Project Phonethica

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1. INTRODUCTION

Fifty to ninety percent of the world's languages are predicted to disappear within the next century.

Project Phonethica explores the diversity of the world through the phonetics of its approximately 6,000 existing languages using the technology of media/sound art - the youngest child of art in the 20th Century.

Project Phonethica is being developed according to a road map to be held over the course of four years. The project began in Tokyo and Paris in 2004, aiming to collect fundamental data through a wide range of interviews with scholars and scientists. During this period of time, research has also been undertaken in order to develop Phonethica - a computer system based on the phonetic feature of language. The project will be disseminated to the public in the form of an online tool, an interactive installation and other media in Tokyo, Paris, Berlin, Hong Kong, Prague, London, New York, Montreal and so on from 2006 through 2007.

2. BACKGROUND

At present, there exist in our world at least 5,000 languages, some say as many as 6,000. In 1992, American linguist Michael Krauss presented a shocking report stating that fifty to ninety percent of the languages in the world will be wiped out within the next century. Moreover, according to a report based on a UNESCO-sponsored international conference on endangered languages that took place in Thailand in 2003, roughly 3,000 languages, half of all those currently in existence, are no longer taught in elementary schools, and are already on the brink of extinction. The report further warns that forty percent of the world's languages, approximately 2,400, will cease to exist beyond our children's generation. Our language is thus in a state of crisis. The predicament can also be regarded as a threat to our very diversity.

At first sight, the integration of our languages does not appear as an entirely negative trend. It can ease tensions between tribes, for instance, and may be beneficial to our global economy. History has frequently witnessed members of a minority community discarding their own language in favor of that of the mainstream in an attempt to enhance their socio-economic status, while, of course, there are also countless examples of larger communities forcing adherence upon minority groups.

But even when we take into account the positive effects of language integration, the number of people concerned over the disappearance of the world's languages is far from few, and its implications are understood to be far-reaching. In particular, there are strong implications which are of a scientific and scholarly interest. Many of the fundamental issues addressed by language research are linked with the enigma of our mental structure, that is to say by the challenges presented to us in the study of the structure and conventions of human language. Thus far, we could hardly claim that this enigma has been solved. The more languages we can examine in the course of this scholarly research the better.

Conversely though, we can also regard the sense of loss brought about by the death of the World's languages as a product of Mankind's collective ego. We perceive something positive in our own diversity because we believe it innately desirous for the thriving of our species. Had we not diverged to the extent that we have, and if we were nothing more than facsimiles of one another, we would simply have become extinct at the hands of a single disease or one episode of climatic change. If we regard this phenomenon of diversity merely as a means to avert a catastrophic situation, then the fact that we assign some cherished worth to our diversity can be reasonably explained in saying that diversity secures our prosperity.

If the loss of minor languages is considered to be a conversion in favor of the major language, so people feel a sense of resentment with regards to the homogenizing effect of globalization. Moreover, this sort of negative mindset is transformed into a kind of fulfillment when shared with others, and in time, the world could be engulfed by apathy.

3. SYSTEM ARCHITECTURE

Project Phonethica involves the research and development of computer system called Phonethica.

Phonethica can find words from among the world's different languages that sound similar to a given word (see figure 1).

