Articles

Didactic Connotations of Text-book Pictorial Adjuncts

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Abstract

The article Didactic Connotations of Text-book Pictorial Adjuncts suggests a theoretical basis for development and assessment of didactic effect of pictorial adjuncts in foreign language textbooks. Barthes's (1977) theoretical interpretation of a press photograph message in three stages, a source of emission, a channel of transmission and a point of reception, is compared to textbook pictorial adjuncts that need to undergo didactic treatment in the first two stages; only then learning effect at the point of reception may be achieved. Comprehensive studies of pictorial adjuncts were written twenty or thirty years ago and the recent preference for photographs without didactic treatment in foreign language textbooks has been explained as attempts of publishers to blend text-book pictorials with visual environment of magazines. The article discusses the concept of "didactic code" at the source of emission and the possibilities of broader context of adjunct pictorials. A delicate balance between text and its pictorial adjunct must be achieved to avoid mere repetition or amplification of the set of connotations already given in the image. The presented theoretical basis is more relevant today than it might have been thirty years ago. It is general enough to be applicable in the prevailing visual digital environment and specific enough to be used for a detailed analysis of the learning effect based on the source of pictorial emission and its channel of transmission irrespective of the technology.

Key words: adjunct pictorials, didactic code, emission, transmission, learning effect, visual environment, textbooks, connotations.

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Didaktické konotace ilustrací v učebnicích

Abstrakt

Článek *Didaktické konotace ilustrací v učebnicích* je návrhem teoretického rámce pro vytvoření a hodnocení didaktického efektu ilustrací v učebnicích cizích jazyků. Barthesova (1977) struktura novinové fotografie jako informace, která má zdroj emise, kanál transmise a bod příjmu, je porovnána s ilustrací v učebnicích. Aby se v bodu příjmu mohl dostavit didaktický efekt, musí fotografie podstoupit při emisi a transmisi didaktickou úpravu. Před dvaceti a třiceti lety byly o ilustracích publikovány popisné a klasifikující studie. Současná preference fotografií bez didaktické úpravy je vysvětlována jako pokus vydavatelů smazat vizuální rozdíly mezi učebnicemi a prostředím populárních časopisů pro mládež. Tento článek se detailněji zabývá didaktickým kódem ve zdroji emise i možnostmi širšího kontextu ilustrací. Jemná rovnováha mezi textem a ilustracemi je nezbytná, aby se zabránilo pouhému opakování nebo zesílení souboru konotací, které jsou již dány obrazem. Tato teoretická východiska jsou dnes ještě relevantnější, než by mohla být před třiceti lety. Jsou dostatečně obecná pro učebnice i aplikaci v převládajícím vizuálním digitálním prostředí, zároveň jsou přiměřeně specifická na to, aby poskytla detailní analýzu efektu učení vyplývajícího ze zdroje emise ilustrace a její následné transmise – bez ohledu na použitou technologii.

Klíčová slova: ilustrace, didaktický kód, emise, transmise, efekt učení, vizuální prostředí, učebnice, konotace.

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Introduction

Any discussion about pictorial adjuncts in textbooks must have a sound theoretical background that would prevent it from the pitfalls of subjective descriptive classifications and generalizations resulting from the alphabetic literacy environment (Van Oostendorp H. & Goldman, S. R., 1998, Petterson, R. 1989, Levin, J. R. & Mayer, R. E. 2012). A slightly modified Barthes's claim that "the emission and the reception of the image both lie within the field of a sociology: it is a matter of studying human groups, of defining motives and attitudes" (1977, 15) may prove to become a possible basis for considering didactic dimension of pictorial adjuncts in foreign language textbooks. Barthes in his seminal essay "The Photographic Message" (1977) suggests terminology and method claiming that the (press) photograph has a structure of a message with a source of emission, a channel of transmission and a point of reception. We believe that the same is true for a pictorial adjunct (a drawing or photograph) in a textbook.

The parts of the message emission (didactic connotation), channel of transmission (didactic context) and reception (didactic effect) are relevant for both the photograph and the didactic image where the didactic effect will be the outcome of the language acquisition process or, more specifically, the effect of the use of the pictorial adjunct in the ESL textbook.

