

## **METAPHOR AND COGNITION: A CROSS-CULTURAL STUDY OF INDIGENOUS AND UNIVERSAL CONSTRUCTS IN STOCK EXCHANGE REPORTS**

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### **Abstract**

The article examines the aspects of similarity and diversity between different cultures through a cognitive metaphorological approach. The aim is to show in which way both aspects are intertwined and in which way they are relevant for both a theoretical foundation of intercultural communication in general and for solving problems of understanding that can arise in special fields of intercultural communication. The article attempts to demonstrate in which way language can be used to analyze culturally relevant cognitive schemas in the field of business communication. It also demonstrates that the concept of indigenous constructs is needed to promote development in the theory of intercultural communication. The author uses the theory of cognitive metaphors which was introduced by Lakoff/Johnson in 1980 and developed further in the 90s and applies it to a cross-cultural corpus of daily business reports on the stock exchange in Finnish, Finland-Swedish and German newspaper articles. Because of the ongoing world-wide process of synchronic movements of trends in national stock markets since the 90s, the reports in different languages on their national stock market movements have a very high degree of referential comparability. A high degree of comparability in the corpus can be considered methodologically crucial for a cross-cultural study which also aims to solve basic theoretical questions.

**Keywords:** understanding problems, business communication, cognitive schemes, indigenous constructs, cognitive metaphors, stock market reports.

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### **Background**

In the field of intercultural communication there has traditionally been a very high degree of interest in paraverbal or nonverbal dimensions of communicating. Verbal communication has traditionally been viewed as a complement of the paraverbal or nonverbal communication. From a holistic theoretical point of view this is justified because we need to integrate all relevant components in our concept of communication. But it seems as if this triadic differentiation has at the same time diminished the relevance of cultural knowledge that we can acquire through focusing on the verbal aspect of communication as such. This is understandable in the short history of intercultural research as an effort to establish itself as its own scientific field next to other existing disciplines. Nevertheless, it seems as if research in intercultural communication has not yet fully considered the cognitive function that verbal communication itself has for enabling effective cross-cultural communication.

### **Problems under scrutiny and the method outlined**

From a cross-cultural perspective the question is as follows: How can language teaching as a verbal component satisfy the demands of communication across borders

aimed at understanding both differences and similarities between one's own culture and a target culture? This question not only concerns communication in the field of languages for special purposes (LSP), but I think that the various fields of business communication mark excellent grounds for empirical studies of this matter. In order to study phenomena of intercultural relevance on a linguistic level we need to have a linguistic theory that allows us to make statements about culture-bound implicit norms, values, thought patterns, etc. That is, we need an access to the cognitive landscape that comes with a different language which – as a whole – differs from the cognitive organization of one's own language. Though the Sapir-Whorf hypothesis, that culture and language are interrelated, has been generally accepted as such, little has so far been achieved in setting up methodological tools for systematic empirical analysis in this area. This article tries to exemplify the contribution which the cognitive theory of metaphor can make on an empirical level to this discussion once it is combined with basic questions of intercultural communication.

From an intercultural perspective I think that the cognitive theory of metaphor, which was introduced by George Lakoff and Mark Johnson in 1980, and which has been developed further,<sup>1</sup> marks an excellent interdisciplinary ground for investigating one of the oldest questions in intercultural communication: How to grasp on a theoretical level and to transpose methodologically the interrelationship between culturally bound and universal constructs in intercultural communication. The relevance of the cognitive theory of metaphor for intercultural aspects begins with its principal claim of ubiquity.<sup>2</sup> This means that there is no situation where metaphorical concepts are not used to express values, thought patterns, norms, etc. In addition to this claim of ubiquity there are three more reasons why this theory should be taken into consideration from an intercultural perspective. They are the central aspects that distinguish this theory from all other theories of metaphor. First, the insight that metaphorical concepts use *concrete* ways of experiencing the world as source domains in the metaphorical process in order to express *abstract* target domains. Secondly, by using concrete experiences to express abstract matters we always use *one* aspect of the domain of origin – not every aspect – which in its own way is *relative to culture-bound ways of mapping concepts*. Thirdly, the projection from source to target domain always and only works *unilaterally* from concrete images of experiencing the world to the abstract domains of the subject matter; never vice versa. But how can this linguistic theory be used to make a contribution to the old problem of being able to separate universal from culture bound aspects in intercultural communication? I will demonstrate this through an empirical study that was carried out analyzing contrastively German, Finnish, and Finland-Swedish stock exchange reports in daily newspapers.

### Empirical analysis

The analysis is based upon daily reports during the period 1-15 April 2000. The movements of the stock markets are of a very high complexity. The numbers themselves reflect on a highly abstract level a multitude of economically relevant phenomena. Because of the ongoing internationalisation due both to international fund networking in stock ownership and to globalisation in company activities, the stock market movements

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<sup>1</sup> Cf. Gibbs 1994, Johnson 1992, Radden 1992, Lakoff 1990, 1987, Sweetser 1990, Lakoff/Johnson 1989 and Kövecses 1986.

<sup>2</sup> Cf. Schmidt 2000, Jäkel 1997, and Gibbs 1994.

all over the world have, since the late 90s, reached a very high degree of synchronicity. These are the main reasons why stock market reports can be considered suitable for research concerned with cognitive concepts, and still show a very high degree of comparability for cross-cultural research. The need for systematically using cognitive concepts in stock exchange reports is due to the fact that these texts nowadays are written by experts who are forced to express complicated and abstract phenomena in a concise and quickly understandable way to readers who can be considered mostly laymen.

