”
and
“{proper noun} is not a/an {singular noun 1}”
from which can be concluded
“{proper noun} is a/an {singular noun 2}”

“Is {proper noun} a/an {singular noun 1} or a/an {singular noun 2}?”
and
“{proper noun} is not a/an {singular noun 2}”
from which can be concluded
“{proper noun} is a/an {singular noun 1}”

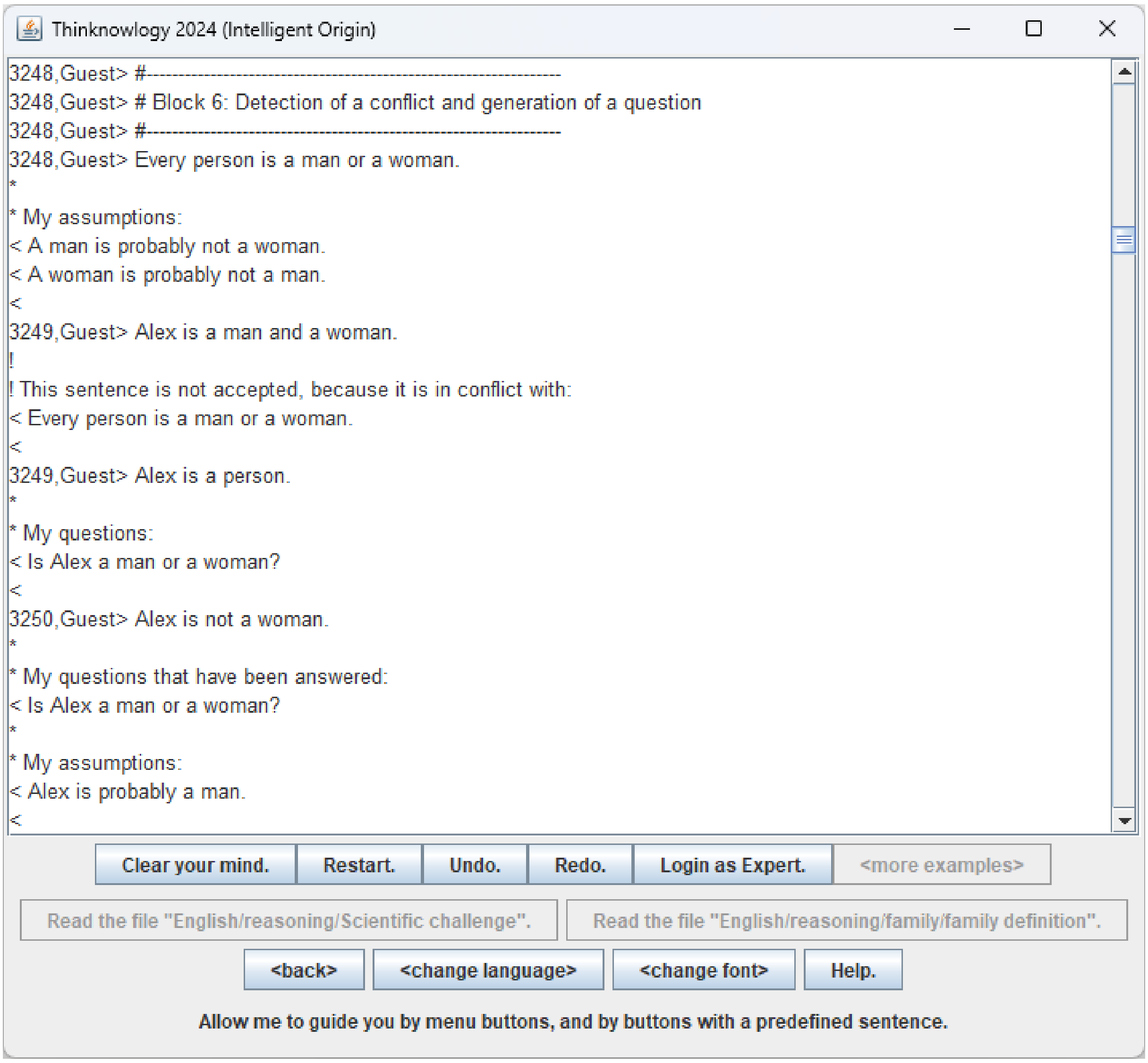
Example:

Variables:

- proper noun = “Addison”,
- singular noun 1 = “man”,
- singular noun 2 = “woman”

Result:

- Given: “Addison is not a woman.”
- Detected that the generated question has been answered:
  “Is Addison a man or a woman?”
- Generated assumption: “Addison is probably a man.”


Thinknowlogy 2024 (Intelligent Origin)
3248,Guest> #--
3248,Guest> # Block 6: Detection of a conflict and generation of a question
3248,Guest> #--
3248,Guest> Every person is a man or a woman.
*
* My assumptions:
< A man is probably not a woman.
< A woman is probably not a man.
<
3249,Guest> Alex is a man and a woman.
!
! This sentence is not accepted, because it is in conflict with:
< Every person is a man or a woman.
<
3249,Guest> Alex is a person.
*
* My questions:
< Is Alex a man or a woman?
<
3250,Guest> Alex is not a woman.
*
* My questions that have been answered:
< Is Alex a man or a woman?
*
* My assumptions:
< Alex is probably a man.
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.

Block 7: Archiving of knowledge

Definition 10:

"{proper noun 1} is **the** {singular noun} of {proper noun 2}"
and
"{proper noun 3} is **the** {singular noun} of {proper noun 2}"
from which can be concluded
"{proper noun 2} has a new {singular noun}, called {proper noun 3}"
and
"{proper noun 2} has a previous {singular noun}, called {proper noun 1}"

Example:

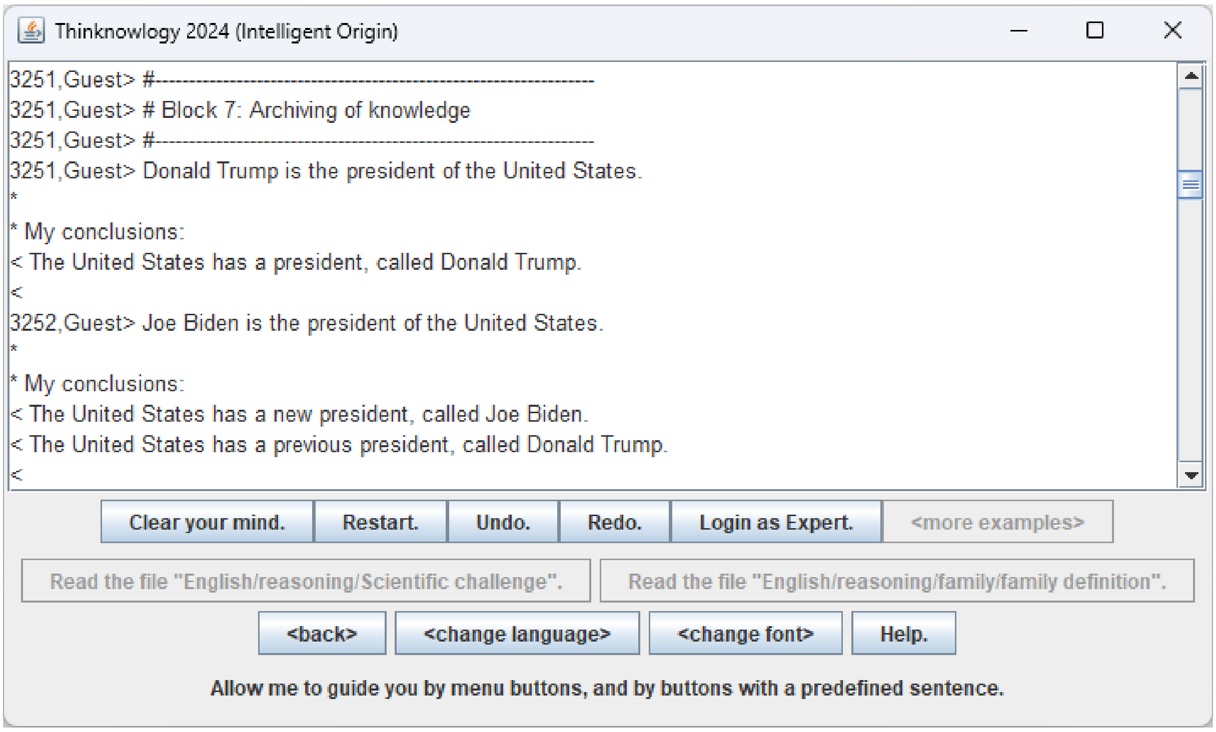
Variables:

- proper noun 1 = "Donald Trump",
- proper noun 2 = "the United States",
- proper noun 3 = "Joe Biden",
- singular noun = "president"