In newspapers the photograph communicates with the text, title, caption and article. In a textbook we should classify relevant contexts the pictorial adjunct communicates with for a maximum learning effect. We need to define each of the three parts of a message and understand how they complement each other.

A drawing for a textbook must include a didactic code, i. e. expressible didactic purpose justifying its use in the unit, at the source of emission. A photograph does not include any code, it is a technology-mediated record of environment, a denoted message only. When a photograph is used as a didactic pictorial adjunct a supplementary message is added to it, be it a simple caption or related instruction. This supplementary message is a "treatment" (Barthes 1977, 17) of the pictorial which transforms it into a teaching aid. The supplementary message may also have a form of the cultural context/code (a photograph in a newspaper, or a textbook).

The suggested structure of a message with a source of emission, a channel of transmission and a point of reception is reflected in the following methodological questions when considering the value of a pictorial adjunct in a ESL textbook: 1) Does the didactic code occur at the source of emission? 2) What are characteristic features of the didactic code at the source of emission? 3) Is not the didactic code a feature inherent in the channel of transmission in textbooks? 4) What is the impact of a pictorial adjunct at the point of reception?

By definition photographs "are discontinuous and complete in themselves" (Barthes 1977, 22), therefore, the photograph is a neutral message without a code and it must be connoted for didactic purposes. How do we connote it, what is the didactic treatment we submit it to? Mostly, the didactic code can be added to the channel of transmission, e.g. by tasks or instructions.

1 Didactic code at the source of emission

Most photographs are not primarily and inherently didactic so the possibilities of inclusion of the didactic code at the source of emission need to be considered, i.e. the presence of the code within the photograph itself without taking into account the channel of transmission. If photographs were to invoke learners' motivation, it could be achieved by manifestly changing them so that they would invite students' involvement before further instructions in the channel of transmission were provided. This could be achieved by developing an actual or abstract "blank space, a riddle" in the

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pictorial arousing interest in students. They would feel motivated e.g. to compare the adjusted photograph to a potential source photograph because photographs have historically special credibility as a perfect analogon of reality. It may be partly due to their potentiality to reflect the environment and very much to the involving power of the photograph technologically enhancing our visual perception. Visualization obviously supports understanding. Would the learning effect of the photograph increase if the image was changed at the point of its emission? Barthes (1977) claims that trick effects intervene without warning in the plane of denotation (21); therefore the adjustments of photographs would have to be didactically obvious, explicitly acknowledged by students.

Another possibility of generating didactic connotation at the source of emission is defining the language skills we want to achieve and consequently translating them into pictorial adjuncts. The idea of "back-translating" speech into the source of pictorial emission may be used to analyse the strength of the didactic code at the point of emission. Some technological extensions of visual sense at the point of emission may be interpreted as including *a priori* didactic connotations, the pictorials "extending" the naked eye might be micro- and macro-images.

There is a store of stereotyped attitudes which form ready-made elements of significance and are reflected in photographs. Barthes (1977, 22) was aware of their potential impact on the viewer. The stereotyped visuals, visual clichés, have eventually become the language of social media (cf. Práger, L., & Řeřicha, V. 2020). Such stereotyped attitudes could be used as textbook pictorials connoted at the source of the emission. Textbook pictorial clichés could be based on language-based clichés. If the language is stereotyped, the images reflecting the language could be stereotyped as well.

The didactic code of a text-book drawing is easier to describe, because, as Barthes (1977) claims, the structure of a textbook drawing is already connoted. It is for this reason that psychological texts use a great many drawings and very few photographs (19). The recent preference for photographs in foreign language textbooks is a complex issue including attempts of publishers to blend text-book pictorials with visual environment of magazines (Laitinen 2014) and recently with that of social media (cf. Práger, L. & Řeřicha, V. 2019a, Práger, L., & Řeřicha, V. 2019b).