If the generally accepted intercultural hypothesis is correct, that we use universal as well as non-universal constructs while communicating, then this kind of study should be able to show *in which way* we can distinguish between these two types of constructs. If we can systematically show the kind of relationship we find between universal and culturally bound constructs, we can also integrate this knowledge into a further development of the theory of intercultural communication. Once we arrive at that point, we could, for example, use culturally bound constructs more efficiently in verbal interaction. This aim goes far beyond the often presupposed dimension of lexical differences as such between language and culture. As the theory of intercultural communication does not solely address linguistic questions, we need a theoretical framework that allows us to make use of culturally relevant knowledge in situations not only involving language. The cognitive theory of metaphor is able to meet this demand, as its methodological relevance goes far beyond simple linguistic questions.

The empirical material in this study was taken from the daily newspapers *Frankfurter Allgemeine Zeitung* (FAZ; German), *Turun Sanomat* (TS; Finnish), and *Hufvudstadsbladet* (HBL; Finland-Swedish). The first step in this study was to locate the kind of source domains and their frequency of use in explaining stock exchange movements in the three languages. Although all the texts in the three languages use systematically images to express the rather abstract and complicated events behind the numbers on the stock markets, they all show both a different list of concepts used and a different frequency of the same metaphorical concept used in more than one language. The differences in the concepts used can be understood as expressing the culture-bound ways of reporting the phenomena on the stock markets. Whereas e.g. the metaphorical concept of PHYSICAL MOVEMENT plays a dominant role in the German (FAZ) texts, it is of minor significance both in the Finnish (TS) and the Finland-Swedish (HBL) texts (see fig. 1). Figure 1 lists all the metaphors and their frequencies in the three languages examined.

**TYPES OF METAPHORS AND THEIR FREQUENCIES IN STOCK EXCHANGE REPORTS IN THE NEWSPAPERS FAZ, TS, AND HBL 1-15 APRIL 2000**

	<i>FAZ</i>	<i>TS</i>	<i>HBL</i>
- PHYSICAL MOVEMENT	31	13	12
- SPORT/GAME	27	10	19
- MECHANICS (VECTORIAL PRESSURE / MACHINERY)	20	14	16
- SOLID/FLUID SUBSTANCE	16	14	2
- GRAVITY	11	9	8
- VISUAL PERCEPTION	11	1	2
- FIGHTING	9	12	2
- MARITIME ENVIRONMENT/ NAVIGATION	8	21	5
- BUILDING, EDIFICE	7	--	3
- STATE OF MIND	7	15	4

- STAGEPLAY, MUSICAL PERFORMANCE	4	2	3
- PHYSICAL STRENGTH	4	7	14
- PHYSICAL GROWTH	4	4	--
- PENDULUM	4	--	--
- PATIENT	3	10	4
- THERMAL STATE	3	10	3
- MOUNTAINS	3	12	2
- BRIGHTNESS/DARKNESS	--	5	5
- WEATHER	--	--	5
- STREET-TRAFFIC	--	2	2
- PHYSIOGNOMY	--	8	--
- PHYSICAL STRAIN	--	2	--
- DISTANCE	--	1	--
- AGGRESSIVE BEHAVIOR	--	1	--
- NEED FOR FOOD	--	1	--
- FIRE	--	1	--
- FLIGHT PERFORMANCE	--	1	--

(Fig. 1)

In order to make the examples of the cognitive metaphors understandable for an English speaking reader, each example is translated into English. It needs to be stressed that only translations which follow the conceptual logic of the metaphors in the original language can be used. In this way the reader is able to understand the conceptual logic from the source domain used in the three languages for constructing metaphors. This culturally bound conceptual logic could not be grasped by free translations into idiomatic English.

The metaphor PHYSICAL MOVEMENT refers to horizontal or vertical movements in space. For example such actions as walking forward/backwards are used as source domains for expressing differences in share prices as target domains:

"Am Neuen Markt sind die Kurse am Dienstag weiter zurückgegangen" (FAZ 05.04.2000)

**(At the New Market prices have continued to go back further)**

Sinking prices are expressed horizontally with the metaphor PHYSICAL MOVEMENT in the German texts, as shown in the example above. Finnish texts use the same metaphor in a vertical manner to express sinking prices:

"Nasdaq-indeksin runsaan kolmen prosentin kumarrus" (TS, 13.04.2000)

**(A bow of more than three percent of the Nasdaq index)**

"New Yorkin teknoindeksin kääntyminen jyrkästi alaviistoon" (TS, 13.04.2000)

**(A steep turn downwards of the New York technology index)**

If PHYSICAL MOVEMENT is used horizontally in Finnish texts it expresses investors' general attitudes rather than solely movements in share prices:

"Hermoilu palasi pörssiin" (TS, 12.04.2000)

**(Nervousness returned to the stock exchange)**

In the Finland-Swedish texts PHYSICAL MOVEMENT is used both horizontally and vertically to express changes both in share prices and other market activities:

"De traditionella bolagen gick överlag ganska starkt" (HBL 01.04.2000)

