

GERMAN PUPILS' AWARENESS
OF ENGLISH-FRENCH COGNATES AND FALSE FRIENDS: AN
INVESTIGATION OF L2 TO L3 TRANSFER

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The Contrastive Analysis Hypothesis (CAH) proposes that similarities and differences between a first (L1) and second (L2) language may lead to positive and negative transfer, respectively. An experiment exploring recognition of cognates and false friends was conducted to investigate lexical transfer for German native speakers learning English and French. Differences in recognition accuracies of cognates and false friends were found, indicating that cognates were easier for learners to identify than false friends. These findings suggest that CAH can be extended to include transfer from L2 to L3 and that, in accordance with intercomprehension theories, a facilitation effect can be found between English and French in particular.

KEYWORDS: Contrastive Analysis Hypothesis, L2 to L3 transfer, cognates, false friends, second language acquisition, intercomprehension

Dieser Artikel befasst sich mit der Erkennungsgenauigkeit, mit der deutsche Schüler englisch-französische Kognate und falsche Freunde erkennen. Das durchgeführte Experiment untersucht den lexikalischen L2-L3 Transfer anhand von Kognaten und falschen Freunden als mögliche Unterrichtsmethode im Englisch- und Französischunterricht für deutsche Muttersprachler. Unterschiede in der Erkennungsgenauigkeit konnten identifiziert werden, die darauf hindeuten, dass Kognate leichter zu identifizieren sind als falsche Freunde. Die Untersuchungsergebnisse deuten darauf hin, dass Contrastive Analysis Hypothesis vom L1-L2 Transfer auf den L2-L3 Transfer übertragen werden kann, indem sie, in Übereinstimmung mit Interkomprehensionstheorien, weitere Anhaltspunkte für das Auftreten eines vereinfachenden Effekts in Bezug auf das Erkennen lexikalischer Gemeinsamkeiten zwischen Englisch und Französisch liefern.

SCHLAGWÖRTER: Contrastive Analysis Hypothesis, L2 zu L3 Transfer, Kognate, falsche Freunde, Zweitspracherwerb, Interkomprehension

1 INTRODUCTION

The Contrastive Analysis Hypothesis (CAH) suggests that teaching materials should be based on a contrastive analysis of learners' native (L1) and target (L2) languages (Lado 1957). Lado's hypothesis is based on the assumption that learners are prone to transfer linguistic phenomena, including word forms and meanings, from their L1 to the L2.

Lado (1957) suggested that similarities between the L1 and L2 will be easier for learners to acquire than differences. For example, similarities, including cognate words which share similar form and meaning, such as German 'Haus' and English 'house', result in positive transfer, facilitating the learning process; whereas differences, including false friends which share a similar form but have a different meaning, such as German 'bekommen' and English 'become', result in negative transfer, inhibiting the learning process. Thus, it can be argued that researchers (and teachers) should investigate similarities and differences between an L1 and L2 in order to be able to identify potential learner difficulties.

The effectiveness of CAH teaching methods in vocabulary learning has been supported by Laufer and Girsai (2008) who compared three different methods of instruction in L2 English vocabulary. The first method focused on meaning, using a reading comprehension and a group discussion task, followed by a plenum discussion; the target words were not specifically pointed out. The second method was mainly concerned with form. The target vocabulary was tested via a multiple choice and a fill-in-the-blanks exercise, followed by a clarification of the meaning of the target words by the teacher. The third method concentrated on a contrastive analysis of English with the L1 (Hebrew) combined with translation. Participants were given specific contrastive information on Hebrew and English and were asked to complete an L2 to L1, as well as an L1 to L2 translation task. Laufer and Girsai found that the learning effect for the third method, Contrastive Analysis plus translation, yielded significantly higher test results than the other two teaching methods. Active and passive recall as well as immediate and delayed testing (one week later) showed higher scores for the contrastive analysis group. Laufer and Girsai concluded that students' awareness of problems arising between their L1 and L2 played an important role in learning new vocabulary.

Most studies concerning CAH have investigated L1 to L2 transfer (see for example Cho and Park 2006; Lado 1957; Laufer and Girsai 2008; Ogata et al. 2000), but there is some research on the effect of additional languages on language learning. Lemhöfer et al. (2004) explored recognition times for German-Dutch cognates, German-Dutch-English cognates and non-cognate words in trilingual speakers: Dutch L1, English L2 and German L3. They found that German-Dutch cognates were recognized faster than non-cognates and that German-Dutch-English cognates were recognized even faster. Lemhöfer et al. argued that this indicated that words in all known languages are activated during lexical access. This interpretation is compatible with the CAH and shows that positive transfer can also occur between an L2 and L3, not only an L1 and L2. However, explicit exploration of L2 to L3 transfer was not a significant component of their study.