2 A broader context of text-book pictures

Pictorial adjuncts could be connoted at the source of emission if they were conceived as part of a broader context, e. g. a narrative sequence comprising the whole textbook. Narration is utilized to promote motivation (Hokanson, B., Clinton, G., & Kaminski, K. 2018, 82) and pictorials could be narratively connoted both visually (e.g. replicated characters and settings) and linearly (e.g. a gradually evolving story). The cohesive con-

tribution of context (narration) has been well documented (Lund 2006) and replicated characters have been utilized in foreign language textbooks, although recently they may be rather considered from a gender-biased than a narrative connotation perspective. The learning effect of a narratively-connotated textbook is yet to be examined, but repetition is an essential aid to memory.

Another cohesive device for a foreign language textbook may be humour. "It can be noted in this connection that the single photograph" notes Barthes (1977, 25), "contrary to the drawing, is very rarely (that is, only with much difficulty) comic". Drawings allow for typification and repetition both of which would be necessary in a humour-based textbook.

Channels of transmission

This article examining the structure of pictorial adjuncts has so far dealt with some aspects of its first part, the source of emission. The second part of the structure, the channel of transmission has been described above as a feature inherent in the didactic code of pictorial adjuncts. The didactic code can be added to the channel transmitting the learning effect of a pictorial by a text of instructions. The strength of the didactic code, the connotation of the pictorial adjunct, is in direct proportion to expected learning effect. Barthes (1977) points out that "the closer the text to image, the less it seems to connote it" (26). In other words, the technology developing a complete, instantaneous image is translated by the technology of linear text. The relationship between the text and its pictorial adjunct must be carefully considered not to weaken the didactic code.

A recent study (Valešová, L., & Duda, O. 2020) considering the effect of translation in foreign language teaching at secondary school and college levels noted that almost half of the respondents did not consider pictorials when translating. It is obvious that from the point of view of the translators the pictorial denotation repeated in the source text must have seemed unnecessary. The source text completely connotes the didactic code of the pictorial message thus rendering it useless.

The text, the channel of transmission, should enhance connotations had they been provided at the source of emission. To establish the delicate balance between text and its pictorial adjunct for the best learning effect the proximity of text to image needs to be considered. "In newspapers the text most often simply amplifies a set of connotations already given in the photograph" (Barthes, 1977, 27).

In a didactic image the set of connotations at the point of emission and channel of transmission should all have clear didactic connotation supporting learning. Differences between a didactically "unconnotated" image and a didactic image should be tested at a source of emission, a channel of transmission and a point of reception.

The established differences would define didactic connotations and, at the point of reception, their efficacy.

A test at the source of emission should assess the ability of learners to decode an image (cf. Carney & Levin, 2002). This ability cannot be taken for granted because pictorial adjuncts communicate a message which should be read correctly. Barthes (1977, 30) suggests that some traumatic photographs "might even suspend language and block meaning". It would be an extreme case and unfortunate for didactic pictorials that need to be translated into language, need to be verbalized. Emotional responses may be sufficient and relevant on social media platforms but not in a textbook. Yet another test is needed to consider cultural encoding of the image, its culture impartiality, if used in generic foreign language textbooks. Culturally universal pictorial adjuncts might, on the other hand, significantly limit the field of didactic connotations.

Conclusion

Flaws of the enthusiastically repeated arguments stressing the beneficial impact of pictorial adjuncts (Hunter, Crismore & Pearson, 1987, Carney & Levin, 2002, Wiedenmann, 1989) have been discussed elsewhere (Práger, Řeřicha, 2020). The theoretical background suggested above investigating didactic connotations at the source of emission and channel of transition allows us to systematically investigate processes determining the impact of a pictorial adjunct at the point of reception.

The intended and achieved learning effect at the point of reception is the benefit of the pictorial adjunct. The processes are an interplay of didactic inputs into the source of emission and channel of transition. Although the channel of transition seems to be the core of didactic connotations of pictorial adjuncts, it is the balance between the measures taken to influence the ability to decode pictorial messages and the instance of didactic inputs into the source of emission. Their mutual combinations should be tested to measure the learning benefit, the effects of pictorials not only in foreign language textbooks but in any digitally-based remote teaching using images.

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