Can a science fiction story influence what happens in the real world?

Here is a science fiction story.

“John, do you understand the character-markup duality of encoded localizable sentences?” asks Edith.

“Yes, it is quite straightforward if one looks at the application of the concept” replies John.

John continues.

Suppose that one has a localizable sentence such as say,

Have you vomited?

That might be very useful if someone feeling ill goes to a doctor and the patient and the doctor do not speak the same language.

Suppose that that particular localizable sentence is encoded using the integer 32175 then if the doctor can encode the question as the number 32175 and then the patient can decode the number 32175 so as to produce the question, then the doctor can convey the question to the patient.

Now, the whole process of encoding, transmitting, receiving and decoding could be done in a number of ways.

For example, by the doctor looking in a printed book for the code number, the doctor writing the number onto a piece of paper, the doctor passing the piece of paper to the patient, the patient looking in a printed book and finding the sentence in the language that he or she speaks.

In the future the whole process could be done electronically, the doctor would find the sentence in a cascading menu system in a computer application program, the encoding would be done by the computer, the message is sent to another computer and then the message is decoded automatically in that other computer, decoded into the language of the person using that other computer.

The matter of the character-markup duality of encoded localizable sentences arises when considering how the localizable sentence is encoded for the transmission and reception and decoding process.

There could be discussion over whether an encoded localizable sentence is or is not a character.

With the concept of the character-markup duality of encoded localizable sentences that question is avoided by saying that in some contexts the encoded localizable sentence is considered as being a character and in some contexts the encoded localizable sentence is considered as being markup.

Now the thing about a markup encoding of localizable sentences is that it can just be implemented, without any official international standard, yet that lack of an official international standard is also a weakness.

An official international character encoding of localizable sentences is difficult to achieve. Such an encoding would be best, yet, as I said, it is difficult to achieve.

By having the character-markup duality of encoded localizable sentences, progress can be made using a markup system yet

leaving open the possibility of a smooth transition to a character system at a later date.

“So how exactly does one do that” asks Edith.

“Actually it is quite straightforward, bearing in mind the way that the character encoding could be done” replies John.

For the character encoding one would have a new character encoded.

It would be encoded as LOCALIZABLE SENTENCE BASE CHARACTER and would probably be encoded in plane 14 of the character standard.

Then, for example, the localizable sentence

Have you vomited?

would be encoded as a sequence of seven existing characters, namely the LOCALIZABLE SENTENCE BASE CHARACTER followed by TAG DIGIT THREE, TAG DIGIT TWO, TAG DIGIT ONE, TAG DIGIT SEVEN, TAG DIGIT FIVE and TAG SEMICOLON.

That sequence would be unique within the international standard for character encoding as having the meaning of the sentence, localized into any language, or, if desired, expressed as a symbol, though not every localizable sentence need have a symbol, and indeed most localizable sentences would not have a symbol.

Now, getting that LOCALIZABLE SENTENCE BASE CHARACTER encoded into the international standard is very difficult, so, in order to try to make progress, a markup system is used.

In the markup system only existing characters are used, so, for example, the localizable sentence

Have you vomited?

would be encoded as a sequence of seven existing characters, namely TAG COLON followed by TAG DIGIT THREE, TAG DIGIT TWO, TAG DIGIT ONE, TAG DIGIT SEVEN, TAG DIGIT FIVE and TAG SEMICOLON.

The only difference between the character encoding and the markup encoding is the first character.

So, when we write software to encode a localizable sentence, we need to declare and use a character constant that is, for now, set to have the value of the TAG COLON character, so that if the LOCALIZABLE SENTENCE BASE CHARACTER is one day in the future encoded then we can update the software easily, just by changing the value set into that character constant.

However, for decoding it will be best to write the detection of a localizable sentence encoding using an OR test so as to detect both TAG COLON and whatever character code might possibly be encoded as LOCALIZABLE SENTENCE BASE CHARACTER so that TAG COLON will always be recognized, as there could be legacy data that will still need to be accessed.

“Yet”, asks Edith “that implies that the same codes for the localizable sentences used in the markup system would be used for the localizable sentences in any international standard that is implemented in the future.”

“Well, yes” replies John, “but that is what would need to happen. If an international standard were to become implemented now then the codes could be chosen now as a part of that process. Yet if the process is that any international standard will only be implemented if there is already an established system in use, then that international standard would need to either use the existing codes for the localizable sentences in the established system or to start again”.