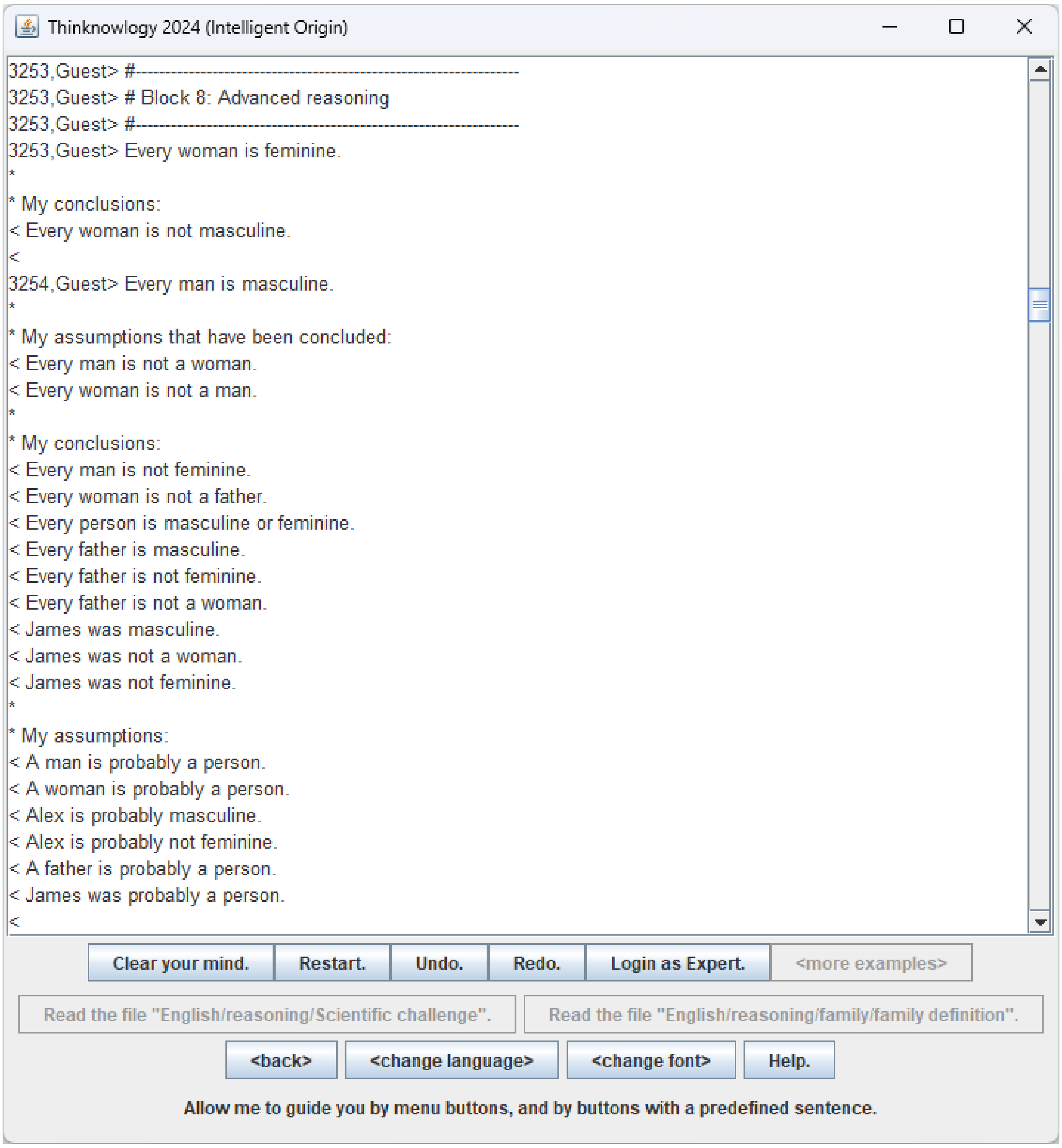
Result:

- Given: "Donald Trump is **the** president of the United States."
- Generated conclusion:
  "The United States has a president, called Donald Trump." (generated by Definition 1)

- Given: "Joe Biden is **the** president of the United States."
- Generated conclusions:
  - "The United States has a new president, called Joe Biden."
  - "The United States has a previous president, called Donald Trump."


Thinknowlogy 2024 (Intelligent Origin)
3251,Guest> #---
3251,Guest> # Block 7: Archiving of knowledge
3251,Guest> #---
3251,Guest> Donald Trump is the president of the United States.
*
* My conclusions:
< The United States has a president, called Donald Trump.
<
3252,Guest> Joe Biden is the president of the United States.
*
* My conclusions:
< The United States has a new president, called Joe Biden.
< The United States has a previous president, called Donald Trump.
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.

Block 8: Advanced reasoning



Thinknowlogy 2024 (Intelligent Origin)

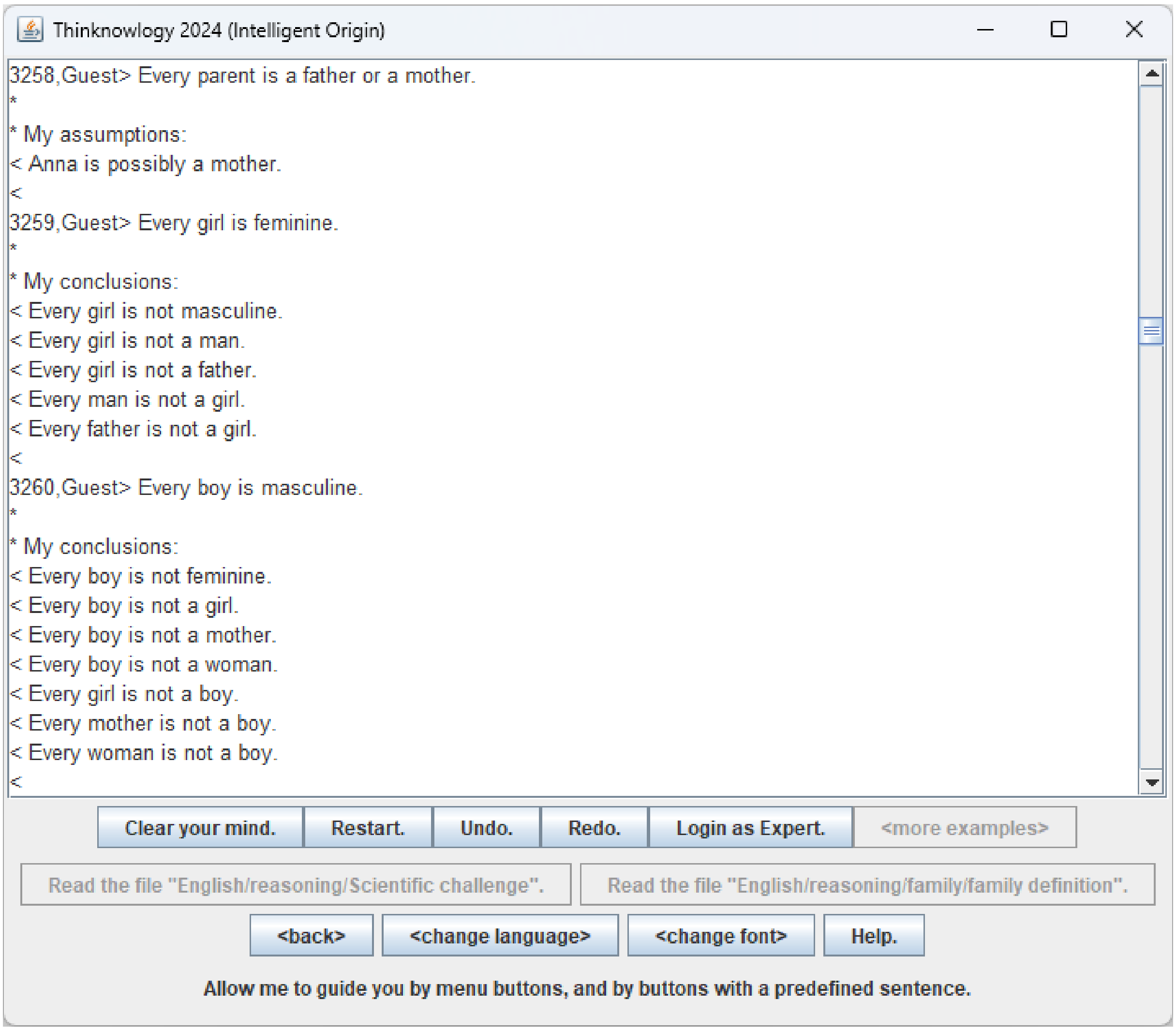
```
3255,Guest> Every parent is a man or a woman.
*
* My conclusions:
< Every parent is masculine or feminine.
*
* My assumptions:
< A parent is probably a person.
< Anna is probably a person.
< Anna is possibly a woman.
< Anna is possibly not masculine.
< Anna is possibly not a man.
< Anna is possibly not a father.
< Anna is possibly feminine.
< John is probably a person.
< Ronald is possibly a person.
< Michael is probably a person.
*
* My questions:
< Is John masculine or feminine?
< Is John a man or a woman?
< Is Ronald masculine or feminine?
< Is Ronald a man or a woman?
< Is Michael masculine or feminine?
< Is Michael a man or a woman?
<
3256,Guest> Every father is a man.
3257,Guest> Every mother is a woman.
*
* My conclusions:
< Every mother is feminine.
< Every mother is not a father.
< Every mother is not masculine.
< Every mother is not a man.
< Every father is not a mother.
< Every man is not a mother.
*
* My assumptions:
< A mother is probably a person.
<
```