**(The traditional companies walked generally rather strongly) (HORIZONTAL)**

"På obligationsmarknaden kom istället säljarna fram (HORIZONTAL) ... när långräntorna klättrade uppåt" (HBL, 07.04.2000)

**(On the bond markets the sellers instead came forward ... when long term rates climbed up) (VERTICAL)**

The metaphor SPORT/GAME expresses the source domain of activities like winning and losing in all three languages to depict the target domains of either single shares or whole markets where either markets or single shares can be active players:

"Der Neue Markt gewinnt mehr als 14 Prozent" (FAZ, 07.04.2000)

**(The New Market wins more than 14 per cent)**

"Nokia ... fanns med på den vinnande sidan" (HBL, 01.04.2000)

**(Nokia ... was on the winner's side)**

"nousijajoukon kärkisijoille kiilasi Nordic Baltic Holding" (TS, 12.04.2000)

**(Nordic Baltic Holding advanced to the top position of the winning group)**

Congruities and disparities between different languages cannot simply be generalized, as they may vary on the level of the metaphors chosen. The metaphor MECHANICS, for example, is based on two types of source domains: VECTORIAL PRESSURE or MACHINERY. The culture bound impact is seen in the case of this metaphor in the fact that the languages examined either actualise one or the other specified source domain of MECHANICS, but not both. MECHANICS is specified in the German texts as VECTORIAL PRESSURE, whereas it is specified both in the Finnish and in the Finland-Swedish texts as MACHINERY with a similar degree of distribution in the latter two languages (see fig. 1). The following examples may clarify the different uses of MECHANICS:

MECHANICS/MACHINERY:

"Handeln körde igång" (HBL, 5 April 2000)

**(Trade started/drove off)**

"Stark ekonomisk statistik fortsatte sedan att kablas ut" (HBL, 8 April 2000)

**(Strong economic statistics continued to be cabled)**

"vauhtia saanut Comptel" (TS, 11 April 2000)

**(Comptel having increased its speed)**

"Teknologiasektorin parasta vauhtia esitti Elcoteq" (TS, 15 April 2000)

**(The best speed in the technology sector was performed by Elcoteq)**

MECHANICS/VECTORIAL PRESSURE:

"Unter Druck stand die Aktie der Deutschen Telekom" (FAZ, 4 April 2000)

**(The share of Deutsche Telekom stood under pressure)**

"die kaum besseren Aussichten ... sorgten für Abgedruck" (FAZ, 6 April 2000)

**(the scarcely better perspectives ... led to a pressure of disposal)**

The metaphor SOLID/FLUID SUBSTANCE depicts the way changes in share prices are conceptualised either for the stock exchange as a whole or referring to single market activities. In German texts SOLID SUBSTANCE is used to depict the general trend at the stock exchange, being the agent of the activities described:

"Die Deutsche Börse hat am Donnerstag fester tendiert. Der Deutsche Aktienindex Dax befestigte sich ... um 1,76 Prozent auf 7549 Punkte" (FAZ, 07.04.2000)

**(The German stock exchange tended to more solidity on Thursday. The DAX solidified by 1,76 per cent to 7549 points)**

Although SOLID SUBSTANCE is used in the German texts to conceptualise rising share prices, the opposite metaphor FLUID SUBSTANCE is not used to depict the opposite tendency in share prices. Instead FLUID SUBSTANCE ("Liquidität"/liquidity) is used to describe an amount of money that can be invested in the market (cf. FAZ, 05.04.2000).

In the Finnish texts the metaphors SOLID/FLUID SUBSTANCE are primarily used to describe rising or falling share prices, either conceptualising the stock exchange as a whole or single shares:

"Tietoturva oli torstaina kysyttyä tavaraa" (TS, 14.04.2000)

**(Tietoturva was on Thursday goods that were often asked for)** (SOLID SUBSTANCE)

"Hex-yleisindeksi valahtikin ... 16045 pisteeseen" (TS, 04.04.2000)

**(The HEX index had flowed down ... to 16045 points)** (FLUID SUBSTANCE)

In the Finland-Swedish texts FLUID SUBSTANCE is not used to depict shares but rather buyers' or sellers' activities:

"när köparna strömmade in i några av våra ... teknologibolag" (HBL, 15.04.2000)

**(When buyers streamed into some of our ... technology companies)**

The metaphor BUILDING/EDIFICE is used in the German texts to conceptualise rising profits out of stock market activities in combination with the metaphor SPORT/GAME:

"Einige konnten die Kursgewinne noch ausbauen" (FAZ, 08.04.2000)

**(Some were able to further build up gains in rates)**

Combined metaphors as in the example above are not an exception in itself, but rather marks one way of conceptualising more complex target domains. It is left to the reader to decide - depending on the context - which of the source domain in cases like this are the dominant source domain in the message.

