John and Henry are in the computing laboratory and are working out how they will carry out their performance at the Poetry through the Language Barrier evening. They need to get it worked out ready for the rehearsal at La Flava Floro.

For the rehearsal John and Henry are going to play the parts of the visiting performers. At the Poetry through the Language Barrier evening the visiting performers will each speak in his or her own language, but John and Henry will use English at the rehearsals, yet that is not a problem as it is the organization of it all that the rehearsal is about.

"This is tricky." says John "In principle it is all very straightforward, yet when it comes to actually doing it as a performance we need to figure this out."

Edith enters.

"Good morning gentlemen."

"Good morning." both reply.

"John, can you tell me about the way that the poetry is to be presented please." says Edith.

"Yes, certainly. I have printed some sheets of cardboard, each showing one of the symbols of the collection of twenty-six localizable sentences that we are using for this event. Twenty-six symbols might sound a lot, but the sentences are in three groups, namely sentences about seasons, weather and colours." says John. "I have done a number of each of them, and in addition I have done two sets for each of the three poems and arranged them in sequence. Henry will stand to my left, and somewhat nearer the audience than me, and he will pick up the cards one by one from the table and hold them out to his right, at about waist height so that the audience can see the one side of the card and I can see the other side. Then I say the sentence localized into English, yet the audience can understand the meaning from looking at the symbol, ... well, if they have learned the meanings from the booklet that they received with their tickets."

"Excellent." says Edith.

"Shall we try one of the poems now please?" asks Edith. "I can be the audience."

"Well, we can try, but there is a bit of a problem at the moment."

"Oh."

"Well, in principle it is all very straightforward, yet when it comes to actually doing it as a performance there is a problem. Henry needs to be able to be displaying the cards both to me and to the audience in a continuous manner, yet having the cards in a pile does not work as sometimes there is a delay in trying to get the next card off the top of the pile. We then tried setting the cards out with about forty millimetres of each card overhanging the edge of the table, but picking up one card can move the position of the next card: a longer table could be used so that the cards did not overlap, but then Henry would have to move along the table as the poem progressed and that would disrupt the performance. There is also the problem that Henry needs to put each card down after I have read it out. We need to figure this out."

"Ah, well, can you try it anyway as best you can so that I can get an idea of how it is intended to be please?"

"Yes, certainly."

John and Henry take their places, Henry behind the table to the left and in front of John.

Henry holds up the first card in his right hand.



"It is winter." says John.

Henry places the card down then picks up the next card from the pile and hold it up."



"The colour is white."

Henry places the card down and then tries to pick up the next card but has a problem getting it from the top of the pile.

"Oh," says Edith "we need a better method of picking up the cards."

"Yes." says Henry. "It is a bit of a problem."

"Have you got the poem as localized into English?" asks Edith.

"Yes." says John as he passes a sheet of paper to Edith.

Edith reads, to herself, not out loud.

It is winter.

The colour is white.

It is spring.

The colour is green.

The colour is yellow.

It is summer.

The colour is green.

The colour is yellow.

The colour is red.

It is autumn.

The colour is yellow.

The colour is brown.

It is winter.

It is cloudy.

The colour is grey.

It is snowing.

The colour is white

"Ah, it goes a full year, through a cycle of the seasons. The various colours ... they refer to different things, even though it does not always say what is the thing to which it refers." says Edith, out loud.

"Henry, the symbols on the cards that you held up. Can you explain them to me please, are they just abstract designs or is there a clue to the meaning in them, some sort of structure?" Edith asks.

"Well, the first one that I displayed is this one."

Henry holds up a card.



"That means,

It is winter."

"It is abstract, yet there is a clue to the meaning. The large shape is common to all of the seasons and indeed the same shape is used for the statements about the weather. The two smaller shapes are representing leaves. For the sentence It is spring, there is one vertical leaf, for the sentence It is summer, there are two vertical leaves, for the sentence It is autumn, there is one horizontal leaf and for the sentence It is winter, there are two horizontal leaves."

"For the weather there are symbols that give a clue, such as this one for It is snowing.



and for It is cloudy. there is this one."



"Ah, thank you." says Edith.

"What about the sentences for colours?"

"Yes, at the moment there are fifteen of them For example, The colour is red."

"Fifteen!" exclaims Edith. "How do you remember the meanings of all those symbols?"

"Oh it is not too hard. They each have the same distinctive shape at the left, so that shows that the localizable sentence is about a colour. The differences are at the right, and they are based on the Petra Sancta system of shading using lines used to indicate colour in printed diagrams before colour printing was invented, though still used today. However, the Petra Sancta system did not describe every colour in the set of colours, so some are innovative. The sentences each start with The colour is so that the word colour, being a noun, means that there is no carry forward of noun gender from any earlier sentence."

"This is interesting, please go on." says Edith.

"Well, I suppose if one looks at the designs of the symbols for colours that the colours can be grouped into three groups of symbols - namely those directly from the Petra Sancta line shadings, those that are derived from Petra Sancta line shadings, and the group that goes from black to white through various shades of grey."

Henry picks up a collection of cards for colours and sets them out on a table in front of Edith.

"As you look at them, the top row are those directly from the Petra Sancta line shadings, red, yellow, green, blue, magenta,

the middle row are those that are derived from Petra Sancta line shadings, namely brown, orange, cyan, pink, sky blue

and the lower row are new designs that go from black to white through various shades of grey, namely black, dark grey, grey, light grey, white."

"So," says Edith "Using what you have just told me I could express the poem using just the symbols. I could try to write a poem myself. That sounds fun. You mentioned twenty-six symbols being used, so, could you put the rest of them out and explain them please?"

"Yes certainly.

Here are the symbols for the four seasons, for spring, summer, autumn and winter,

and here are seven symbols, one each for raining, snowing, sunny, cloudy, windy, hailing and foggy, each of them starting It is ..., for example, It is raining.:

that is the twenty-six being used for the poetry evening."

"Yet not every localizable sentence in the system has a symbol does it." adds Edith.

"That is correct. Early on in the research each sentence being used had its own symbol, but now it is only some of the sentences in the system that have a symbol, mainly those from long ago - they have been done, so why waste them - and a few others that might be used in signs or on cards, yet symbols are not needed for automated electronic systems. Though having symbols is sometimes fun, like being able to have the poetry evening, though of course we need to solve the problem of how to present the cards." adds Henry.

"I have printouts of the English localizations of the other two poems for the poetry evening if you would like them."

"Yes please." says Edith enthusiastically.

Here is the second poem.

It is summer.

The colour is green.

The colour is green.

It is autumn.

The colour is orange.

The colour is yellow.

It is autumn.

It is windy.

The colour is orange.

The colour is yellow.

The colour is yellow.

The colour is orange.

It is winter.

It is foggy.

Here is the third poem.

It is summer.

It is sunny.

The colour is sky blue.

It is summer.

It is raining.

It is summer.

It is sunny.

The colour is red.

The colour is orange.

The colour is yellow.

The colour is green.

The colour is blue.

The colour is magenta.

It is summer.

It is sunny.

The colour is sky blue.

"Thank you." says Edith.

Edith returns to her office.

John and Henry try to think how to solve the presentation problem.