The current study explored English-French cognate and false friend recognition for pupils in a German school. There were two main research questions: 1. Are vocabulary similarities, i.e. cognates, easier to recognize than differences, i.e. false friends, as predicted by Lado (1957)?; and 2. Can transfer occur between an L2 and L3?

2 PARTICIPANTS

Seventy-two participants (all female aged between 15-16 years) were taken from four French classes in year 10 at a secondary school in Kaiserslautern. Three classes (Groups

A, B and C) were at the level of German Gymnasium and one class (Group D) was at the same school but at the level of German Realschule. Groups A, B and D had been learning L2 English for 6-8 years and L3 French for 4-5 years. Groups A and D were regular classes at Gymnasium and Realschule level, respectively, meaning the pupils attended L2 English and L3 French language classes regularly. Group B included 13 pupils who were in a special program called 'English bilingual education', where they received additional English lessons in grades 5 and 6 and had additional history, geography and social studies lessons in English in grades 7-10 in addition to their normal English language lessons. Group C had been learning L2 French for 6-8 years and English L3 for 4-5 years. The variation within the groups of the years that pupils had been learning French and English is due to the fact that some of the pupils started learning a second language in elementary school and some had to repeat a class.

3 STIMULI

Twenty French and English cognate pairs, taken from Limper (1932), and 20 French and English false friend pairs, taken from Pateau and Barrie (1989), were used as stimuli. All words were common nouns in both languages. Stimulus material was presented in randomized order. A full list of stimuli can be found in the appendix.

4 PROCEDURE

All participants completed a background questionnaire asking about their native language(s), whether or not they had taken Latin, and what their grades were for English and French. Participants were then given definitions of cognates and false friends and were asked to indicate which of the 40 listed word pairs were cognates and which were false friends. There were four possible answers: 'false friend', 'cognate', 'neither' and 'I do not know one or both words'. The experiment was restricted to 20 minutes to discourage the use of meta-cognitive search strategies. The full experiment questionnaire can be found in the appendix.

5 RESULTS

Answers were evaluated and transformed into percent correct. The data are summarized in Table 1. Statistical analyses were run using non-parametric tests because the data were non-normally distributed.

Data for number of cognates and false friends that were known and the percentage of cognates and false friends that were responded to correctly (out of the number known) were entered into omnibus Kruskal-Wallis tests to explore whether there were significant differences across the groups for these variables.

There was a significant difference across groups for the number of known cognates ($H(3) = 8.178, p < 0.05$), indicating that the performance across groups varied. Post-hoc Mann-Whitney tests showed that there were no differences between Groups A and B ($U = 211.500, N_1 = 14, N_2 = 31, p = 0.892$), and Groups C and D (U

= 76.500, $N_1 = 13$, $N_2 = 14$, $p = 0.488$). To reduce the number of comparisons made, Groups A and B, and Groups C and D were combined. There was a significant difference between Groups A+B and Groups C+D ($U = 358.000$, $N_1 = 45$, $N_2 = 27$, $p < 0.005$), indicating that for Groups A+B significantly fewer cognates were marked as known in comparison to Groups C+D.

There was no significant difference for number of known false friends ($H(3) = 1.338$, $p = 0.708$), indicating similar numbers of known false friends across all groups.

Table 1: Mean numbers of known cognates and false friends and percentage correct out of the number known as a function of group. Standard deviations are given in brackets.

	# Known Cognates	% Known Cognates Correct	# Known False Friends	% Known False Friends Correct
Group A N = 14	7.7 (2.4)	62.2 (0.2)	6.1 (2.5)	40.5 (0.1)
Group B N = 31	7.7 (2.3)	55.1 (0.2)	6.6 (2.2)	42.8 (0.1)
Group C N = 13	9.9 (2.5)	71.3 (0.2)	5.5 (3.5)	38.0 (0.2)
Group D N = 14	9.4 (2.4)	62.7 (0.1)	6.6 (3.1)	43.9 (0.1)
Total N = 72	8.4	60.9	6.3	41.7

There was a significant difference across groups for the percentage of known cognates correct ($H(3) = 8.995$, $p < 0.05$), indicating that the performance across groups varied. Post-hoc Mann-Whitney tests were run to explore the source of the effect. A Bonferroni correction was applied to correct the significance value for multiple comparisons, yielding a significance value of $p < 0.008$. There was a significant difference between Groups B and C ($U = 99.000$, $N_1 = 31$, $N_2 = 13$, $p = 0.008$), indicating that Group C had a significantly higher percentage of known cognates correct in comparison to Group B. All other $p > 0.008$, indicating that there were no significant differences for all other group comparisons.