The metaphor STATE OF MIND is used in all three languages to describe changes in share prices. The source domain of brightness in spirit as a human experience is used for rising share prices and a frightened or depressed state of mind is used for falling share prices:

"UPM-Kymmene piristyi aavistuksen" (TS, 11.04.2000)

**(UPM-Kymmene cheered up a bit)**

"Jotin tulosvaroituksesta säikähtänyt PMJ automec" (TS, 13.04.2000)

**(The earnings warning of Jot frightened PMJ automec)<sup>3</sup>**

"Glädjerus i teknik" (HBL, 07.04.2000) **(Intoxication of joy in technics)**

"hatten viele Beobachter mit einem freundlichen Handelstag gerechnet" (FAZ, 04.04.2000)

**(Many observers expected a friendly trading day)**

The metaphor GRAVITY is used in the German and Finnish texts to express downward movements in share prices as a consequence of the natural laws of gravity:

"Der deutsche Aktienindex Dax fiel rund 0,3 Prozent auf 7425 Punkte" (FAZ, 08.04.2000)

**(The DAX fell by 0,3 points to 7425 points)**

"sillä 205 euroa osoittanut päätöstasyöntasoa tiesi niukkaa puolentoista prosentin pudotusta" (TS, 06.04.2000)

**(because the final level of 205 euros meant a fall by one and a half per cent)**

In the Finland-Swedish texts GRAVITY is used as a weight indicator to refer to main industrial sectors represented on the stock market:

"teknologitunga Nasdaq" (Hbl, 12.04.2000)

**(the technology heavy Nasdaq)**

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<sup>3</sup> Both *Jot* and *PMJ automec* are names of companies.

"vår egen teknologitunga börs" (HBL, 05.04.2000)  
**(our own technology heavy stock exchange)**

VISUAL PERCEPTION refers to the stock market in general from the point of view of market commentators in the German texts, whereas it is used in the Finland-Swedish texts to depict distinguishable tendencies in share price changes:

"Marktbeobachter", "Auch Gewinnmitnahmen seien zu beobachten" (FAZ, 08.04.2000)  
**(market observers), (Even the taking along of wins were observable)**

"Bildern har ju det senaste dygnet inte precis blivit klarare" (HBL, 01.04.2000)  
**(The picture has not really been clearer/sharper the last 24 hours)**

In the Finnish texts FIGHTING conceptualises the source domain of martial activities to depict developments in single share prices or in share indexes as a whole:

"Yhdysvaltain teknologiaosakkeiden runsaan neljän prosentin rynnistys perjantaina" (TS, 11.04.2000)  
**(The American technology shares' more than four per cent attack on Friday)**

"Hex-yleisindeksi antautui ... 2,3 prosenttia ... 15711 pisteeseen" (TS, 05.04.2000)  
**(The HEX index surrendered ... by 2,3 points ... to 15711 points)**

MARITIME ENVIRONMENT/NAVIGATION is actualised in Finnish texts through the experience of diving in the water or through the ups and downs of wave movements or through the source domain of navigating ships at sea. The kind of use and frequency of the metaphor MARITIME ENVIRONMENT/NAVIGATION shows a congruency between the German (8 actualisations) and the Finland-Swedish (5 actualisations) texts in contrast to the frequency in the Finnish texts (21 actualisations; cf. fig.1). In the German texts this metaphor is almost exclusively conceptualised by the source domain of diving activity for the target domain of movements in share prices:

"seitsemän prosentin sukellus" (TS, 14.04.2000)  
**(a dive of seven per cent)**

"Varallisuutta sirettiin teknologiayhtiöistä turvallisimmille vesille" (TS, 04.04.2000)  
**(Wealth was moved from technology companies to safer waters)**

"Die Aktien von SAP dagegen sanken 6,59 Prozent auf 695 Euro" (FAZ, 11.04.2000)  
**(The shares of SAP sank by 6,59 per cent to 695 euros)**

The metaphor STAGE PLAY, MUSICAL PERFORMANCE refers in the German texts both to IPOs (initial public offers) as performing actors and to investors' activities:

"Ihr Börsendebüt am Neuen Markt gaben heute die Aktien der November AG" (FAZ, 11.04.2000)  
**(The stock exchange début at the New Market was today made by the shares of November AG)**

"Andere Akteure auf dem Frankfurter Parkett" (FAZ, 01.04.2000)  
**(Other actors on the Frankfurt stalls)**

Whereas the German texts tend to actualise the metaphor STAGE PLAY, the Finland-Swedish texts actualise both STAGE PLAY and MUSICAL PERFORMANCE. Because of the closeness of the source domains both metaphors are grouped here as one. In the Finnish texts STAGE PLAY refers only to IPOs:

"vid 14-tiden blev det lite piggare takter igen" (HBL, 01.04.2000)  
**(at 14 hours the tempo increased again)**

"Börsdebuten för Saunalahtis del" (HBL, 11.04.2000)  
**(Saunalahti's début at the stock exchange)**

"Saunalahden debyyttikään" (TS, 11.04.2000)  
**(even the début of Saunalahti)**

The metaphor PHYSICAL STRENGTH is used to describe changes in share prices in all three languages, where the source domain of strength conceptualises the pace of (mostly) rising share prices:

"när vändningen uppåt väl kom blev det också med ordentlig kraft" (HBL, 07.04.2000)  
**(when the upward movement came, it was done with real strength)**

PHYSICAL GROWTH is not used to express changes in share prices but conceptualises certain kinds of shares as a group classifier both in Finnish and in German. In both cases the target domain of the metaphor is the sector of information technology:

"Wachstumsbörse Nasdaq" (FAZ, 07.04.2000)  
**(the growth bourse Nasdaq)**

"Kasvuosakkeista pyrittiin luopumaan Helsingissäkin" (TS, 06.04.2000)  
**(It was tried to get rid of growth shares in Helsinki as well)**

