Multiple languages

The actual version of the terminology is presented in 5 languages: Latin, English, French, Spanish and Russian. A rather strict discipline is followed in order to translate the terms in all languages in the respect of the source universal terms. However, it is well known that languages are versatile and largely dependent on culture and traditions in different countries: a fully rational or formal point of view is not adequate. The authors of the terminology must always balance between the scientific desiderata leading to precise and unambiguous terms and the irrational roots of the human languages: here is the beauty and the difficulty of this enterprise.

The most global goal of a terminology is certainly to contribute to a precise and non ambiguous communication between scientists of the world. It would be an error to consider that good communication in a single language is sufficient, even if this language is English known to support the majority of the scientific literature. Communication implies a sender and a receiver. If the sender is in position to master the English language or is getting adequate help from native speakers, this is not true for the receivers. Medicine is thought in more than 50 languages all over the world: any actor would benefit from a multilingual distribution of the anatomical terminology.

Terminologia Anatomica was originally published in 1998 in Latin with English equivalent terms (TA98). In the years later, translations in Spanish, Russian and Japanese (possibly other versions) were made available by national initiatives. But these efforts were not coordinated, but in the absence of revisions of the terminology, this was not problem. Today, we foresee that the new versions of the terminology will be permanently updated. Therefore, the need of a coordinated development in several languages is indicated. Automatic translation is no more an option, but the condition for any future terminology of the size of TA

To promote the translation of the TNA into multiple languages, translation by computer program into French, Spanish and Russian has been designed and realized by Robert Baud, in addition to the translation from the universal representation in Latin and in English. A validation by a team of enthusiastic anatomists and neuroscientists, including Odile Plaisant, Alexis Guédon, Nathalie Tzourio-Mazoyer and Laurent Petit for French, Ricardo Insausti (with Luis Puelles and Javier DeFelipe) for Spanish and Yuriy Vasiliev (with Sergey Dydykin) for Russian. Versions coupling Latin with a modern language are available, like LA-EN, LA-FR, LA-ES, LA-RU, as well a five-language version to facilitate comparisons.

It should be noted that in 2020 a Polish version of the TNA was published online. Italian and Portuguese translations are in preparation and possibly in other languages as well. Asian languages would need cooperation with native-speaking experts.

What is the cost of adding a new language? This is a double operation: 1) a specific interface must be programmed, taking advantage of a similar language; 2) a vocabulary of some 3000 words must be translated for that language. One man-month of a skilled computer person is necessary. Another man-month effort by a native speaker expert in anatomy is needed for validation. All the work can be coordinated on the internet.

The authors of the terminology are convinced that a new space of com-

munication in anatomy is now open. The multilingual approach is its visible aspect.