В мастерской переводчика: как преодолеть диссонанс при переводе научно-технических текстов

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Аннотация
Данная статья посвящена актуальному в лингвистике исследованию диссонанса в переводе научно-технических текстов. Основное содержание статьи составляет анализ перевода текстовых фрагментов протокола верификации. Целью статьи является выявление способов предотвращения диссонанса в переводе научно-технических текстов. В качестве исследовательской задачи автором была определена попытка рассмотреть влияние диссонанса на качество переводов научно-технических текстов. В статье обобщен практический опыт студентов-переводчиков в выявлении причин возникновения диссонанса и определении способов его преодоления. На основании результатов проведенного анализа устанавливаются основные причины, которые могут привести к возникновению диссонанса при переводе на экспрессивном и рецептивном уровнях. Это игнорирование грамматического, ситуативного и когнитивного контекстов, неправильный перевод атрибутивных словосочетаний, неверное использование переводческих трансформаций, несоблюдение особенностей научно-технического стиля, неверное актуальное членение предложения.

Ключевые слова: диссонанс, научно-технический текст, преодоление

Nowadays there is a great demand for scientific-technical texts translators due to advancement of science and technology. However, quality of translations is often very low. On one hand, it is due to a lack of consideration of morphological, syntactical, lexical and compositional features of scientific-technical style. On the other hand — insufficient knowledge of the subject-matter of scientific-technical texts. As a result, we come across such a linguistic phenomenon as dissonance that can be defined as distortions and discrepancies in the process and results of translation. Reasons for dissonance can be a lack of wide cultural outlook, of background knowledge and knowledge of the source language culture, and the translation subject on the whole [Шевнин, 2009, с. 38].

In fact, there are two types of translators: linguist translators and engineer translators. The former usually need penetration into the technical

subject matter, the latter need good language skills. We strive for training linguist translators, who can combine both. We conduct workshops aimed at teaching students to use their linguistic potential and develop their technical cogitation.

Here we give some fragments of Verification Protocol translation into Russian during one of such workshops. The students were to detect reasons for dissonance occurrence and to suggest ways of its prevention.

… *security/privacy and accuracy seem to be opposing objectives* [Upmanyu, 2010, c. 1].

… безопасность/ конфиденциальность и точность — противоположные задачи.

Firstly, grammatical context was neglected in the translation: the Infinitive construction of the Complex Subject, and it led to a rather categorical statement, uncertainty of the situation is lost. Secondly, attainment of *security/ privacy and accuracy* are not completely conflicting tasks, otherwise it would be impossible to fulfill them simultaneously. Dissonance could have been prevented by translating the sentence by a compound one, the principal clause of which is indefinite-personal and by adding some helpful words:

…***кажется***, *что* ***достижение*** *безопасности/ конфиденциальности и* ***стремление*** *к точности являются* ***несовместимыми*** *задачами.*

(2) *We overcome this seemingly unavoidable compromise by designing the classifier in the plain feature space, which allows us to maintain the performance of the biometric* [Upmanyu, 2010, c. 2].

Мы преодолеваем этот, по-видимому, неизбежный компромисс путем создания классификатора в простом пространстве признаков, который позволяет нам поддерживать выполнение функций биометрических данных.

A clear reason for dissonance here is improper translation of the word *compromise which* is a trap word here. Dissonance can be prevented by taking into account situational context: usually we *overcome* some negative thing that prevents us from doing something. C*ompromise* is used here in the negative meaning, it means something we cannot put up with — *противоречие*, for example.

Dissonance appeared due to the fallacious translation of the word combination *plain feature space: простое пространство признаков*. The adjective *plain* is polysemantic. Cognitive context can help in this case. If we speak about biometric features, we come to know that they can be both encrypted and unencrypted. The adjective *plain* in the given context means that features are unencrypted: *Однако данное, казалось бы, неизбежное* ***противоречие*** *преодолевается путем создания классификатора в* ***пространстве незашифрованных признаков****, который позволит поддерживать выполнение функций биометрических данных.*

(3) *The first class of feature transformation approaches known as Salting offers security using a transformation function seeded by a user specific key*

[Upmanyu, 2010, c. 2].

