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SOME THOUGHTS ON THE INFORMATION STRUCTURE OF TRAFFIC SIGNS

Lenka Stehlíková

INTRODUCTION

IN the last decades, we are witnessing the appearance of various theories of information structure of language. One of them is the theory of Functional Sentence Perspective (FSP). All of these theories deal with language, which is a system of signs that have to be ordered in a line (i.e. one-dimensionally) to convey information. However, there also other systems of signs, in which information is communicated using two dimensions, i.e. by planar (pictorial) signs (traffic signs, information symbols, hazard symbols, etc.). There have been attempts to analyse other systems than language, e.g. Chafe (1994) examined the information structure of a sonata by Mozart, but music is still a linear system. Nobody has probably attempted so far to analyse the information structure of a system where information is conveyed not linearly (in time) but really (in two-dimensional space). Therefore, one of such systems—traffic signs, which is a relatively small and relatively closed system—is the focus of the present paper.

The sample analysed in the paper represents part of the system of Czech traffic signs. The reason for choosing Czech traffic signs for the analysis is the fact that the descriptions (definitions) of the majority of these signs consist of a noun phrase developed by a subordinate clause. And a clause is more suitable for an FSP analysis than the noun phrase. The descriptions of British or American traffic signs mostly consist of a noun phrase only, and thus are less suitable for an FSP analysis. Moreover, they usually express less information than is conveyed by the sign itself. In the definitions of Czech signs, the full information is given by the developing clause.

The traffic signs for the analysis were retrieved from *Regulation No. 30/2001 of the Ministry of Transport and Communications of 10 January 2001* implementing road-traffic regulations and

road traffic control. Another resource important for the analysis was *the Vienna Convention on Road Signs and Signals*, which is an international treaty standardizing the signing system for road traffic internationally. It specifies precise colours, sizes and shapes for each class of signs as well as precise symbols, pictograms, and the orientations.

ANALYSIS

The analysis was carried out on the following four groups of Czech traffic signs:

a) Danger warning signs – 41
b) Priority signs – 8
c) Prohibitory or restrictive signs – 40
d) Mandatory signs – 34
Total – 123

The other groups of traffic signs (Informative signs, Road markings, etc.) were excluded from the analysis, partly because they have a different character than the above four groups (e.g. informative signs contain inscriptions and this paper aims to focus on the pictorial signs, road markings are in fact linear, etc.), and partly because the analysis of such a large and diverse material would exceed the scope of the present paper.

The aims of the analysis were the following. First, to find out how the information on the traffic signs is structured. Second, whether it is possible to identify in the traffic signs various degrees of communicative dynamism (informational importance). And third, whether there is any parallel between the information structure of language and that of traffic signs.

The four groups of signs were analysed in three steps:

1. FSP Analysis of the descriptions of traffic signs
2. Identification of the parameters used in the traffic signs to convey information
3. Identification of the parameters used for individual FSP functions

In the first step, the descriptions of traffic signs were analysed from the point of view of FSP functions (Theme, Transition, Rheme). The second step focused on the identification of parameters used in the signs to convey information (shapes, colours, orientations, etc.). And finally in the third step I tried to identify which parameters are used in the traffic signs to express the individual FSP functions of their descriptions.

FSP Analysis

The theoretical basis for the FSP analysis is the theory of functional sentence perspective and especially its comprehensive summary in Firbas (1992). According to the theory of FSP, the sentence is a field of communicative units where each unit contributes to the development of communication in a different way. Some units contribute less, i.e. they are less dynamic, other units contribute more, i.e. they are more dynamic. The extent to which a unit contributes to the development of communication is called *communicative dynamism* (CD) (Firbas 1992). The degree of CD is determined by the interplay of four factors: *linearity*, *semantics*, *context*, and in spoken language also *intonation*. In each sentence it is usually possible to distinguish 3 basic FSP functions: *Theme—Transition—Rheme*. **(**In a more detailed analysis, we can distinguish other functions: *Theme Proper—Diatheme—Transition Proper—Transition—Rheme—Rheme Proper*).