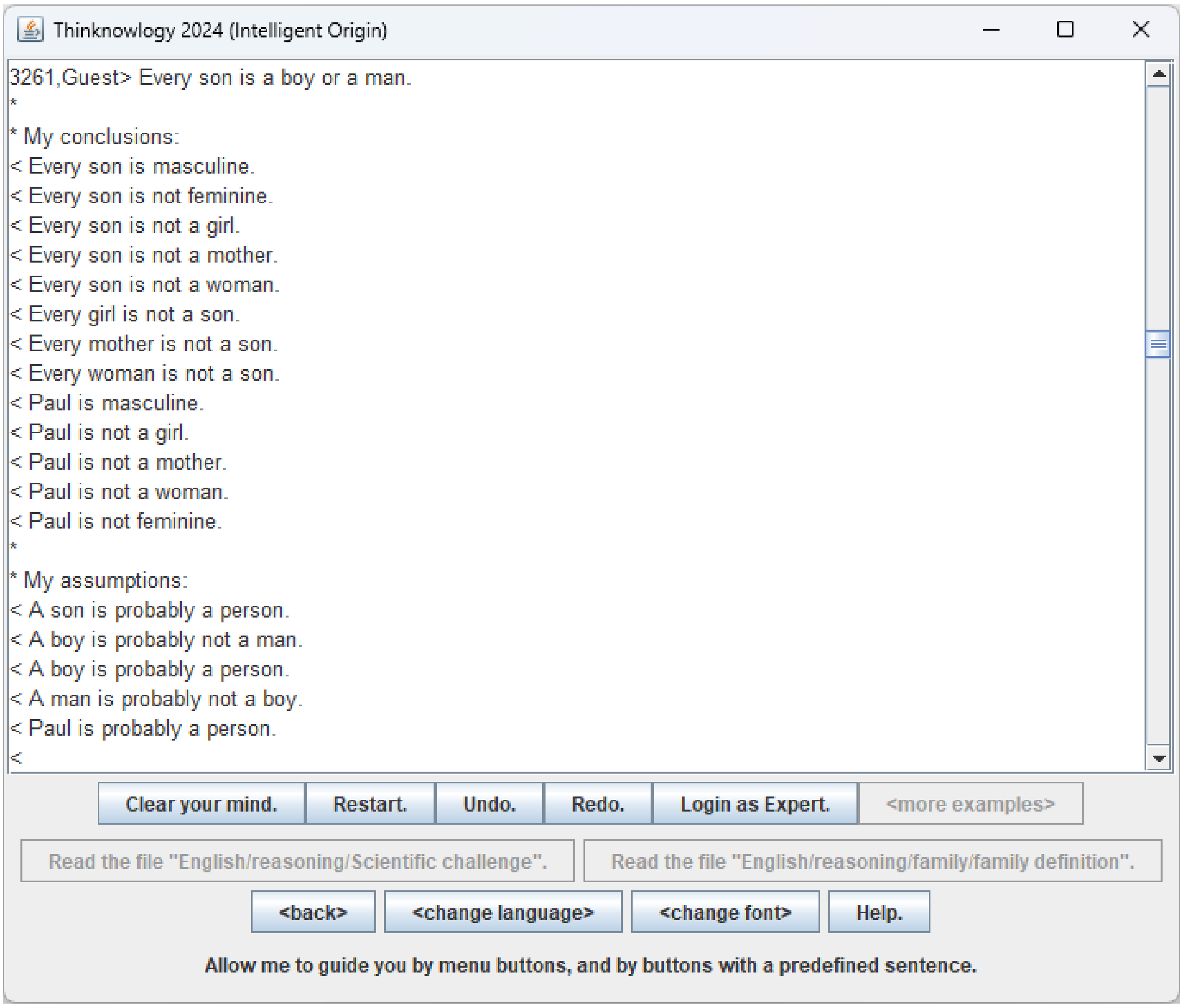
Clear your mind. | Restart. | Undo. | Redo. | Login as Expert. | <more examples>

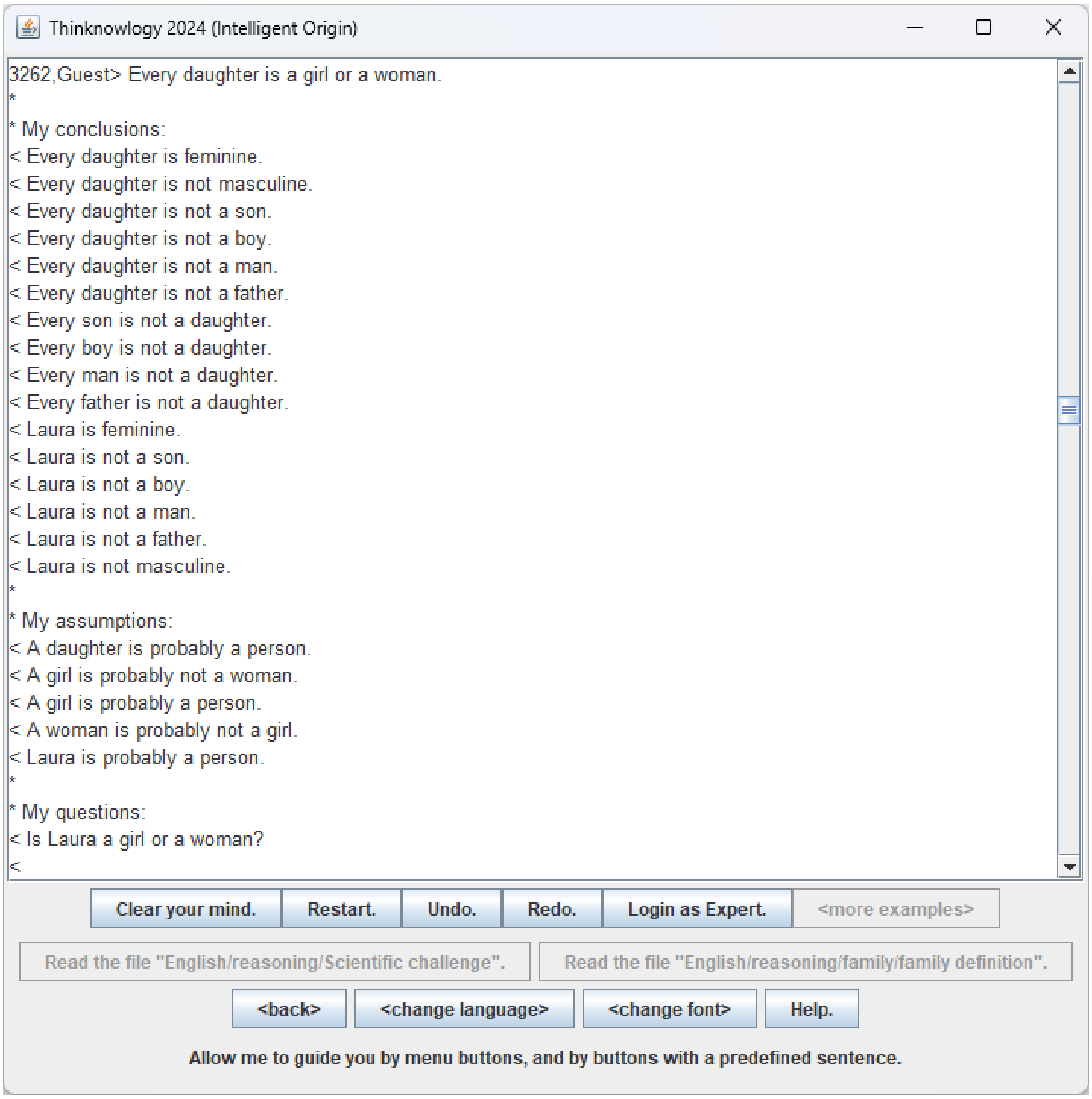
Read the file "English/reasoning/Scientific challenge". | Read the file "English/reasoning/family/family definition".

<back> | <change language> | <change font> | Help.

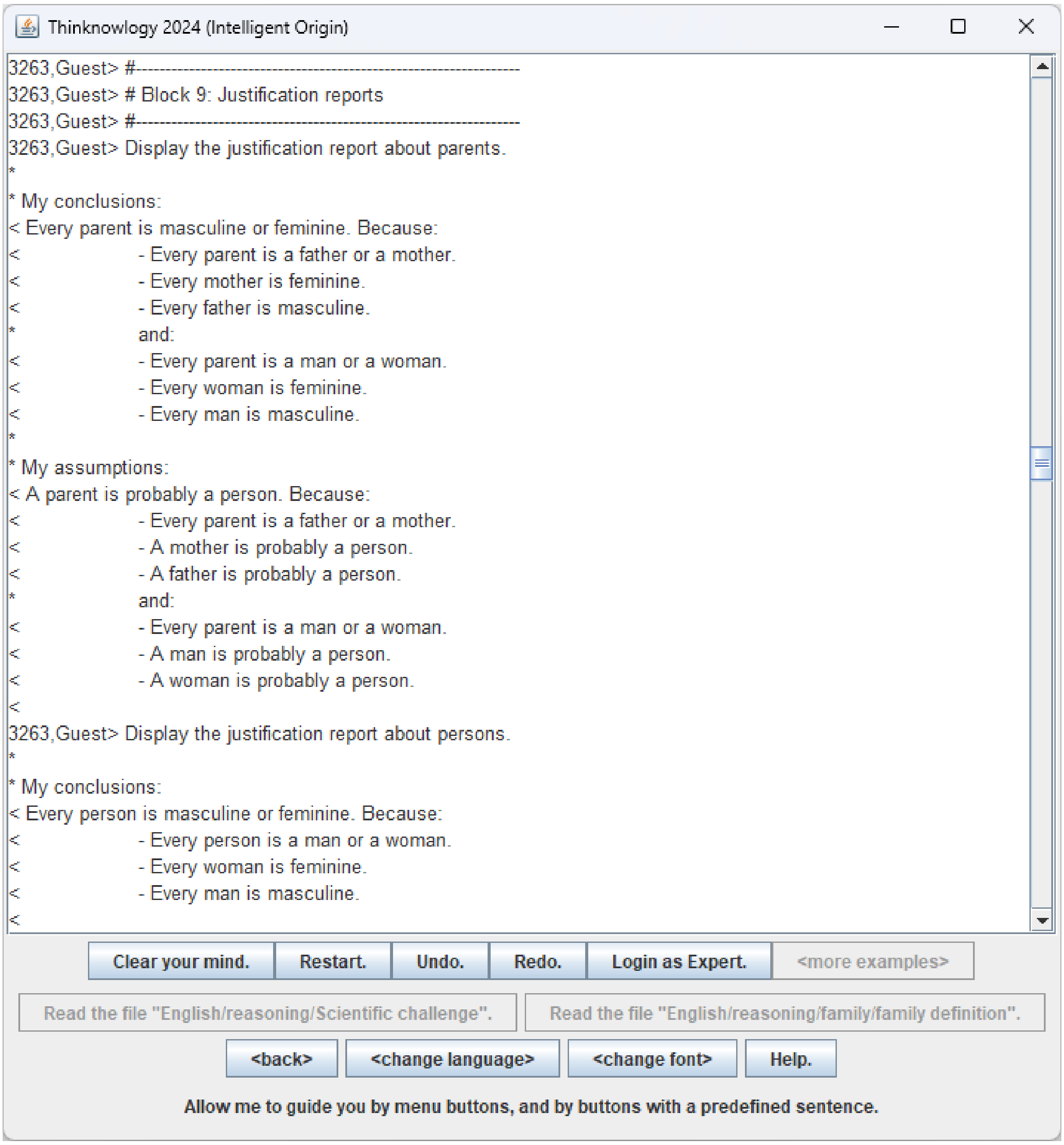
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.