The metaphor PENDULUM is only used in the German texts and conceptualises the changes in share prices:

"Händler rechneten auch für die kommenden Tage mit volatilem Handel und größeren Ausschlägen nach beiden Seiten" (FAZ, 07.04.2000)  
**(Also concerning coming days traders reckoned with a volatile trade and bigger amplitudes towards both sides)**

The metaphor PATIENT conceptualises the source domain of being hurt, becoming contaminated or recovering from illness for the target domain of changes either in single share prices or in over-all market indexes. In the first of the two examples shown it is used in combination with the metaphor STATE OF MIND:

"alavire tarttui myös kännykkäjättiin" (TS, 04.04.2000)  
**(the melancholy (STATE OF MIND) was also contagious for the mobile phone giants (PATIENT))**

"Men som så många gånger förr inleddes ändå återhämtningen kvällen innan i USA" (07.04.2000)  
**(But as so many times before the recovery started the night before in the USA)**

THERMAL STATE conceptualises the differences between warmth and cold both for tendencies in share indexes and for buying or selling activities in all three languages:

"Nasdaqin avautuminen selvästi pakkasella" (TS, 11.04.2000)  
**(the opening of Nasdaq clearly in the cold)**

"eldade köparna på mer och mer ju längre dagen led" (HBL, 07.04.2000)  
**(buyers piled more and more fuel on the fire the longer the day lasted)**

"Dann wurden die Optimisten kalt erwischt" (FAZ, 04.04.2000)  
**(Then the optimists were caught in a cold way)**

Also the metaphor MOUNTAINS is used in all three languages to conceptualise rising or falling share prices (cf. fig. 1), although it shows a clearly higher frequency in the Finnish texts:

"Nasdaq-indeksi jatkoi ... alamäkeään" (TS, 15.04.2000)  
**(The Nasdaq index continued ... its downhill movement)**

"Es ging nur noch bergab" (FAZ, 04.04.2000)  
**(There was only downhill movement)**

The metaphor BRIGHTNESS/DARKNESS is used only in the Finnish and Finland-Swedish texts. In the Swedish texts it exclusively conceptualises general tendencies in share indexes, whereas it is used in the Finnish texts both to conceptualise price developments of single shares as well as indexes:

"Makrosituationen är däremot för stunden mycket ljus" (HBL, 13.04.2000)

**(The overall situation is on the contrary for the moment very bright)**

"Nasdaq-indeksi koki historiansa synkimmän päivän" (TS, 05.04.2000)

**(The Nasdaq index experienced the darkest day of its history)**

The metaphor WEATHER is only used in the Finland-Swedish texts and conceptualises the source domain of windy or stormy weather for sinking share prices. The metaphor STEET-TRAFFIC is used in the Finnish and Finland-Swedish texts for changes in indexes. In addition to the above mentioned metaphors the Finnish texts use some additional metaphors that are not used in the other languages, although they are not central metaphors for the Finnish texts, as their frequency rate - with the exception of PHYSIOGNOMY - is very low (cf. fig. 1 above). PHYSIOGNOMY conceptualises the source domain of parts of the human body for the target domain of different stock indexes ("Päälistan" TS, 14.04.2000, **'Head list'**). The metaphor PHYSICAL STRAIN conceptualises the source domain of hard physical work, DISTANCE the notion of space, AGGRESSIVE BEHAVIOR the source domain of unfriendly physical interaction ("osake poljettiin", TS, 14.04.2000, **'the share was kicked'**). NEED FOR FOOD conceptualises the brokers' interest in buying shares and FIRE emotional attitudes towards rising share prices. The metaphor FLIGHT PERFORMANCE conceptualises in the Finnish example a birds' physical use of wings to express rapid changes in share prices. In the Finnish example below this metaphor is used together with the metaphor PHYSICAL STRENGTH:

"Nordic Baltic Holdingin vahva kysyntä jatkui tiistaisen osavuotistuloksen siivittämänä" (TS, 13.04.2000)

**(The quarterly report from Tuesday lended wings to a continuing strong demand for NBH)**

The descriptons and examples above show the way in which the metaphors are used in the three languages. To some extent the source domains vary from language to language for the same metaphor. When there are no different kinds of source domains between the languages examined there still is a very clear difference both in the frequency of the metaphors used as well as in the range of different metaphors in each language (cf. fig. 1). The German corpus has the smallest number of different metaphors, whereas the Finnish corpus shows the largest number of different metaphors. Figure 1 summarises the kind and amount of metaphors used in the corpuses.

These congruencies and differences in the use of metaphors necessitates further investigations into the differences and similarities in culturally relevant language concepts. The question of the relationship between culturally bound and universal constructs underlying the different uses of metaphors can be answered by reconsidering the epistemological ground that the cognitive theory of metaphor is based on. The theory states that there are basic ontologic ways of experiencing the world that are the same for all cultures because physical laws such as gravity or the physiological constitution of the human body with its consequences for e.g. spatial movements. We

learn these physical laws automatically from childhood on. We know, for example, that if we pour a liquid into a glass, the change in quantity of the liquid in the glass is parallel to the change of the liquid's surface level. That leads us to the basic metaphorical knowledge that MORE IS UP. This means that more quantity in a container leads automatically to a rise in the surface level and not vice versa, regardless of the cultural or linguistic context.