The definitions of the four groups of signs were analysed from the point of view of their **FSP functions.** In the majority of cases these definitions consist of a noun phrase which is developed by a clause. The analysis was carried out on the **clause** developing the noun phrase (1) because it contains the substantial information in the sentence form, which is suitable for an FSP analysis. The initial noun phrase in fact contains the same (but usually less) information but it is less suitable for an FSP analysis. The analysis was carried out on the Czech definitions, the English translations in brackets are only added for illustration. However, these are only translations of the Czech text made by the author of this article, they usually do not correspond to either the English or American definitions of traffic signs:

(1)
Zatáčka vpravo, která (Th) upozorňuje (Tr) na směrový oblouk (Rh),
(Turn to the right, which (Th) gives warning (Tr) of a bend (Rh),)

In a few cases, e.g. in (2), the definition contains only the noun phrase which is not developed by a clause. In these cases only the noun phrase was analysed:

(2)
Zákaz (Tr_n) otáčení (Rh) 0 article (Th)
(Prohibition (Tr_n) of U-turns (Rh) 0 article (Th))

In some cases the definitions are very long and contain several clauses. In these cases it was only the first clause (usually ended by a semi-colon) that was analysed because this first clause contains the substantial information represented also on the traffic sign. The rest of the definition mostly gives only supplementary information which is not represented in the traffic sign itself anyway.

(3)
Nejnižší dovolená rychlost, která (Th_1) přikazuje (Tr) řidiči (Th_2) jet nejméně rychlostí v kilometrech za hodinu vyjádřenou číslem na značce (Rh); to neplatí, pokud by takovou rychlost vylučovaly provozní podmínky, například intenzita provozu, překážka provozu, nebo pokud by taková rychlost ohrožovala bezpečnost provozu na pozemních komunikacích, například za mlhy nebo jiných nepříznivých povětrnostních podmínek; značka ukončuje platnost předcházející značky č. C 6a s jiným údajem na značce,
(The lowest permissible speed, which (Th_1) instructs (Tr) the driver (Th_2) to travel at not less than the speed in km per hour expressed by the figure on the sign (Rh); this does not apply if such speed is prevented by traffic conditions, e.g. intensity of

traffic, traffic obstacle, or if such speed would be a hazard to road safety, e.g. in fog or other adverse weather conditions; this sign terminates the validity of the preceding sign No. C 6a with another inscription on the sign,)

Identification of the Parameters Used in the Traffic Signs to Convey Information

The second step of the analysis was the identification of the means (parameters) by which the information in the pictorial traffic signs is expressed. The identification was based on the pictures of the traffic signs and on the Vienna Convention on Road Signs and Signals. The analysis resulted in the identification of following parameters: *Colour, Shape, Contrast, Planar-dimensional orientation, Linear-dimensional orientation, Inscription of words, Number, Location and Size*. The overview of these parameters is shown in Table 1. In the first column, there are names of the parameters, the second column gives the place (or one of the places) in the text of *Vienna Convention* where the particular parameter is mentioned, in the third column there is a list of all the types of the particular parameter, and the fourth column gives the number of types of the particular parameter. Below, the individual parameters are discussed in more detail.

Colour: In the sample analysed, eight colours were identified. Five of them are frequent: *black, white, red, blue* and *yellow*. The other three, *grey, green* and *orange,* only appear in a small number of signs.

Shape: The number of shapes identified in the sample is 66. Five of these are basic shapes: *triangle, circle, rectangle, square* and *octagon,* and the remaining 61 are more complex, e.g. *arrow, car, bike*, etc.

Contrast: As regards contrast, only the contrast of colours was considered in this analysis, and the resulting number of colour contrasts was ten, e.g. *red/white*, *black/white*, *red/amber/green*, *yellow/white*, etc. It would certainly be possible to consider also contrasts of other parameters, e.g. contrast of shapes, contrast of orientations, contrast of sizes, but for the sake of simplicity, these other types of contrast were omitted. It should also be noted that for the sake of simplicity, only contrast within one FSP function (either Th, or Tr, or Rh) was con-

sidered, not contrast between more FSP functions (e.g. between Tr and Rh).

Planar-dimensional orientation: There are three types of planar-dimensional orientation of both basic shapes of the signs and the symbols on them. If we take one of the orientations of any shape as basic, then only two other types of orientation can be found in the sample, namely a rotation by 45° and 180°, which is illustrated by an example:

Basic orientation: 

Rotation by 180° 

Rotation by 45° 

Linear-dimensional orientation: This type of orientation means in fact the direction(s) indicated on the traffic sign. In the sample examined, 13 possible orientations were identified, e.g. *to the right, to the left, to the right or left, straight and to the right, up and down*, etc.

Inscription of words: Although the main focus of this analysis was pictorial signs, a certain number of these signs contain inscriptions which have to be taken into consideration as well. The total number of inscription types is eight, e.g. *12%, 6 t, 2,5 m., 80* (speed), *STOP, CLO/ZOLL, SMOG*, etc.

