

Learning English Through Research on Trans-disciplinary Terms

Perspectives in Economics and Psychology

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Abstract—Researches concerning trans-disciplinary terms discovered that students might learn English more effectively and cultivate more interests on the process learning English, which might benefit both students and education institutions as well. This paper is to illustrate the critical points conveyed by experiments, discussions and seminars and tries to prove the cognitive rules of learning English as one efficient approach by further analysis on two distinctive academic disciplines — economics and psychology.

Keywords—*trans-disciplinary; learning English; economics and psychology*

I. INTRODUCTION

In the era of the population of fan-media or knowledge service, people tend to learn in a casual manner although some academic terms may be tough for them to get through. During the learning process, people seem to adapt themselves to the casual environment in which professional or academic knowledge are transmitted from knowledge producer to common knowledge consumer in a comparatively low-budget way. People come to realize that it's convenient and somewhat effective to learn English from diversified branches of academic disciplines in this way. Disciplines empower the cognition of English learning while learning English reaffirms the theory of trans-discipline development.

II. LANGUAGE AND CONNOTATION ANALYSIS OF ECONOMICS TERMS

A. Cost

The connotation and interpretation of cost is regarded as one of the most important key points for the deep understanding of economics. When people have discussions about different aspects of economics, they discover many secrets and insights buried underneath the surface of normal definition of cost itself. In one of our classes concerning cost, the teacher put up with several classical economic exclamations and students thereby make a further discussion about them in an all-round manner. This paper will present the critical discussion points as follows.

1) *The cost of an action is the best opportunity foregone:*

The question asked here is how to interpret the sentence in a whole. Many students interpreted it as commonly as they ever thought. Most of them payed special attention to the seemly unfamiliar word "foregone". In their mind, they thought it as something which has gone and no more thinking. The teacher, on the contrary, pointed out that in order to understand the sentence clearly, it is necessary to be put in an economic logic. The teacher invited two students to translate the sentence into Chinese, but both of them did it simply based on common situation instead of professional setting. Next, the teacher guided students to put up with a case which can be related with the sentence. Answering to students' silent reaction, the teacher illustrated the meaning of foregone and presented a case in practical life. Foregone means something has gone before people realized that they had lost it. To prove that people will definitely lose something, they will indeed keep in charge of what they thought to be really important to them. Further, the teacher suggested a thesis paper by one author in economics and a book concerning the theme of cost. Further, the teacher assigned several sentences in economics to students to write the translation of the sentences and talk further in detailed cases.

The economic sentences as assignments the teacher presented are as follows:

- The cost of your action is defined by the rest of the society.
- A sunk cost is a cost that cannot be recovered.
- It is the supply and demand for the end-user product that defines the price of the inputs of production, not the other way around.
- Transaction cost is the cost incurred when multiple individuals interact with each other.
- The least cost avoider shall be held liable for the accidents.
- Competition is costly itself.

- The cost of forbidding the trading of human organs increases as the technology of transplant operation develops.
- There are social norms that tend to minimize the costs of competition.
- It is costly to commercialize innovations and inventions.

The third step is to analyze and take a test about the outcome of students' self-study. According to the presentation students performed in the class, the teacher found that only few of them could find proper cases to analyze those economic terms and quotations. Most of students could only translate most part of the sentences and understand only a small part of the sentence. When talking about the difficulties and obstacles they encounter in doing the assignment, students mentioned that they could look up the dictionary about every word of the sentence but they couldn't see the meaning of the sentence as a whole, especially when the sentences are not common ones but professional ones. The teacher helped to analyze the causes of the inefficiency of sentence analysis, including professional vocabulary, grammar, sentence structure, academic background knowledge and the logic hidden within. The paper chooses one of the assignments as one example to illustrate how the experiment is conducted.

2) *"A sunk cost is a cost that cannot be recovered":*

First, students are asked to take a quick look about the whole sentence and try to understand it in a common sense. Most often, "sunk" may refer to an action which goes down to the deep inside of river or ocean. But when it is used to describe cost, it will definitely be changed from the currency going down to the state in which the cost for some item being lost forever. Second, "recovered" may not refer to the same idea it does in common situation, in which it may refer to someone or something getting refreshed after illness, some accidents or disasters. "Recovered" here means that people got the cost back even if the cost or part of the cost has been consumed. Therefore, the whole sentence declares that in our life, people quite often suffers from being lost, no matter what kind of property they have, especially when they had devoted quite a lot to it, possessions, emotions, time, energy, etc. People cannot hang on it all the time and fail to draw ourselves back from being lost. People are taught to keep in mind not to cry for the spoiled milk, instead, to recover from being lost and continue to strive for the next target.