Thinknowlogy 2024 (Intelligent Origin)
3258,Guest> Every parent is a father or a mother.
*
* My assumptions:
< Anna is possibly a mother.
<
3259,Guest> Every girl is feminine.
*
* My conclusions:
< Every girl is not masculine.
< Every girl is not a man.
< Every girl is not a father.
< Every man is not a girl.
< Every father is not a girl.
<
3260,Guest> Every boy is masculine.
*
* My conclusions:
< Every boy is not feminine.
< Every boy is not a girl.
< Every boy is not a mother.
< Every boy is not a woman.
< Every girl is not a boy.
< Every mother is not a boy.
< Every woman is not a boy.
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.


Thinknowlogy 2024 (Intelligent Origin)
3261,Guest> Every son is a boy or a man.
*
* My conclusions:
< Every son is masculine.
< Every son is not feminine.
< Every son is not a girl.
< Every son is not a mother.
< Every son is not a woman.
< Every girl is not a son.
< Every mother is not a son.
< Every woman is not a son.
< Paul is masculine.
< Paul is not a girl.
< Paul is not a mother.
< Paul is not a woman.
< Paul is not feminine.
*
* My assumptions:
< A son is probably a person.
< A boy is probably not a man.
< A boy is probably a person.
< A man is probably not a boy.
< Paul is probably a person.
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.


Thinknowlogy 2024 (Intelligent Origin)
3262,Guest> Every daughter is a girl or a woman.
*
* My conclusions:
< Every daughter is feminine.
< Every daughter is not masculine.
< Every daughter is not a son.
< Every daughter is not a boy.
< Every daughter is not a man.
< Every daughter is not a father.
< Every son is not a daughter.
< Every boy is not a daughter.
< Every man is not a daughter.
< Every father is not a daughter.
< Laura is feminine.
< Laura is not a son.
< Laura is not a boy.
< Laura is not a man.
< Laura is not a father.
< Laura is not masculine.
*
* My assumptions:
< A daughter is probably a person.
< A girl is probably not a woman.
< A girl is probably a person.
< A woman is probably not a girl.
< Laura is probably a person.
*
* My questions:
< Is Laura a girl or a woman?
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.

Block 9: Justification reports



Thinknowlogy 2024 (Intelligent Origin)

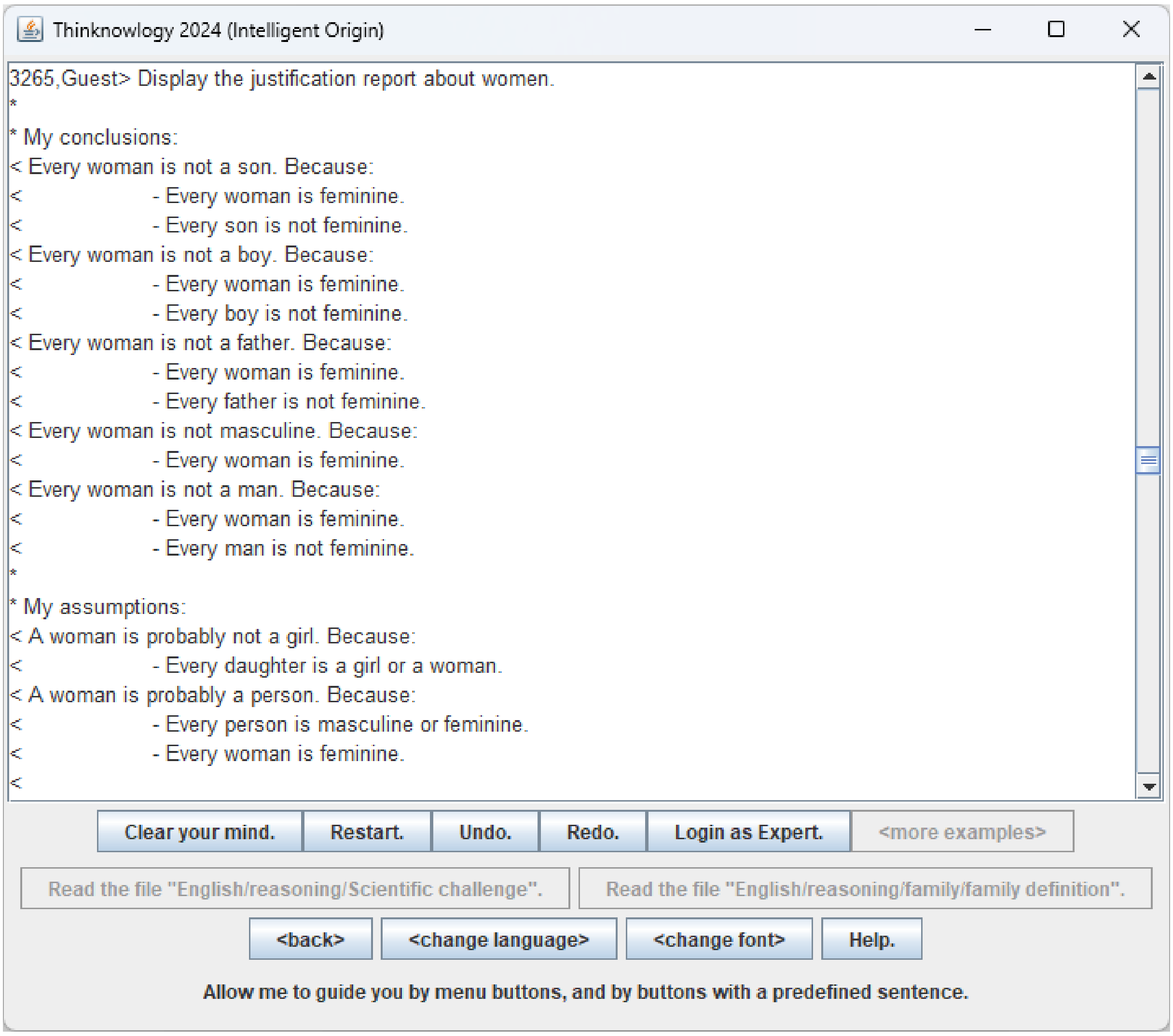
```
3264,Guest> Display the justification report about mothers.
*
* My conclusions:
< Every mother is not a son. Because:
<                  - Every mother is feminine.
<                  - Every son is not feminine.
< Every mother is not a boy. Because:
<                  - Every mother is feminine.
<                  - Every boy is not feminine.
< Every mother is feminine. Because:
<                  - Every mother is a woman.
<                  - Every woman is feminine.
< Every mother is not a father. Because:
<                  - Every mother is a woman.
<                  - Every woman is not a father.
*                  and:
<                  - Every mother is feminine.
<                  - Every father is not feminine.
< Every mother is not masculine. Because:
<                  - Every mother is a woman.
<                  - Every woman is not masculine.
< Every mother is not a man. Because:
<                  - Every mother is feminine.
<                  - Every man is not feminine.
*                  and:
<                  - Every mother is a woman.
<                  - Every woman is not a man.
*
* My assumptions:
< A mother is probably a person. Because:
<                  - Every mother is a woman.
<                  - A woman is probably a person.
<
```

Clear your mind. | Restart. | Undo. | Redo. | Login as Expert. | <more examples>

Read the file "English/reasoning/Scientific challenge". | Read the file "English/reasoning/family/family definition".

<back> | <change language> | <change font> | Help.

Allow me to guide you by menu buttons, and by buttons with a predefined sentence.


Thinknowlogy 2024 (Intelligent Origin)
3265,Guest> Display the justification report about women.
*
* My conclusions:
< Every woman is not a son. Because:
< - Every woman is feminine.
< - Every son is not feminine.
< Every woman is not a boy. Because:
< - Every woman is feminine.
< - Every boy is not feminine.
< Every woman is not a father. Because:
< - Every woman is feminine.
< - Every father is not feminine.
< Every woman is not masculine. Because:
< - Every woman is feminine.
< Every woman is not a man. Because:
< - Every woman is feminine.
< - Every man is not feminine.
*
* My assumptions:
< A woman is probably not a girl. Because:
< - Every daughter is a girl or a woman.
< A woman is probably a person. Because:
< - Every person is masculine or feminine.
< - Every woman is feminine.
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.

Thinknowlogy 2024 (Intelligent Origin)