For example, Japanese and French are vastly different languages, but the French expression "Ça va?" meaning, "How are you?" and the Japanese word for mackerel, "saba," actually sound quite similar (see figure 2). In fact, because the structure of human vocal organs varies little from Japanese to French to Kenyan, these types of coincidentally shared sounds occur often. Anyone who speaks more than two languages is probably aware of a few examples of this. And sometimes one finds humor in the extreme disparity in meaning held by words which sound similar.
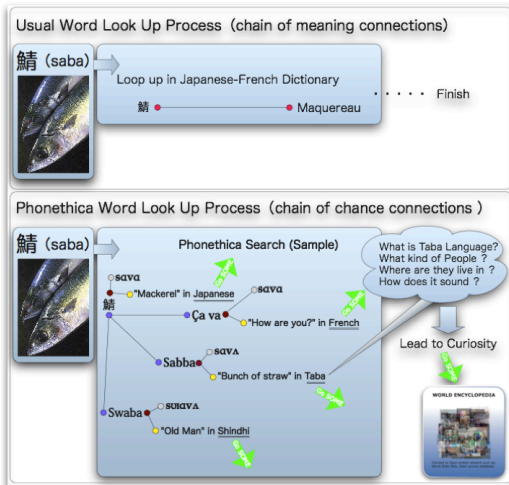
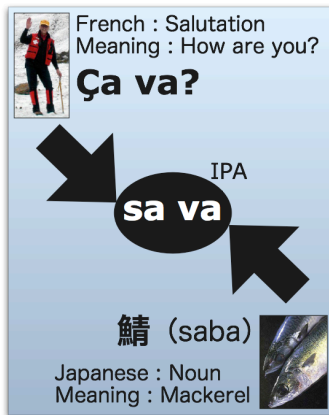**Figure 1. lookup process**

Figure 2. Ça va - Saba

Phonethica locates these types of words by comparing the approximate value of the IPA – International Phonetic Alphabet. For instance, a word inputted by a user will be translated into IPA which will then be compared with the vocabularies in the world language database.

Phonethica will extract those words which have approximately the same IPA as the user's selection, and the result will be displayed, representing its approximate value in three dimensional graphics. (see figure 3).

The user can dynamically access various information related to those languages including descriptions explaining the culture and race of the people who speak the languages, the environments in which they live, the types of food they eat, the kinds of songs they sing, their history, religion, economic and political situations. Information on grammar, vocabulary, orthography, phonology, writing and numbering systems are also available.

In this way, facts unknown to us come within our reach, not based on the matching of definitions for different words that we can usually locate in a dictionary, but through words that are phonetically similar by chance.
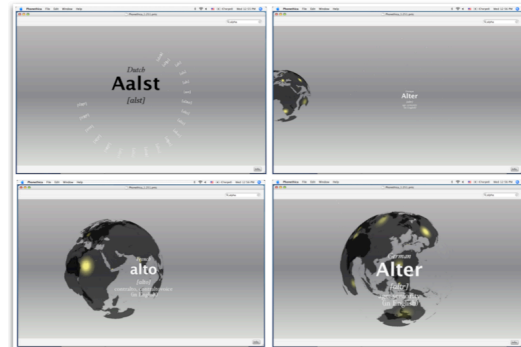

Figure 3. Graphic user interface

For instance, you may be inspired to learn about the lives of the Taba-speaking inhabitants of the Molucca region of Indonesia, which you never even knew existed. And the next day, you may want to tell your friends about your discoveries.

And if you find the salutations and customs of that region particularly interesting, you and your circle of friends might want to adopt them into your own interactions and create a trend. Eventually someone in the group might be roused to visit that place. And, perhaps even years or decades later, that person may decide to take the plunge and travel there. If we live in a world where one can be provoked by such coincidence, then we can imagine the potential that may still lie therein. If, in this way, two symbols which previously appeared as unrelated can become connected through their very sound, then this common denominator can create a valuable new interface which potentially could relate all aspects of the Earth to each other. This interface will at first promote an awareness of our diversity which will then, paradoxically, give rise to a quiet consciousness of our being related respectively to one another. The world will secretly but certainly grow conscious of its connectedness and its universality.

4. CONCLUSION

Project Phonethica is the quest for a practical means of survival in this often lethargic world through an organic synergy which combines scientific technology with the magic of art, while taking hints from diversity.

Project Phonethica does not aim to protect languages that are vanishing at a rate of one every two weeks and to archive them in libraries. Rather, it endeavors to invent a dynamic method by which we can understand and appreciate our diversity and randomly disseminate it as part of a wider social movement.

Project Phonethica aspires to create a world in which two points gradually intersect and give rise to the next action, and the universality by which the process is dominated is realized subtly but indisputably.