Number: Number is a parameter which also plays a role in the traffic signs, e.g. a number of colours, shapes, contrasts, orientations, inscriptions, etc., because two similar signs can have a different meaning if they have a different number of symbols or directions. The maximum number of any parameter identified in the sample was five (five stripes on the sign called "End of maximum permissible speed").

All the above mentioned parameters have one thing in common; they all distinguish meaning if they appear in the same contexts. However, the parameters described bellow have a different character, they do not distinguish meaning in the

same contexts, but, as will be shown bellow, their function seems to be different.

Location and size are parameters in which it is advantageous to distinguish their absolute and relative aspect. **Absolute location** means the location of a shape (corresponding to one FSP function) on the traffic sign, i.e. *in the centre, at the top, at the bottom, in the corner, on the right*, etc. In the sample analysed, thirteen types of absolute location were identified. **Relative location**, on the other hand, means the location of a shape (corresponding to one FSP function) in relation to another shape (corresponding to another FSP function). Possible relative locations are e.g.: *around Rh, inside Tr, under Tr, above Rh*, etc. The total number of types of relative location identified in the sample is nine. The **absolute size**, i.e. the real size of a traffic sign or a symbol on it is standardized by *Regulation 30/2001 of the Ministry of Transport and Communications* and must not be changed. (In fact there are four size variants possible but these are intended for different types of roads, e.g. large signs for high-speed roads, etc., but the meaning of the signs remains the same.) Each sign has to be made to the prescribed size because if it was too small or too large, it would not be binding for road users. **Relative size** means the size of a shape (corresponding to one FSP function) in relation to another size (corresponding to another FSP function). The number of relative sizes identified in the analysis was seven, e.g. a shape can be *larger than Rh*, *smaller than Tr*, another shape can have *1 dimension equal to Tr and 1 dimension larger than Tr,* etc.

All the parameters mentioned above are parameters identified in this specific sample of traffic signs. If the analysis was carried out on another system of pictorial signs, it would certainly be possible to identify other parameters as well, e.g. intensity of colour, transition from one colour to another, fading away of colours, etc.

Identification of the Parameters Used for Expressing Information Conveyed by Individual FSP Functions

In the third and most important step of the analysis, all the definitions were analysed again and this time I tried to find out which parameters specified in the traffic signs correspond to the information contained in the individual FSP functions determined in the descriptions of the signs (i.e. *Theme, Transition, Rheme*). In other words, how the linearly ordered information contained in the sentence (i.e. in the definition of the sign) is reflected in the planar information of the sign. Let me start the identification from the most prominent FSP function, i.e. from the Rheme.

IDENTIFICATION OF RHEMES

The Rhemes identified in the definitions of the traffic signs are FSP functions that are the easiest to identify in the pictures of signs. In the majority of definitions analysed (112), the Rheme corresponds to the symbol or inscription in the centre of the respective sign. In the remaining eleven signs it is not possible to clearly distinguish neither the Rheme, nor the other FSP functions. In Tables 1 to 4 below giving examples of an analysis of each of the four groups of signs, the Rhemes and the parameters representing them can be found in the last column.

IDENTIFICATION OF TRANSITIONS

Transitions are not identified as easily in the pictures of traffic signs as the Rhemes but in the majority of signs they seem to be quite clearly recognizable. Let me explain this on the example of danger warning signs. The Transitions in the definitions of all 41 danger warning signs are represented by the same words *gives warning*. Considering the fact that in *the Vienna Convention*, the danger warning signs are defined in the following way: "The 'A' DANGER WARNING signs shall be of model A^a or model A^b . . . Model A^a is an *equilateral triangle having one side horizontal and the opposite vertex above it; the ground is white or yellow and the border red*" (Vienna Convention on Road Signs and Signals," 31), it is possible to conclude that the words *gives warning* correspond to the triangle with the white ground

and red border. Therefore, it is possible, at least in the 36 signs which have the shape of a triangle, to regard the red and white triangle (the basic shape of the sign) for the Transition.

Similarly we can identify Transitions in the other three groups of sings. In the case of the prohibitory or restrictive signs the Transition is represented by the word *prohibits* in definitions that have the form of a clause, or by the word *prohibition* in definitions that have the form of a noun phrase. Let us again compare this with the definition in *the Vienna Convention*: "Prohibitory and restrictive signs shall be *circular* . . . prohibitory or restrictive signs shall have a *white or yellow ground or blue ground for signs prohibiting or restricting standing and parking with a wide red border*; (Vienna Convention on Road Signs and Signals," 38). Therefore, the Transitions represented in the definitions by *prohibits* or *prohibition* correspond to the circle with the white ground and red border, and this circle can thus be regarded as the transitional part of the sign (in 31 cases).