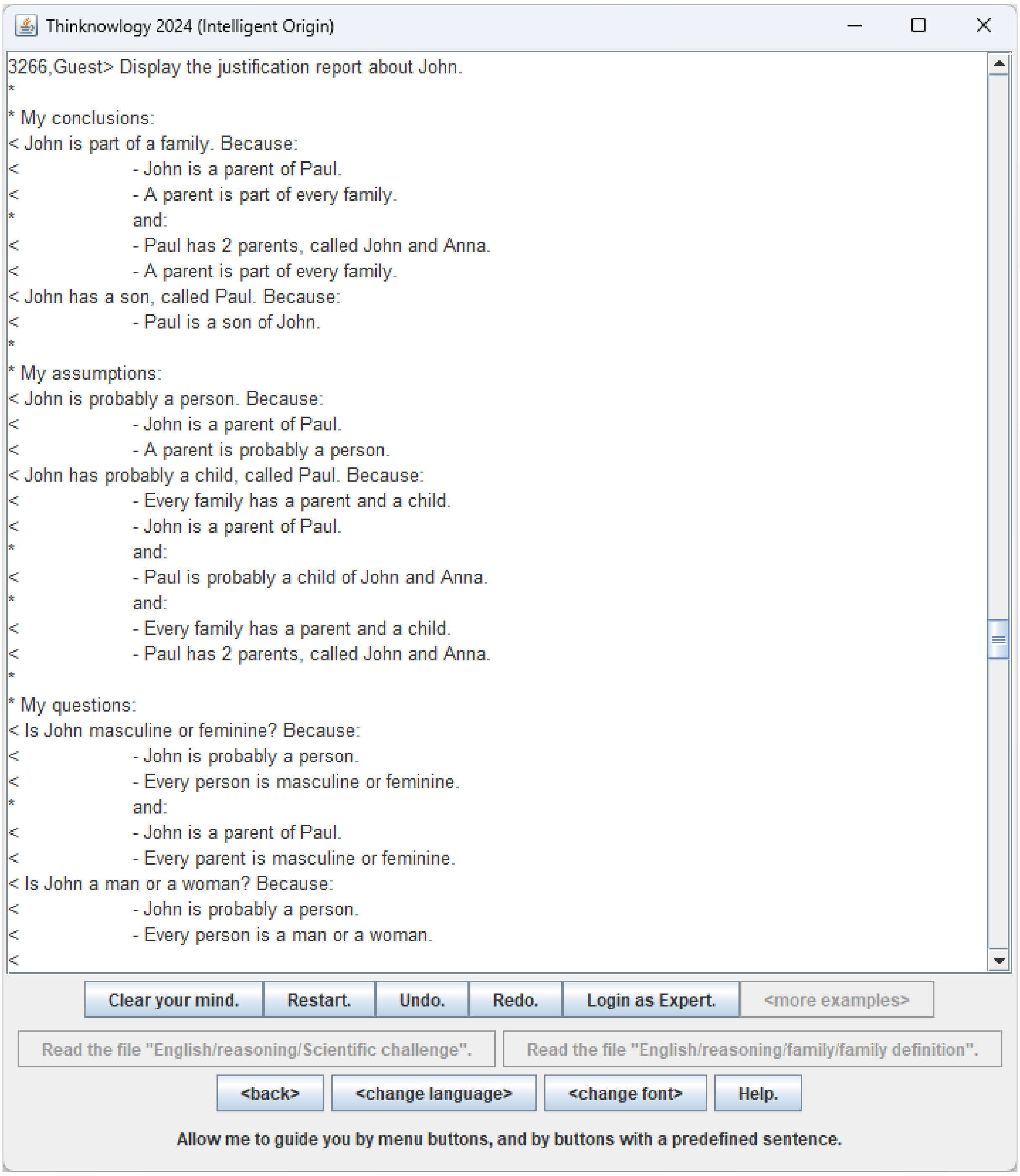
3266,Guest> Display the justification report about Paul.
*
* My conclusions:
< Paul is masculine. Because:
<   - Paul is a son of John.
<   - Every son is masculine.
< Paul is not a girl. Because:
<   - Paul is masculine.
<   - Every girl is not masculine.
*   and:
<   - Paul is a son of John.
<   - Every son is not a girl.
< Paul is not a mother. Because:
<   - Paul is masculine.
<   - Every mother is not masculine.
*   and:
<   - Paul is a son of John.
<   - Every son is not a mother.
< Paul is not a woman. Because:
<   - Paul is masculine.
<   - Every woman is not masculine.
*   and:
<   - Paul is a son of John.
<   - Every son is not a woman.
< Paul is not feminine. Because:
<   - Paul is a son of John.
<   - Every son is not feminine.
*
* My assumptions:
< Paul is probably a person. Because:
<   - Paul is a son of John.
<   - A son is probably a person.
< Paul is probably a child of John and Anna. Because:
<   - Every family has a parent and a child.
<   - John is a parent of Paul.
<   - Anna is a parent of Paul.
*   and:
<   - John has probably a child, called Paul.
<   - Anna has probably a child, called Paul.
*   and:
<   - Every family has a parent and a child.
<   - Paul has 2 parents, called John and Anna.
< Paul is probably part of a family. Because:
<   - Paul is probably a child of John and Anna.
<   - A child is part of every family.
*   and:
<   - John has probably a child, called Paul.
<   - Anna has probably a child, called Paul.
<   - A child is part of every family.
<

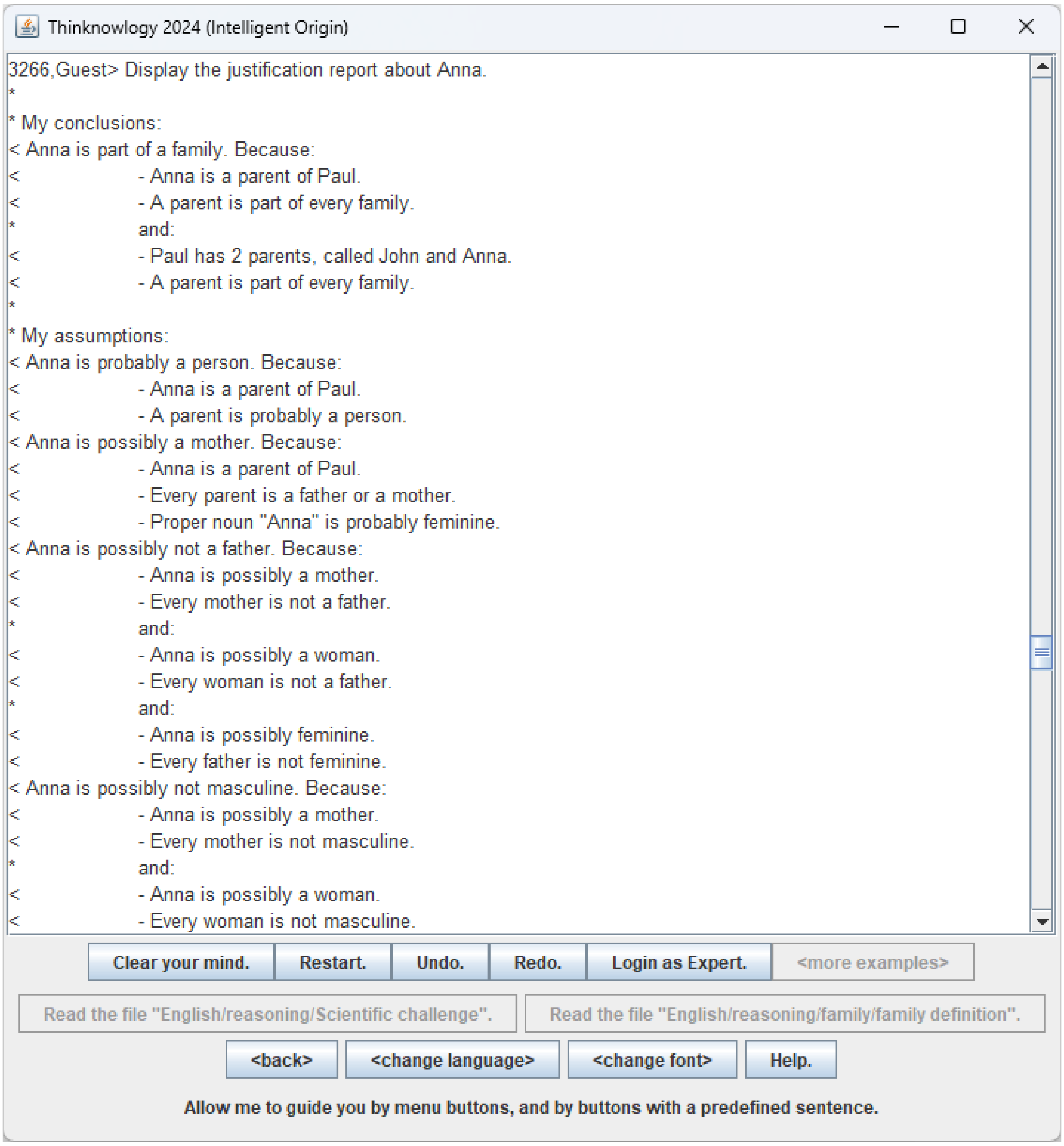
Clear your mind. | Restart. | Undo. | Redo. | Login as Expert. | <more examples>

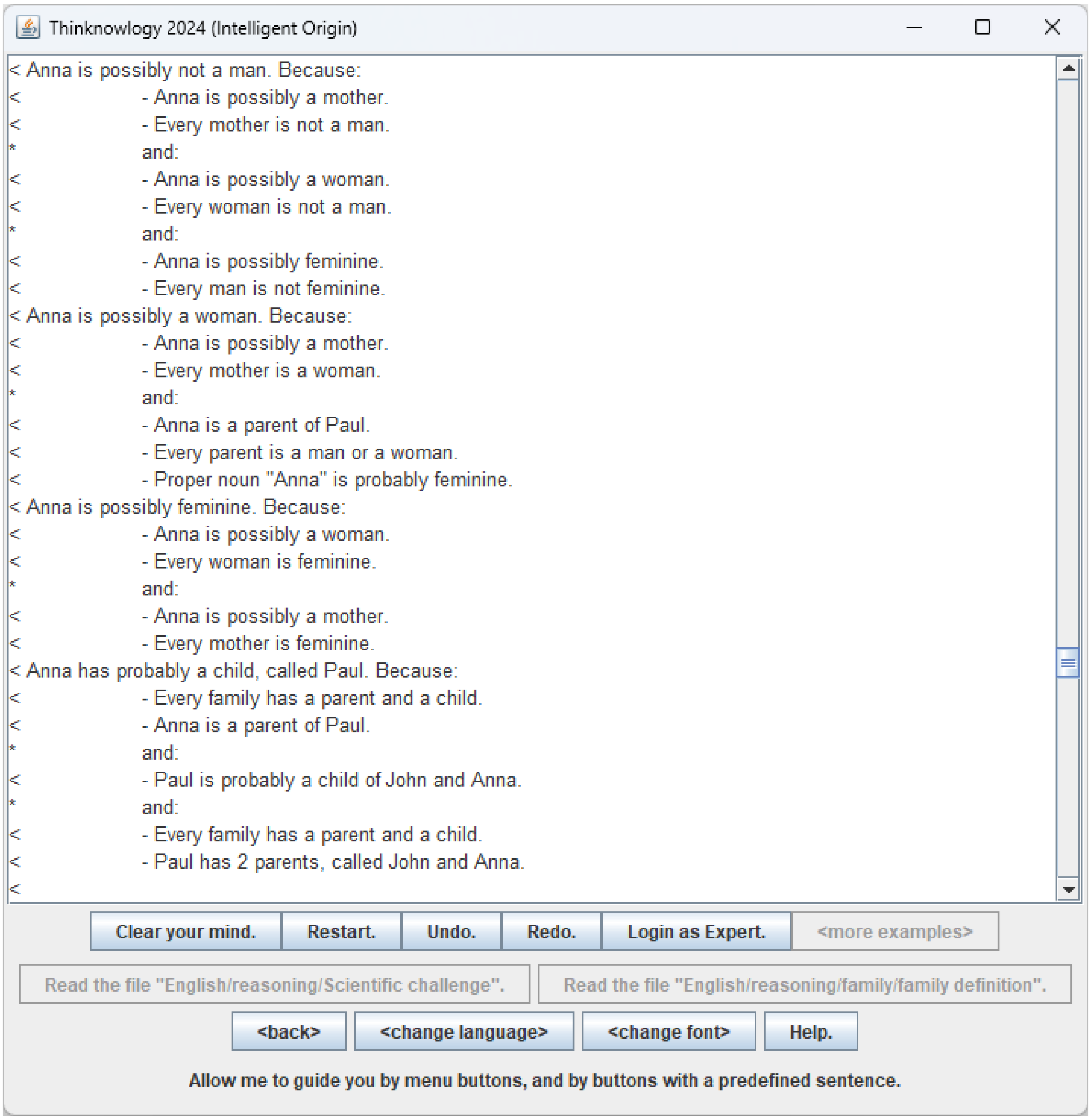
Read the file "English/reasoning/Scientific challenge". | Read the file "English/reasoning/family/family definition".