This kind of vertical orientation in space is an example of the basic or universal concepts that underlie our use of metaphors. In the development of the cognitive theory of metaphors these kinds of basic concepts have become known as *image schemata*.<sup>4</sup> Proceeding on this assumption of universally relevant schemata we can construct the *kind of linkages* that come into play when developing further culture bound constructs based on universally relevant image schemata.

To make the results as valid as possible, I have also focused on a comparison of the concepts used on the same day in all three of the newspapers examined: the reports of 7 of April. Concerning the concrete use of conceptual source domains, all three languages use a different set of concepts for each activated image schema when describing the same events (cf. fig. 2).

The results show that a limited number of universally relevant image schemas activate a varying set of metaphorical concepts in each language. But even on the level of image schemas we have a varying degree of concept activation (cf. fig. 2). We can conclude from these results that image schemas are of both universal and culture bound relevance. In the German text, for example, VERTICALITY is the major factor for the use of spacial concepts, whereas HORIZONTALITY is used as a dominant spatial concept in the Finnish text, and so on. The only solely universal level with the same relevance of physical or ontological experience in different cultures is the preconceptual level. Due to universal physical laws of existence and of movement in space (for example the laws of gravity and principles of movements of the human body) this level is of the same importance in all cultures. But it must be pointed out that we are dealing with a preconceptual level in this case. It is only through the gradual conceptual specification of image schemas and the metaphors derived from image schemas that verbal communication is enabled. Thus the preconceptual level as such does not yet enable verbal interaction (cf. fig. 2). Some examples may clarify the projection from the universal conceptual level to image schemas and from there to culture bound metaphorical mappings:

FAZ: "Der Neue Markt, das Börsensegment für wachstumsstarke Unternehmen, verzeichnete extrem hohe Gewinne"

**(The New Market, the bourse segment for strongly growing companies, booked extremely high wins)** (SPATIAL ORIENTATION ---> VERTICALITY ---> PHYSICAL GROWTH and SPORT/GAME)

TS: "..., markkinoilla arveltiin yleisesti aallonpohjan jääneen taakse"

**(at the markets the bottom of the wave was generally believed to have been left behind)** (SPATIAL ORIENTATION ---> HORIZONTALITY ---> MARITIME ENVIRONMENT: NAVIGATION)

HBL: "På marknaden kom säljarna fram"

**(The sellers came forth at the markets)** (SPATIAL ORIENTATION ---> HORIZONTALITY --> PHYSICAL MOVEMENT)

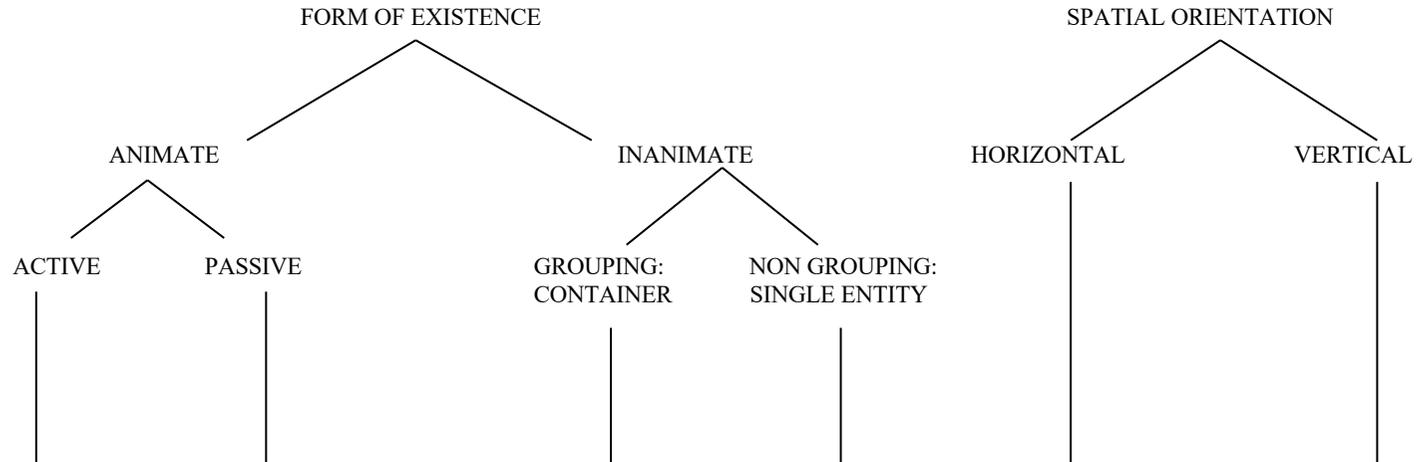
<sup>4</sup> Cf. Schmidt 2000, Hundt 1995, and Johnson 1987.