B. Further Discussions

After taking the whole analysis of the sentence, students tend to understand it from a new angle and come to a common sense that human beings felt miserable when they suffered the lost, and people will be caught in the emotions of being lost. However, what people need to do the most is to come back from sorrows and distresses, and step up to another stage of life. Until now, both of the teacher and students got the task done, and got the proper analysis of not

only the sentence itself from the angle of economics, but the genuine meaning of life we hold true.

Another side-effect of this discussion in the class, some students put up with several classical quotations from economics and all of them did the perfect job. Here, it is proper to record some the tasks they did actively and analyzed perfectly.

- Scarcity is inevitable.
- Coase Theorem
- Win-win solution makes every one better off.
- Resources shall be put in the highest valued use.
- The use of knowledge in society is facilitated by price mechanism.
- Congestion charges tell people's need, rather than people's wealth.
- Trustful relationships develop over time.
- Trust results from reunion.
- Both the legal rules and the social norms help to establish trust.
- In China, drinking wines or liquors help to establish trustful relationship.
- Asymmetric information
- Those who show their weakness are likely those who are strong.
- Contracts help to reallocate the responsibilities from the dominated party to the dominating party.

Almost at the end of the semester, the study group held a conference concerning the theme of economics, and even focus on one particular branch of economics — marriage economics. Students figured out one solution to deal with the subject. Here is the quotation: "Marriage has its sentimental and its business sides. The whole law of marriage is founded upon business principles, in which the utmost good faith is demanded of the parties and least fraud in regards thereto is the subject of judicial cognizance."

For this time, students have got to keep in mind that new words and grammar should not be put on the first and more focus should instead, be put forward. Accordingly, they pay attention to the structure and integral meaning of the sentence, holding a fervent discussion from diversified aspects of marriage as social science and one critical feature in human life, and most important, as one phenomenon in economics. They learn to move forward step by step, with PPT assistance, illustrating the key points from their consult of professional journals, reading materials, media conversations and academic arguments. Here are the details of their discussions:

- Marriage shouldn't be named as a deal, it is not a deal at all. People get to marriage not for anything else but love, common destination, shared interests or don't

wanting to be lonely or be left alone. It is clear that both the teacher and the students didn't confine the discussion within the scope of social science or emotion scope. The teacher lead students to the line of economics, and told them to focus only on economic interpretation.

- Most of the students agree with the idea that marriage does serve as one special and featured branch in social science study. On one side, it is sentimental. In language acquisition, students tend to think the word "sentimental" being emotional, closely related to the state of mental distress, which to some extent influenced the action of two parties in marriage, especially for women. On the other side, it is no denying the fact that marriage can be interpreted from economic spectrum. Marriage, in nature, is bonded with economic features, which performs as property, belongings, promises and contract. Men in tradition supply more for women, and reversely, women obey the rule of being loyal to the paternity of children.
- Next, students move forward to concrete vocabulary and sentence grammar, which always serve as the big barrier to their understanding and cognition of professional English terms. This time, the reactions of students turned out to be bettered off, with previous research about the relationship between marriage and law, about the nature of marriage in the sense of modern law.

One assignment was left to students with one classical term from Economic Analysis of Law by Richard Posner, for students' further group discussion and independent thinking and research. Question 1: Read the quotation, interpret the sentence in the logic of law of marriage. Question 2: Talk about the process and logic of your thinking about the questions. Here is another quotation for further discussion and research.

"The prohibition of polygamy, by limiting competition of men for women increases the sexual and marital opportunities of younger, poorer men. The prohibition is in effect a tax on wealth, for only wealthy men can afford multiple wives. The tax does not generate revenue directly, but by reducing the cost of a wife it transfer wealth from the more affluent to the less affluent (and more numerous) men."

The followings are parts of students' teamwork, which are conducted in a very delicate manner:

- Point 1: One student pointed out the correlation of marriage and economics in social science: the economics of marriage includes the economic analysis of household formation and break up, of production and distribution decisions within the household. Further, there is a marriage principle for males that the wage of married males is 15% higher than the wage of never married males. Then the questions follow: Why is that? Some propose the theory of marriage investment and marriage consumption, which prove the tendency and ideology of married males when they involve in the household

of family. In social science, there is one confirmed logic. It is to bring up the off-springs effectively and sufficiently in the life of a married male.