Первый класс признаков трансформационных подходов, известный под названием Солтинг, предлагает безопасность с помощью трансформационной функции специальным ключом пользователя.

A reason for dissonance here is hidden in the attributive word-combination *feature transformation approaches*. First, it is advisable to define the determinate in the word combination. The main word usually stands at the end in translating from English into Russian. In our case, the determinate is the word *approaches*. Now we start analyzing the words separately from the left to the right. After this, it is recommended to start translating the whole word combination from the right to the left: *первый класс подходов преобразования признаков*.

The word *Salting* was translated as *Солтинг* by means of transcription that led to dissonance at the receptive level. The word *Salting* is considered to be a neologism in computer science. There is no direct equivalent in the Russian language. The descriptive translation together with a glance at the cognitive context can prevent dissonance here: *процесс добавления к данным случайного числа или текста*.

The verb *seed* was omitted in the translation. But it does have some semantic significance and therefore should be preserved. In accordance with the situational context, the verb may be translated as *отбирать* or *отбор* by means of conversion.

Another reason for dissonance is *специальный ключ,* a two-component word combination. The Russian adjective *специальный* means something that has a definite purpose. Here they mean the key that really exists and that is well-marked, the adjective *конкретный* corresponds more to the given context: *Первый класс* ***подходов преобразования признаков****, известный как* ***процесс добавления к данным случайного числа или текста (Salting),*** *обеспечивает безопасность путем* ***отбора*** *функций преобразования* ***конкретным ключом пользователя****.*

(4) *In the first case, the key is unlocked/ generated at the client end, which is sent to the server for authentication, which will ensure security of the template, and provide user privacy* [Upmanyu, 2010, c. 3].

В первом случае ключ разблокирован/ сгенерирован в клиентской части. Затем он отправляется на сервер для аутентификации, обеспечивая безопасность и конфиденциальность пользователя.

Dissonance in the sentence was caused by breaking Russian stylistic norms (*разблокирован/ сгенерирован*) and by improper translation of the word *template*. This word is polysemantic in Russian: *шаблон*, *трафарет*, *образ*, *образец*, *матрица, модуль, пластина для тестирования, модель*. What is a more corresponding equivalent? The cognitive context gives a hint that as we deal with cryptography and biometrics, this term can be mainly translated into Russian as *образ*, *образец* and *шаблон*. The cognitive context also "reminds" that a better English equivalent for the Russian word *образец*

in biometrics is *pattern*. The word *шаблон* does not suit this situational context either. If we speak about authentication and privacy of something that is kept in the database, the word *template* means some identical features or parameters of a certain user. Thus, the Russian correspondence of the word *template* is the word *образ*: *В первом случае ключ* ***можно разблокировать/ сгенерировать*** *в клиентской части. После этого он посылается на сервер для аутентификации, а впоследствии обеспечивает безопасность* ***образа*** *и конфиденциальность пользователя.*

(5) *Moreover, authenticating over an insecure network makes the plain biometric vulnerable to spoofing attacks* [Upmanyu, 2010, с. 3].

Более того, аутентификация при незащищенной сети делает простые биометрические данные уязвимыми к спуф-атакам.

The translation of the two-component word combination *spoofing attacks* led to dissonance. We won't do without pragmatic adaptation here which can be achieved with the help of translation transformations. The word-combination *спуф-атаки* makes the recipient baffled even though he/ she is a specialist in the sphere of cryptography and biometrics. Translation transcription, description or translator's commentary can prevent dissonance. This word combination may be translated as *спуфинг-атаки* by means of transcription or *атаки путем спуфинга* with the help of description. If the recipient is not a specialist, translator's commentary makes sense. It should be given at the bottom of the page as a footnote: *Более того, процесс аутентификации делает биометрические признаки уязвимыми к* ***спуфинг-атакам***[1] *при условии, что сеть незащищена.*

(6) *In addition, the framework here is generic in the sense that it can classify any feature vector, making it applicable to multiple biometrics* [Upmanyu, 2010, с. 3].