**GRAPHIC SURVEY OF THE COGNITIVE MODELS USED IN FAZ, TS, AND HBL ON 7 APRIL 2000**

PRECONCEPTUAL LEVEL  
OF ONTOLOGICAL EXPERIENCE

LEVEL OF IMAGE SCHEMATA/  
BASIC CONCEPTS

LEVEL OF SOURCE DOMAINS  
FOR METAPHORICAL  
MAPPINGS IN:



	ACTIVE	PASSIVE	GROUPING: CONTAINER	NON GROUPING: SINGLE ENTITY	HORIZONTAL	VERTICAL
<b>FAZ</b>	SPORT/GAME FLIGHT PERF. FIGHTING PHYS. GROWTH PHYS. MOVEMENT	SPORT/GAME VISUAL PERC.	M: VECT. PRESS. PHYS. MOVEM.	SOLID/FLUID SUBST. BUILDING	X	PHYS. GROWTH SOLID SUBST. SPORT/GAME
<b>TS</b>	FIGHTING THERMAL STATE	ME: NAVIGATION PHYS. STRENGTH STATE OF MIND PATIENT BRIGHTN./DARKN.	X	M: MACHINERY BRIGHTN./ DARKN.	PHYS. GROWTH ME: NAVIGATION	MOUNTAINS
<b>HBL</b>	SPORT/GAME THERMAL STATE PHYS. MOVEMENT	PATIENT PHYS. STRENGTH BRIGHTN./DARKN.	STATE OF MIND	X	PHYS. MOVEMENT	PHYS. STRENGTH PHYS. MOVEMENT

(Fig.2)

ME = MARITIME ENVIRONMENT, M = MECHANICS

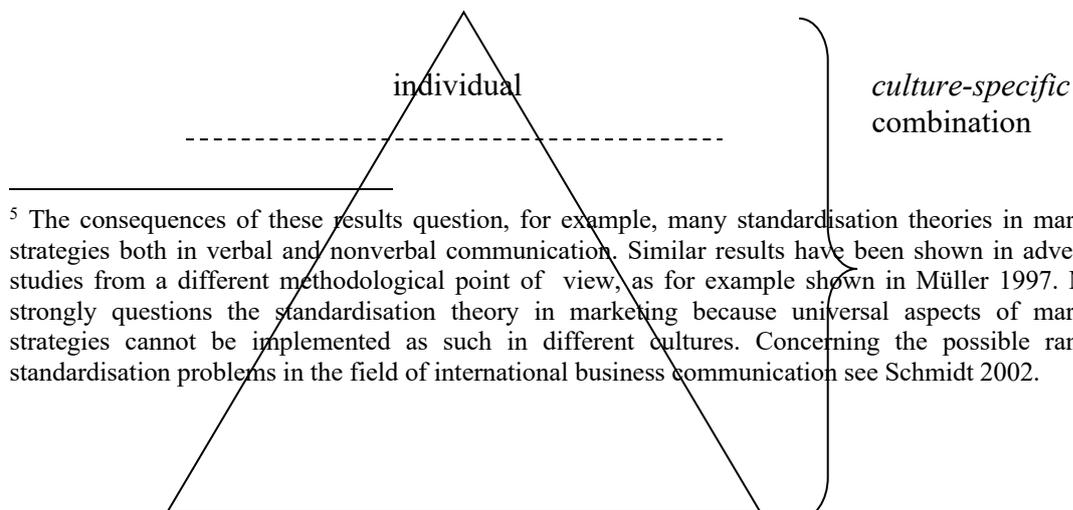


If we look at the level of metaphorical mappings in figure 2, we find a different set of activated metaphors in each of the three languages. However, the single metaphors used at this level in fig. 2 are not unique to a given language or culture. For example the metaphor SPORT/GAME is used in the German and the Finland-Swedish text. The metaphor FIGHTING is used in the German and Finnish text, and so on. The examples from fig. 1 above showed that certain metaphors are even used in all three languages, some using the same source domain in the metaphorical projection, others, different ones. Additionally, the frequency of a metaphor (metaphor dominance) - marking culturally relevant key metaphors - may vary considerably between the languages examined.

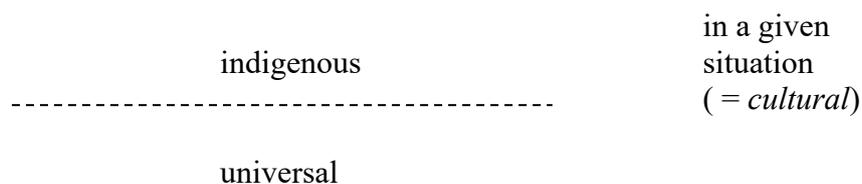
Whereas the preconceptual level (see fig. 2) marks a universal level, the level of image schemas is influenced by cultural determination, although still holding a limited number of culturally variable image schemas. The cultural variation is at its highest on the level of source domains chosen for the metaphorical mappings. But as the metaphors can be used in different languages they cannot be classified as culture specific. However, they do not either function as universal constructs, as the sets of metaphors differ in each language.

It is, therefore, necessary to introduce a new theoretical concept to clarify the relationship between universal and culture specific aspects of intercultural communication. I use the term *indigenous* for the communicative phenomena – as for example metaphorical mappings – in a given language in a culture bound way (on the horizontal scale in fig.2). This term marks cultural relevance but – in contrast to the term *culture specific* – it does *not make the claim of describing something culturally unique*. The term *culture specific* is used to grasp the kind of conceptual linkage that exists in a given language from the preconceptual (universal) level to the level of source domains in indigenous metaphorical mappings (on the vertical scale of fig. 2). The relationship between the universal preconceptual level, the partly universal/partly indigenous level of image schemas and the indigenous level of metaphors is a relationship of *gradual* conceptual influence and therefore of gradual change between universal and indigenous constructs. This insight, as well as the above described interrelations between specific combinations of the partly universal level of image schemas with certain culture bound actualisations of metaphors, renders the widely held dichotomous distinction between universal and culture specific aspects in intercultural communication obsolete. According to the results in this study, universal constructs do not play an essential role in intercultural communication. This may affect many intercultural or cross-cultural communication strategies, for example, in the field of business communication.<sup>5</sup>