- Point 2: Another student proposed the idea that according to Wikipedia, the definition of marriage economics closely related to the law and economics of marriage and household as well. And he gave one example to illustrate his idea towards the relationship ad essence of marriage and economics. He mentioned Richard Wrangham ever put forward the view that women cooking for men are fundamental to marriage in hunter-gatherer societies. He explained that in mating system in hunter-gatherer era, the whole system is constrained by the way people are socially confined to food supply. After all, that was the time when people hold the highest target of gaining more food to supply themselves and their off-springs. So to a man, his needing a wife to provide food is universal among hunter-gatherer tribes. So food basically drove a man's decision for marriage more than the need for sexual attraction.
- Point 3: Based on two opinions mentioned above by another two students, the third student illustrated his concrete idea by a peculiar case which ever happened in Inuit. The case was called "men stealing women". Among the tribes of Inuit, a woman contributed no food calories, her cooking and food production of warm, dry-hunting clothes were critical: A man normally cannot cook and hunt at the same time. Therefore, the high pressure for living drove a man to the neighborhood to steal a woman to be his wife even if it sometimes meant that would kill her husband. As time went by, man will not steal his wife from other males, instead, stealing conversed into love affair in marriage market. Therefore, all three students prove the essence and fundamental logic within marriage are quite closely related with economics.

III. ANALYSIS FROM PSYCHOLOGICAL PERSPECTIVE

A. Psychological Terms

1) *Spotlight effect*: It is the phenomenon in which people tend to believe they are being noticed more than they really are. Being that one is constantly in the center of one's own world, an accurate evaluation of how much one is noticed by others is uncommon.

2) *Pygmalion effect*: The Pygmalion effect or Rosenthal effect, is the phenomenon whereby others expectations of a target person affect the target person's performance. The effect is named after the Greek myth of Pygmalion, a sculptor who fell in love with a statue he had carved.

3) *Halo effect*: The halo effect is a type of cognitive bias in which our overall impression of a person influences how people feel and think about his or her character. Essentially, your overall impression of a person impacts your evaluations of that person's specific traits.

B. Students' Reactions and Responses

Quite often, students focus more on the first noun which is put ahead of effect, and they talk a lot about their understanding about spotlight but they seem to know little about Pygmalion and Halo, which might be a bit far away from their life experience and cognition.

First, they point out that according to their mind, spotlight may refer to some actions which put people into the focus in some situations, such as presentation, ceremony, family, or company reunion. They stress the point that when they see the word "spotlight", they normally imagine the fascinating circumstances in which people feel illusionary, upset, nervous and excited. They argue that it is human nature that people desire to be noticed and admitted by others for what they did and uttered in public or for public. One of the students put up with one case in which she illustrated the desire and passion for the ancient Greek argued and debated in public. That not only serves as the tradition of modern Western world but also serves as the sequential and systematic discipline for modern western democracy. To some extent, the tradition of being put in the spotlight and announce opinions about social issues and national affairs has been followed firmly and orderly by descendants.

Second, students present their research outcome about Pygmalion effect and Pygmalion himself. They got to know the legendary myth from the references and internet resources. Although the legend was simple, the teacher still reminded the students of paying attention to the core issue and stress point in the legend. So what is the core issue in the legend and how would see the points within? Students made several groups to have a further discussion and they were asked to give one example which related to the Pygmalion effect in their life. In this case, students put lots of cases to prove the effect and they find that the Pygmalion effect is quite universal in our life and people seem to bear the gene of imagination, illusion and be addicted to everything they produced or made.

Third, when they discuss "halo", they at first may not see the idea of the phrase, so they looked up the dictionary, found the definition and consult the ideas conveyed by the phrase. Through the discussion, they gradually understand the meaning of "halo", which bears quite different notion with hello or any greeting words, instead, they got to see it as one type of cognition to evaluate others, our society, the world people live in and the interactive relationship among human beings.

To summarize the points which are illustrated above, students sum up several rules or methods to learn English not only as foreign language, alien culture and more importantly, as one approach to understand themselves, mutual relationships among human beings and the disciplines the world moves ahead.

IV. CONCLUSION

From these two perspectives of academic trans-disciplinary interaction, students call for more and ask for more interaction with other disciplines through English as

one critical and effective tunnel to bond the gap among human cognitive ability, communicative ability and understand the world logically and in a systematic manner.

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