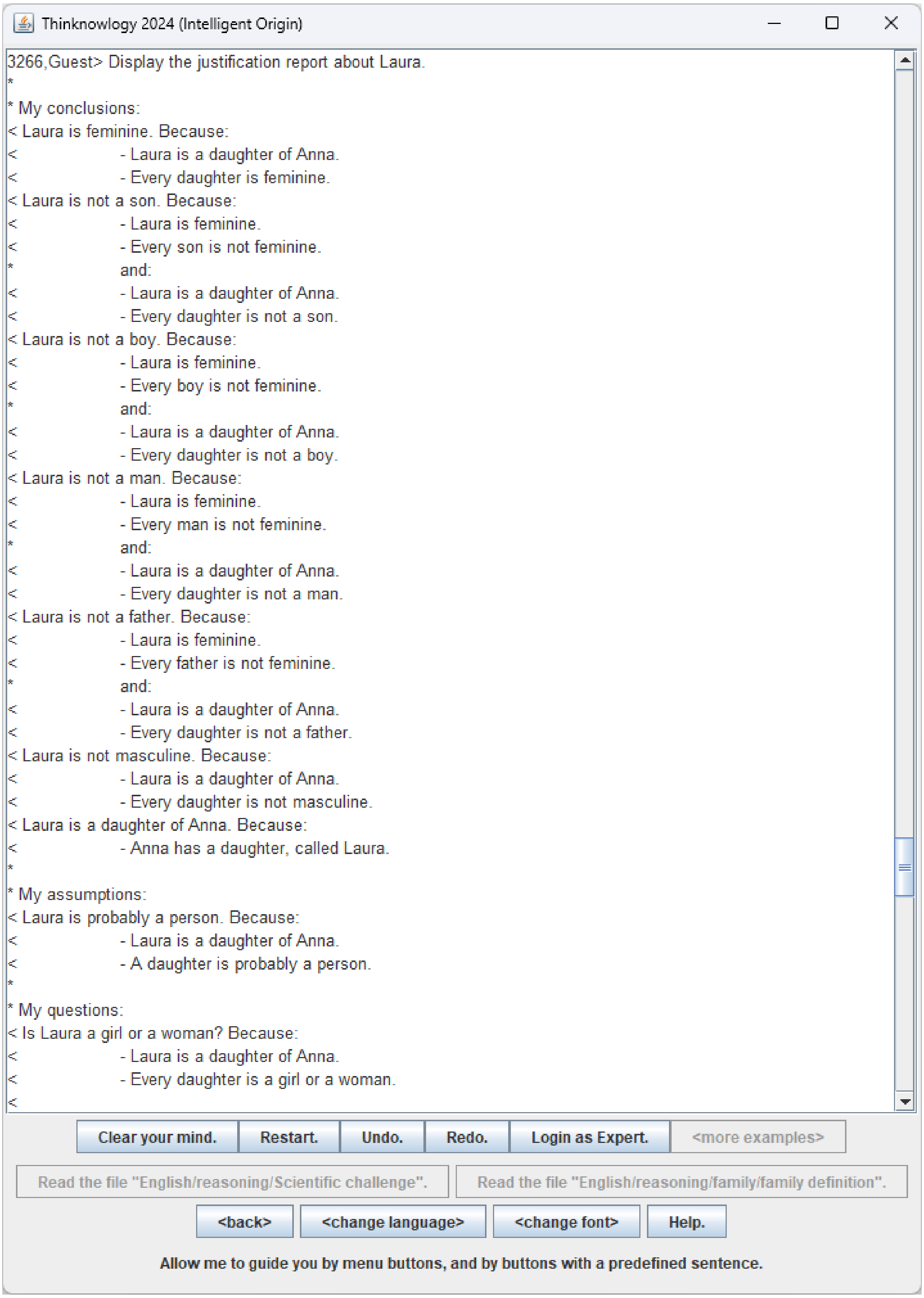
<back> | <change language> | <change font> | Help.

Allow me to guide you by menu buttons, and by buttons with a predefined sentence.

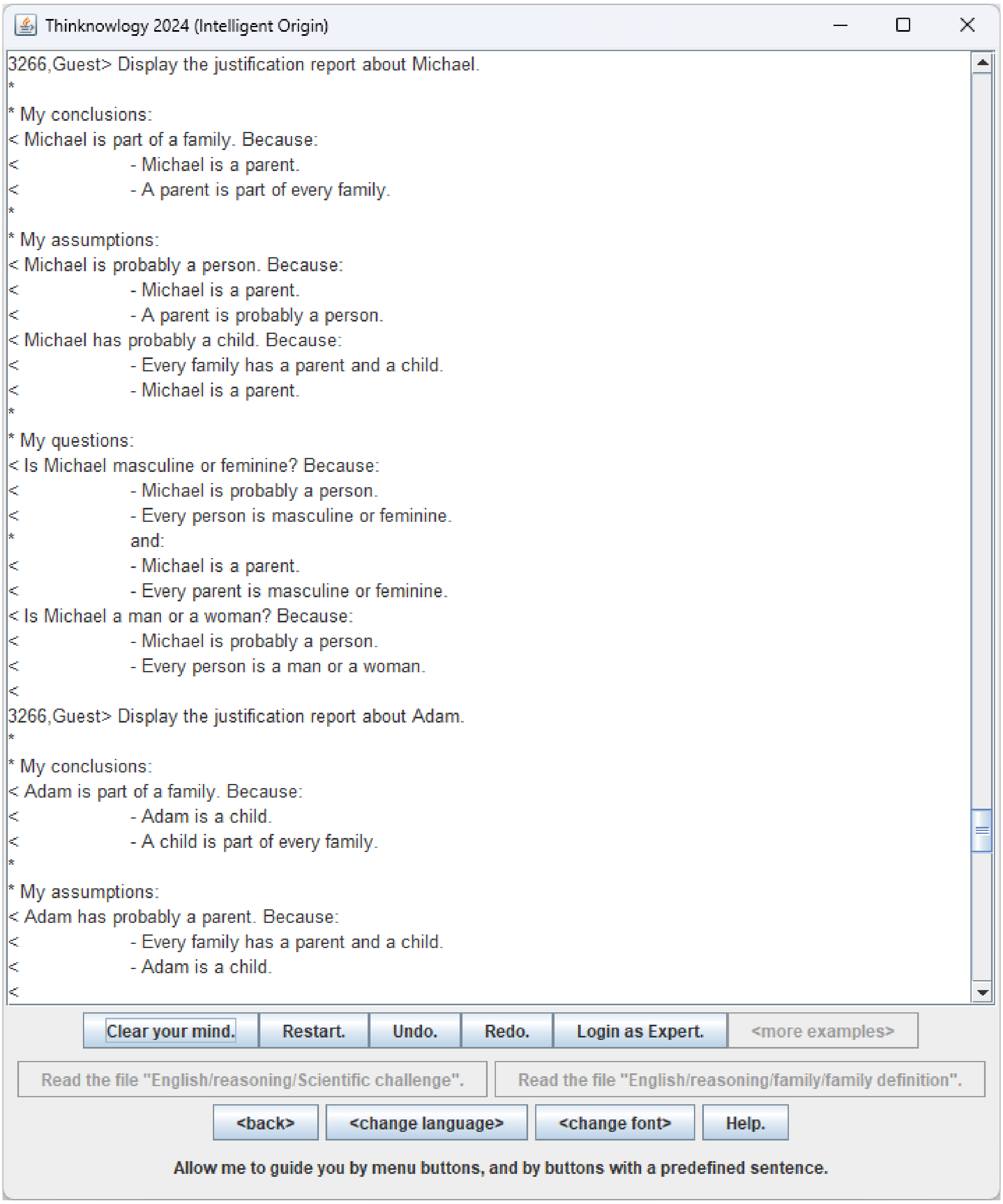

Thinknowlogy 2024 (Intelligent Origin)
3266,Guest> Display the justification report about John.
*
* My conclusions:
< John is part of a family. Because:
< - John is a parent of Paul.
< - A parent is part of every family.
* and:
< - Paul has 2 parents, called John and Anna.
< - A parent is part of every family.
< John has a son, called Paul. Because:
< - Paul is a son of John.
*
* My assumptions:
< John is probably a person. Because:
< - John is a parent of Paul.
< - A parent is probably a person.
< John has probably a child, called Paul. Because:
< - Every family has a parent and a child.
< - John is a parent of Paul.
* and:
< - Paul is probably a child of John and Anna.
* and:
< - Every family has a parent and a child.
< - Paul has 2 parents, called John and Anna.
*
* My questions:
< Is John masculine or feminine? Because:
< - John is probably a person.
< - Every person is masculine or feminine.
* and:
< - John is a parent of Paul.
< - Every parent is masculine or feminine.
< Is John a man or a woman? Because:
< - John is probably a person.
< - Every person is a man or a woman.
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.