Вдобавок к этому фреймворк является общим, так как он классифицирует вектор признаков, делая его доступным для множественной биометрии.

Non-observance of scientific-technical style peculiarities often leads to dissonance in translation. In this case the Russian adverb *вдобавок* is colloquial and thus inappropriate for scientific-technical use. We will substitute it for *кроме того.*

Another reason for dissonance in the sentence is the term *framework* which was translated by means of transliteration. As a result, a new scientific term appears which can make the recipient confused. This term has a fuzzy meaning in computer science. Hence, it is advisable to choose a more appropriate equivalent. Situational context helps to understand what is implied and thus to prevent dissonance : we will use *подход.*

The adjective *generic* here can be translated as *универсальный.*

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1 вторжения, при которых взломщик пытается замаскироваться под другую систему, используя ее IP-адрес

Thus, the translation is as follows: ***Кроме того,*** *данный* ***подход*** *является* ***универсальным****, так как он может классифицировать любой вектор признаков с возможностью его использования во множественной биометрии.*

(7) *Brute-force cracking is practically impossible if one uses a probabilistic encryption scheme, even for limited-range data* [Upmanyu, 2010, c. 6].

Атака грубой силой практически невозможна, если используется вероятностная схема шифрования даже для ограниченных данных.

Dissonance occurred due to the wrong actual division of the sentence. A probabilistic encryption scheme is not used for limited-range data. That is why the word-combination *limited-range data* refers to the word-combination *brute-force cracking*. The comma after the word combination *probabilistic encryption scheme* helps to understand it. In order to prevent distortions, it is recommended to use transposition. In the English sentence the word combination *brute-force cracking* is considered to be the rheme as it renders new information. The theme is *if one uses a probabilistic encryption scheme*. As a result, the theme stands in the first place and the rheme stands second in translation into Russian.

The term word combination *brute-force cracking* was also a reason for dissonance. It should be translated as *атака методом «грубой силы»* in inverted commas by means of description with a short explanation in brackets (*метод полного перебора*). Otherwise technical-scientific style is broken. It refers more to belles-lettres style.

Another multicomponent term *probabilistic encryption scheme* was fallaciously translated from the left to the right, not from the right to the left. The suggested version is as follows: *Если используется* ***схема вероятностного шифрования, атака методом «грубой силы» (метод полного перебора)*** *практически невозможна даже для ограниченного типа данных.*

The students concluded that the translation of the text fragments was equivalent but not adequate.

Dissonance can be prevented by taking into account the following things.

1. Making tagging. The initial stage of work with a source text which consists in revealing controversial and difficult for the units comprehension.
2. Proper use of translation techniques that helps to make pragmatic adaptation and prevent dissonance at the recipient level.
3. Involving connotation extra linguistic facts.
4. Regarding the actual division of the sentence.
5. Observing scientific-technical style peculiarities.

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TRANSLATOR'S WORKSHOP: DISSONANCE PREVENTION IN SCIENTIFIC-TECHNICAL TEXTS TRANSLATION

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Abstract
The present article is concerned with the topical linguistic research of dissonance in scientific-technical texts translation. The main content of the article is presented by Verification Protocol text fragments analysis. The aim of the article is defining ways of dissonance prevention in the process and results of translation. The author attempts to regard dissonance influence on scientific-technical texts translation quality. The article summaries practical experience of the students-translators in defining reasons for dissonance appearance and ways of its prevention. On the results of the analysis it is determined that the following reasons can cause dissonance at the expressive and recipient levels: disregarding grammatical, situational and cognitive context, improper translation of attributive word-combinations, wrong usage of translation transformations, breaking of the scientific-technical style, wrong actual division of the sentence.

Key words: dissonance, scientific-technical text, prevention

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