There was no significant difference for percentage of false friends correct ($H(3) = 1.383$, $p = 0.710$), indicating similar percentages across all groups.

Further comparisons were run to explore differences in performance for cognates and false friends. There was a significant difference between number of known cognates and number of known false friends ($T = 5.029$, N - Ties = 68, $p < 0.0005$) and between percentage of known cognates and known false friends correct ($T = 5.620$, $p < 0.0005$), indicating higher scores for cognates than for false friends for both comparisons.

6 DISCUSSION AND CONCLUSION

The current study investigated recognition accuracies for English-French cognates (vocabulary similarities) and false friends (vocabulary differences) in four groups of German pupils with two main questions: 1. Are vocabulary similarities, i.e. cognates, easier to recognize than differences, i.e. false friends, as predicted by Lado (1957)?; and 2. Can transfer occur between an L2 and L3?

Results showed that all groups scored better on cognates in comparison to false friends. Participants in all groups recognized more cognates and, out of the cognates they knew, they scored better on the test in comparison to false friends. Thus, our data confirm Lado's hypothesis that similarities are easier for the learner to acquire than differences. In addition, our results show that transfer can occur between an L2 and L3. However, this requires further exploration as confounding variables, such as word frequency and the possible effect of German cognates, e.g., beer-bière-Bier, cannot be ruled out.

Our results also showed that Group C performed better than the other groups for cognates, though this was statistically significant for Group B only. Based on the assumption that knowledge of other languages may facilitate cognate recognition (Lemhöfer et al. 2004; Stegmann & Klein 2000), it could be the case performance on cognates varied due to differences in language backgrounds between groups. Group A had 3 non-monolingual German participants, with 8 such participants in Group B, 1 in Group C and 4 in Group D. Additional knowledge of Latin may have also been a factor, aiding in the learning of Romance languages. However, most participants with experience of Latin were in Group B (16 out of 31), Group C had 3, Group A had 1 and Group D had no participants with knowledge of Latin. Thus, if an additional Germanic or Romance language background, including knowledge of Latin, would have aided performance, Group B should have out-performed all other groups. The results showed that this was not the case. One additional possibility may be the grade point average of the participants. Group D had the highest grade point average in both English and French, 2.3 (corresponding to 'good') for both languages, and Group C had the second highest grade point average in French, 2.4, but Group C also had the lowest grade point average in English, 3.4 (corresponding to 'satisfactory'). In addition, if grade point average were an independent factor, Group D, with the highest averages for both languages, should have out-performed all groups. Within group variation is also unlikely to play a role, as indicated by similar standard deviations across groups. Thus, there must be another variable, or combination of variables, that is responsible for the differences between groups, namely Group C outperforming the others.

In summary, our study provides further evidence that a facilitation effect, such as suggested by Lado (1957) for L1-L2 transfer, can be extended to lexical L2-L3 transfer. Our findings also support the claim that facilitated transfer does not only occur within one language family but can also occur between English and French, as was suggested by Klein and Reissner (2006). These findings are also of pedagogical relevance. A new teaching method, 'intercomprehension', focuses on similarities between languages within one language family (Stegmann & Klein 2000). In their intercomprehension manual for the Romance language family, Stegmann and Klein (2000) aim to provide pupils with systematized techniques, including a short overview of language-specific features, i.e., differences within the language family, to acquire languages within the

same language family as another known language. This manual aims to teach German learners how to quickly understand (in the sense of ‘grasp the general idea of’) a text in an unknown Romance language with the help of an already known Romance language. Based on this manual, there is a supplementary manual concerning the role of English in Romance intercomprehension. Klein & Reissner (2006) have even shown that knowledge of English can aid the acquisition of French, using similarities in vocabulary such as ‘democracy’ and ‘démocratie.’