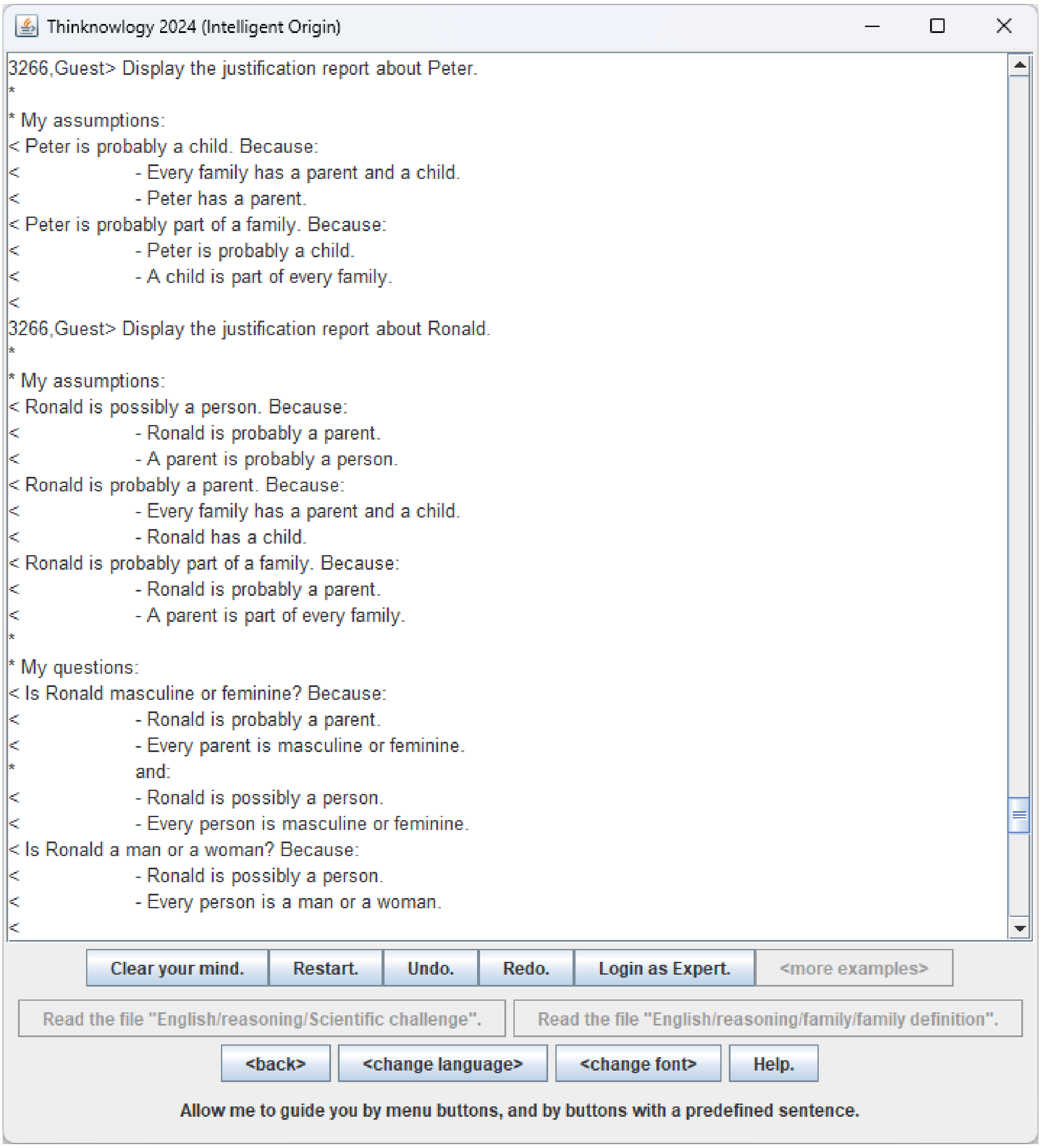

Thinknowlogy 2024 (Intelligent Origin)
3266,Guest> Display the justification report about Anna.
*
* My conclusions:
< Anna is part of a family. Because:
< - Anna is a parent of Paul.
< - A parent is part of every family.
* and:
< - Paul has 2 parents, called John and Anna.
< - A parent is part of every family.
*
* My assumptions:
< Anna is probably a person. Because:
< - Anna is a parent of Paul.
< - A parent is probably a person.
< Anna is possibly a mother. Because:
< - Anna is a parent of Paul.
< - Every parent is a father or a mother.
< - Proper noun "Anna" is probably feminine.
< Anna is possibly not a father. Because:
< - Anna is possibly a mother.
< - Every mother is not a father.
* and:
< - Anna is possibly a woman.
< - Every woman is not a father.
* and:
< - Anna is possibly feminine.
< - Every father is not feminine.
< Anna is possibly not masculine. Because:
< - Anna is possibly a mother.
< - Every mother is not masculine.
* and:
< - Anna is possibly a woman.
< - Every woman is not masculine.
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.

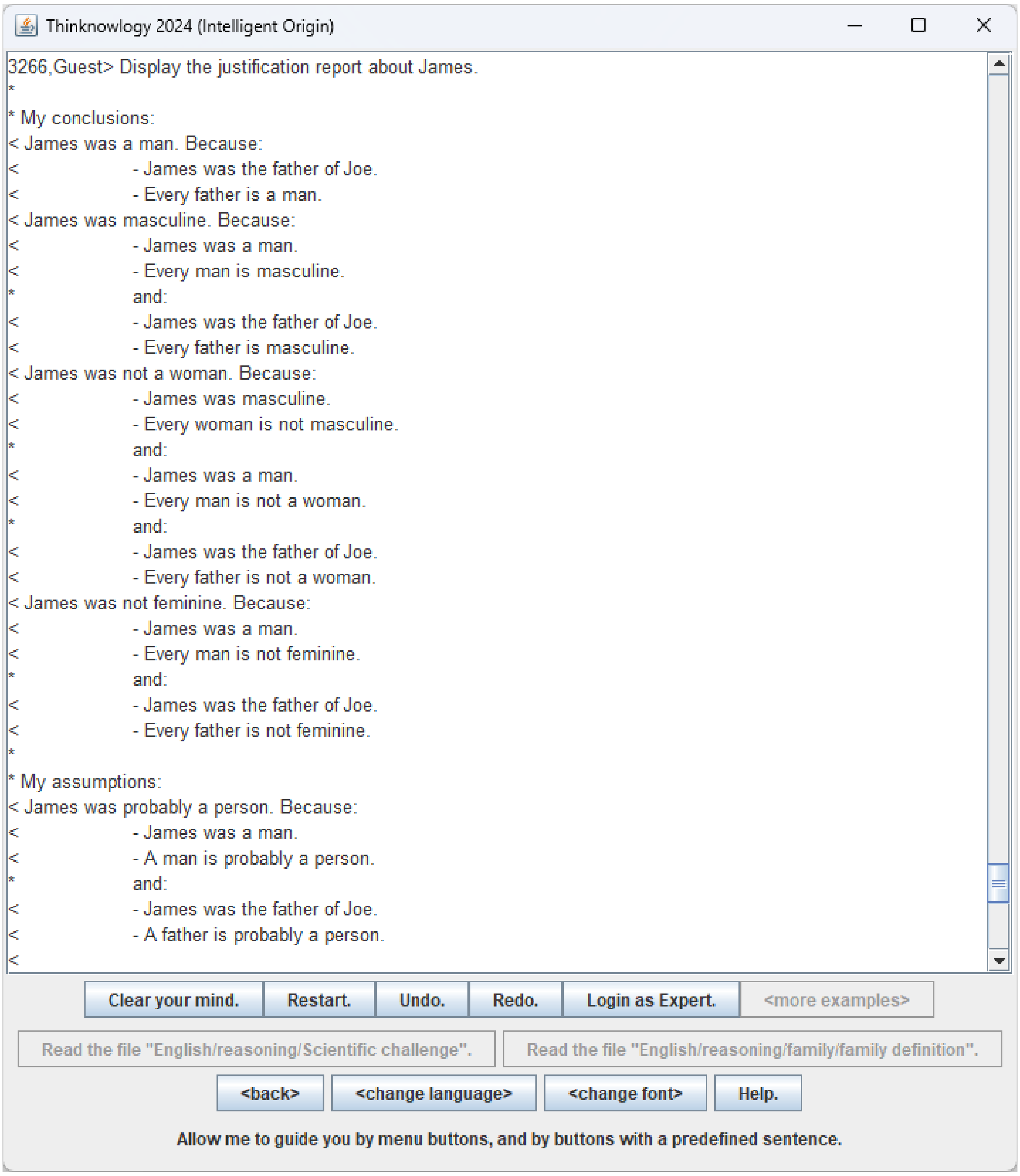

Thinknowlogy 2024 (Intelligent Origin)
< Anna is possibly not a man. Because:
< - Anna is possibly a mother.
< - Every mother is not a man.
* and:
< - Anna is possibly a woman.
< - Every woman is not a man.
* and:
< - Anna is possibly feminine.
< - Every man is not feminine.
< Anna is possibly a woman. Because:
< - Anna is possibly a mother.
< - Every mother is a woman.
* and:
< - Anna is a parent of Paul.
< - Every parent is a man or a woman.
< - Proper noun "Anna" is probably feminine.
< Anna is possibly feminine. Because:
< - Anna is possibly a woman.
< - Every woman is feminine.
* and:
< - Anna is possibly a mother.
< - Every mother is feminine.
< Anna has probably a child, called Paul. Because:
< - Every family has a parent and a child.
< - Anna is a parent of Paul.
* and:
< - Paul is probably a child of John and Anna.
* and:
< - Every family has a parent and a child.
< - Paul has 2 parents, called John and Anna.
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.