### COMPONENTS OF INTERCULTURAL COMMUNICATION



<sup>5</sup> The consequences of these results question, for example, many standardisation theories in marketing strategies both in verbal and nonverbal communication. Similar results have been shown in advertising studies from a different methodological point of view, as for example shown in Müller 1997. Müller strongly questions the standardisation theory in marketing because universal aspects of marketing strategies cannot be implemented as such in different cultures. Concerning the possible range of standardisation problems in the field of international business communication see Schmidt 2002.



(Fig. 3)

This insight leads us to a reorientation in Geert Hofstede's (2001/1980) triadic model, where the cultural dimension can now be understood as a given culture specific *combination* of the individual, indigenous, and the universal level (cf. fig. 3); all three of them together marking a given culture's impact in a given situation. This is why each culturally relevant *kind* of relation between, for example, universal and indigenous constructs marks a single *culture-specific phenomenon as a whole* and forms what we now could label the cultural dimension in verbal and non-verbal interaction. The individual level is not discussed in this paper but seen as a principal part of every specific process of enculturation. From a holistic point of view it cannot be regarded independantly from cultural issues.

### Theory consequences

This study leads us to the following conclusions concerning the interrelationship of universal and indigenous constructs: if we are to seek a way of communicating over language and culture borders, we must concentrate on the kind of indigenous concepts that arise from our universal basis. By making the universal level explicit and by reconstructing the relevant indigenous concepts used in a foreign language, we can attain what I term *conceptual competence* in a foreign language. As the previous examples show, conceptual competence can be understood as the capability of using culturally adequate source domains to describe target domains in a given communication situation. The metaphorological insight is that metaphors in the cognitive sense are far more relevant for every day as well as specialised communication than traditional theories of metaphor have claimed.<sup>6</sup>

As a consequence of the basic role cognitive metaphors play in communication, the acquisition of conceptual competence could be initiated in foreign language teaching at the school level, which traditionally concentrates on grammatical and terminological competence. Methodologically this could be achieved by demonstrating the gradual change between universal and indigenous constructs. This would underline the importance of intercultural studies for foreign language teachers, which in a very functional way could combine language and culture knowledge. The need for systematic training in culturally relevant conceptual competence becomes even more obvious in foreign language teaching at the university level and especially in job-related specialized areas. The latter aspect has become especially important because of the demand for integrating culturally relevant knowledge in foreign language teaching programs for so-called expatriates in multinational corporations. There is no doubt nowadays about the central role of language teaching in programs aimed at preparing

<sup>6</sup> Therefore the relevance of conceptual competence cannot be excluded from LSP communication (languages for special purposes). It also means that new relevant knowledge can be obtained in such fields as business communication where the intercultural stance has definitely come to stay both in internal and external corporate and business communication.

business managers for expatriate periods as a part of their career. It has become clear, however, that a so-called 'traditional' language course can not satisfy the demands of linguistic and cultural mobility that comes with expatriation or shorter assignments abroad. Until now, however, there has been no concrete model describing how to actually combine in a holistic way the linguistic factor with the cultural one.

In my opinion, the principle of conceptual competence is a relevant answer to this need. The actual bridge between linguistic and cultural competence is hereby built with the help of the cognitive theory of metaphor. Conceptual competence would mark a central aspect of foreign language teaching in addition to grammatical and terminological competence. Intercultural aspects of foreign language situations are much more than a complement of traditional language teaching, be it at the school, university, or post-graduate level.

The study shows that it is not enough to assume a universal conceptual understanding in specialized communication. This weakens the universalist theory in business communication which assumes a unifying "engineering" language that transcends borders, and which proposes that we can solve everyday communication problems in the world of business by using a so-called fact-rooted mode of communication. Most problems in joint-ventures across borders do not so much show up in outlining and identifying the states of affairs themselves, but rather in the way we deal with the problems. Therefore, intercultural communication can be of relevance as a *conceptual* approach on a linguistic level for problem solving strategies. Even when we talk about a highly specialized subject-matter which demands specialized knowledge, we do this by using the cognitive concepts based on our own linguistic enculturation.

## Conclusions

The article has shown in which way the relationship between indigenous and universal constructs can be examined as part of the verbal aspect of communication. On the basis of the cognitive metaphorology inaugurated by G. Lakoff and M. Johnson it is argued that we can examine cultural aspects of communication through the use of language. This concept goes far beyond the intercultural relevance of any traditional linguistic theory as the cognitive theory of metaphor enables us to study the culturally relevant concepts behind the use of language. On the basis of stock exchange reports in the period of 1 to 15 April 2000 in German, Finnish, and Finland-Swedish newspapers I have outlined how the cognitive use of metaphors shows us in which way universal and indigenous constructs always comprise culture-specific uses of concepts. But it is nevertheless possible to separate indigenous and universal constructs which are used differently in all languages to express the same kinds of abstract issues. This has consequences for our method of teaching language both in general and in job-related areas of LSP, as *conceptual competence* becomes a major factor in our ability to communicate across borders.

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