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APPENDIX

STIMULI

COGNATES

English	French
aversion	aversion
lesson	leçon
mayor	maire
beer	bière
author	auteur
advantage	avantage
era	ère
catastrophe	catastrophe
pity	pitié
doubt	doute
conclusion	conclusion
difference	différence
choice	choix
actor	acteur
agony	agonie
Christian	chrétien
company	compagnie
precaution	précaution
inhabitant	habitant
autumn	automne

FALSE FRIENDS

English	French	Translation of French Word
advice	avis	opinion
cave	cave	cellar
corpse	corps	body
data	date	date
deception	déception	disappointment
diner	dîner	dinner
arm	arme	weapon
fabric	fabrique	factory
evidence	évidence	obviousness
journey	journée	day
lecture	lecture	reading
library	librairie	bookshop
money	monnaie	change (monetary)
novel	nouvelle	short story; news
place	place	square
process	procès	trial

property	propreté	cleanliness
sort	sort	fate
coin	coin	corner
survey	surveillance	supervision

EXPERIMENT QUESTIONNAIRE

Experiment: Cognates und False Friends im Bewusstsein von Schülern

Liebe Schülerin der Klasse 10,

vielen Dank, dass du dich dazu bereit erklärt hast, an diesem Experiment teilzunehmen.

Deine Anonymität ist dabei zu jedem Zeitpunkt gewährleistet.

1. Bitte beantworte zunächst die untenstehenden **Fragen zu deinen Fremdsprachenkenntnissen**.
2. a) Bitte lies dir in Ruhe die **Definitionen von „Cognates“ und „False Friends“** durch, die auf jeder neuen Seite ganz oben angegeben sind.
 b) Bitte kreuze nun in der **nachfolgenden Tabelle** an, ob die angegebenen Englisch-Französische **Substantiv - Paare** den Cognates, False Friends oder keinem von beiden zuzuordnen sind. Bitte Kreuze die letzte Möglichkeit an, falls dir eines oder beide Wörter unbekannt sind.
 c) Kreuze pro Englisch-Französischem Paar bitte immer nur **genau 1 Antwort** an
 d) Du hast nun genau **20 min.** Zeit (etwa 30 sec. pro Paar).

Persönliche Angaben (*Zutreffendes bitte ankreuzen/ ausfüllen*)

1. Muttersprache

- Meine Muttersprache ist Deutsch
- Meine Muttersprache ist eine andere Sprache als Deutsch, nämlich _____.
- Ich habe 2 Muttersprachen, ich bin bilingual aufgewachsen, nämlich _____ und _____.

2. Fremdsprachen (FS)

	1. FS	2. FS	3. FS	weitere
E / E bili / F / L				
seit ... Jahren				

3. Durchschnittliche Note in:

- Englisch _____.
- Französisch _____.
- Latein _____.

4. Ich habe im Unterricht schon einmal von

Cognates False Friends gehört.

Definitionen:

1. Cognates:

Wörter in verschiedenen Sprachen, die ähnlich aussehen und eine **ähnliche** Bedeutung haben.

Bsp.: **mother – Mutter**

2. False Friends:

Wörter in verschiedenen Sprachen, die ähnlich aussehen, aber **unterschiedliche** Bedeutungen haben.

Bsp.: **become – bekommen**

English	Français	Cognates	False Friends	Keines von beiden	Ich kenne eines oder beide Wörter nicht
money	monnaie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Christian	chrétien	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
data	date	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
era	ère	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
company	compagnie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
pity	pitié	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
library	librairie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
arm	arme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
novel	nouvelle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
conclusion	conclusion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
autumn	automne	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
advice	avis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
mayor	maire	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
journey	journée	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
precaution	précaution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
evidence	évidence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
fabric	fabrique	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
doubt	doute	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
coin	coin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
advantage	avantage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Bitte wenden!

Definitionen:

1. Cognates:

Wörter in verschiedenen Sprachen, die ähnlich aussehen und eine ähnliche Bedeutung haben.

Bsp.: **mother – Mutter**

2. False Friends:

Wörter in verschiedenen Sprachen, die ähnlich aussehen, aber unterschiedliche Bedeutungen haben.

Bsp.: **become – bekommen**

English	Français	Cognates	False Friends	Keines von beiden	Ich kenne eines oder beide Wörter nicht
deception	déception	O	O	O	O
beer	bière	O	O	O	O
process	procès	O	O	O	O
agony	agonie	O	O	O	O
survey	surveillance	O	O	O	O
lecture	lecture	O	O	O	O
place	place	O	O	O	O
catastrophe	catastrophe	O	O	O	O
diner	dîner	O	O	O	O
corpse	corps	O	O	O	O
aversion	aversion	O	O	O	O
inhabitant	habitant	O	O	O	O
difference	différence	O	O	O	O
author	auteur	O	O	O	O
property	propreté	O	O	O	O
lesson	leçon	O	O	O	O
sort	sort	O	O	O	O
cave	cave	O	O	O	O
choice	choix	O	O	O	O
actor	acteur	O	O	O	O

Vielen Dank!!!

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