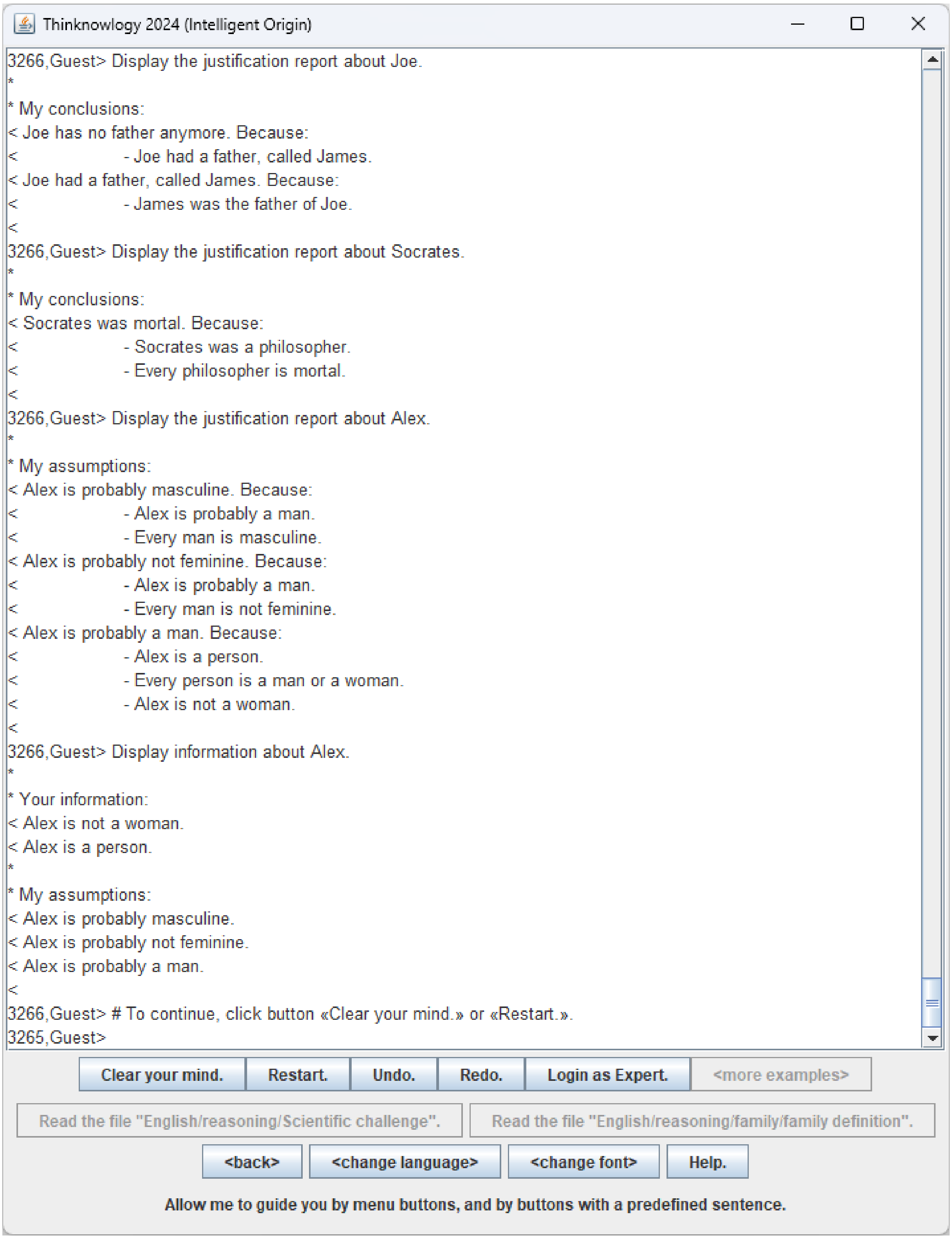

Thinknowlogy 2024 (Intelligent Origin)

3266,Guest> Display the justification report about Laura.
*
* My conclusions:
< Laura is feminine. Because:
< - Laura is a daughter of Anna.
< - Every daughter is feminine.
< Laura is not a son. Because:
< - Laura is feminine.
< - Every son is not feminine.
* and:
< - Laura is a daughter of Anna.
< - Every daughter is not a son.
< Laura is not a boy. Because:
< - Laura is feminine.
< - Every boy is not feminine.
* and:
< - Laura is a daughter of Anna.
< - Every daughter is not a boy.
< Laura is not a man. Because:
< - Laura is feminine.
< - Every man is not feminine.
* and:
< - Laura is a daughter of Anna.
< - Every daughter is not a man.
< Laura is not a father. Because:
< - Laura is feminine.
< - Every father is not feminine.
* and:
< - Laura is a daughter of Anna.
< - Every daughter is not a father.
< Laura is not masculine. Because:
< - Laura is a daughter of Anna.
< - Every daughter is not masculine.
< Laura is a daughter of Anna. Because:
< - Anna has a daughter, called Laura.
*
* My assumptions:
< Laura is probably a person. Because:
< - Laura is a daughter of Anna.
< - A daughter is probably a person.
*
* My questions:
< Is Laura a girl or a woman? Because:
< - Laura is a daughter of Anna.
< - Every daughter is a girl or a woman.
<


Thinknowlogy 2024 (Intelligent Origin)
3266,Guest> Display the justification report about Michael.
*
* My conclusions:
< Michael is part of a family. Because:
< - Michael is a parent.
< - A parent is part of every family.
*
* My assumptions:
< Michael is probably a person. Because:
< - Michael is a parent.
< - A parent is probably a person.
< Michael has probably a child. Because:
< - Every family has a parent and a child.
< - Michael is a parent.
*
* My questions:
< Is Michael masculine or feminine? Because:
< - Michael is probably a person.
< - Every person is masculine or feminine.
* and:
< - Michael is a parent.
< - Every parent is masculine or feminine.
< Is Michael a man or a woman? Because:
< - Michael is probably a person.
< - Every person is a man or a woman.
<
3266,Guest> Display the justification report about Adam.
*
* My conclusions:
< Adam is part of a family. Because:
< - Adam is a child.
< - A child is part of every family.
*
* My assumptions:
< Adam has probably a parent. Because:
< - Every family has a parent and a child.
< - Adam is a child.
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.


Thinknowlogy 2024 (Intelligent Origin)
3266,Guest> Display the justification report about Peter.
*
* My assumptions:
< Peter is probably a child. Because:
< - Every family has a parent and a child.
< - Peter has a parent.
< Peter is probably part of a family. Because:
< - Peter is probably a child.
< - A child is part of every family.
<
3266,Guest> Display the justification report about Ronald.
*
* My assumptions:
< Ronald is possibly a person. Because:
< - Ronald is probably a parent.
< - A parent is probably a person.
< Ronald is probably a parent. Because:
< - Every family has a parent and a child.
< - Ronald has a child.
< Ronald is probably part of a family. Because:
< - Ronald is probably a parent.
< - A parent is part of every family.
*
* My questions:
< Is Ronald masculine or feminine? Because:
< - Ronald is probably a parent.
< - Every parent is masculine or feminine.
* and:
< - Ronald is possibly a person.
< - Every person is masculine or feminine.
< Is Ronald a man or a woman? Because:
< - Ronald is possibly a person.
< - Every person is a man or a woman.
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.


Thinknowlogy 2024 (Intelligent Origin)
3266,Guest> Display the justification report about James.
*
* My conclusions:
< James was a man. Because:
< - James was the father of Joe.
< - Every father is a man.
< James was masculine. Because:
< - James was a man.
< - Every man is masculine.
* and:
< - James was the father of Joe.
< - Every father is masculine.
< James was not a woman. Because:
< - James was masculine.
< - Every woman is not masculine.
* and:
< - James was a man.
< - Every man is not a woman.
* and:
< - James was the father of Joe.
< - Every father is not a woman.
< James was not feminine. Because:
< - James was a man.
< - Every man is not feminine.
* and:
< - James was the father of Joe.
< - Every father is not feminine.
*
* My assumptions:
< James was probably a person. Because:
< - James was a man.
< - A man is probably a person.
* and:
< - James was the father of Joe.
< - A father is probably a person.
<
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.


Thinknowlogy 2024 (Intelligent Origin)
3266,Guest> Display the justification report about Joe.
*
* My conclusions:
< Joe has no father anymore. Because:
< - Joe had a father, called James.
< Joe had a father, called James. Because:
< - James was the father of Joe.
<
3266,Guest> Display the justification report about Socrates.
*
* My conclusions:
< Socrates was mortal. Because:
< - Socrates was a philosopher.
< - Every philosopher is mortal.
<
3266,Guest> Display the justification report about Alex.
*
* My assumptions:
< Alex is probably masculine. Because:
< - Alex is probably a man.
< - Every man is masculine.
< Alex is probably not feminine. Because:
< - Alex is probably a man.
< - Every man is not feminine.
< Alex is probably a man. Because:
< - Alex is a person.
< - Every person is a man or a woman.
< - Alex is not a woman.
<
3266,Guest> Display information about Alex.
*
* Your information:
< Alex is not a woman.
< Alex is a person.
*
* My assumptions:
< Alex is probably masculine.
< Alex is probably not feminine.
< Alex is probably a man.
<
3266,Guest> # To continue, click button «Clear your mind.» or «Restart.».
3265,Guest>
Clear your mind.
Restart.
Undo.
Redo.
Login as Expert.
<more examples>
Read the file "English/reasoning/Scientific challenge".
Read the file "English/reasoning/family/family definition".
<back>
<change language>
<change font>
Help.
Allow me to guide you by menu buttons, and by buttons with a predefined sentence.