Also in mandatory signs it is possible to find a parallel between the Transitions in the definitions *instructs/instruct*) and the signs themselves on the basis of *the Vienna Convention*: "Mandatory signs shall be *circular* . . . the *signs shall be blue and the symbols shall be white or of a light colour*" (Vienna Convention on Road Signs and Signals," 43).

With the priority signs the situation is more complicated because there are only eight of them and they are varied in character. Four of them could be analysed in a similar way as the signs in the other groups because their shapes and colours correspond to the signs in one of the other three groups, in the remaining four it is not possible to distinguish individual FSP functions.

In conclusion it is possible to say that in 112 out of 123 traffic signs it is possible to clearly distinguish the transitional part of the traffic sign from it rhematic part. In tables 2 to 5 below with the examples of an analysis of the four groups of signs, the transitions and the parameters corresponding to them can be found in the third column. In the remaining 11 signs it is not possible to distinguish individual FSP functions that would correspond to the FSP functions in the definitions at all.

IDENTIFICATION OF THEMES

To identify the thematic part of a traffic sign is a little problematic. In the definitions of traffic signs the Theme is quite clear because in almost all the signs the definitions of which contain a clause, the Theme is represented by the word *which*, as e.g. in turn to the right, which (Th) gives warning (Tr) of a bend (Rh), but in the actual traffic sign it is not clear which part of it should be regarded as the Theme. *Which* in the definition either corresponds to the whole preceding noun phrase *Turn to the right,* and in this case the thematic part of the traffic sign would be the picture of traffic sign as a whole, which seems to be a little strange. Or, *which* corresponds to the expression *traffic sign*, which introduces the whole list of traffic signs given in *Regulation No. 30/2001*. In this case the thematic part of the traffic sign would not be the whole picture of the sign but also (only?) the post and the plate on which it is put.

Tables 2 to 5 show examples of the analysis of each of the four groups of traffic signs.

Analysis–Summary

The analysis has shown that the information in the traffic signs is structured and in the majority of signs it is possible to distinguish several (but usually two) parts which have a different shape, colour, orientation, inscription, etc. Each of these parts represents a "communicative unit" consisting of all or at least some of the parameters identified above (*colour, shape, contrast, orientation, inscription, number, location and size*). Each "communicative unit" identified in the traffic signs thus seems to be something like a "bundle" of colour(s), shape(s), contrast(s), orientation(s), etc.). In other words, the same (or similar) parameters seem to be repeated at different levels of communicative dynamism of the sign.

As regards the character of the parameters, they seem to be of two types. Parameters of one type (*colour, shape, contrast, orientation, inscription, number*) distinguish meaning in the same contexts. The other type of parameters (*location* and *size*) does not distinguish meaning in the same contexts but seems to have a different function. As has been mentioned above, it proved

advantageous to distinguish *absolute location* (Location_{abs}) and *relative location* (Location_{rel}) as well as *absolute size* (Size_{abs}) and *relative size* (Size_{rel}).

In my opinion, in the Transitional sphere of the sign, Location_{abs} and Size_{abs} have a function similar to Transition Proper because similarly to TrPr (represented by modal and temporal exponents of the verb), which anchors the sentence in the act of communication, Location_{abs} and Size_{abs} anchor the traffic sign in the traffic situation. Because if a traffic sign is supposed to function as a traffic sign, it must be situated in an appropriate place ("Vienna Convention on Road Signs and Signals"—side of road, at a certain height, etc.) and must have a certain size.

In the Rhematic sphere of the sign, in my opinion, Location_{abs} and Size_{abs} correspond to the Nominal Transition Proper because similarly to TrPr_{n}, (represented by Case and Number), Location_{abs} and Size_{abs} anchor the unit representing the Rh in the superordinate distributional field.

Location_{rel} and Size_{rel} (in both Transitional and Rhematic spheres of the sign) function, in my opinion, as a device linking the individual communicative units.

Charts 1 to 4 below indicate the representation of individual parameters in Transitions and Rhemes in the four groups of signs. As is apparent from the charts, parameters of *colour, shape, location* and *size* can be found in all the traffic signs, while the remaining ones, *contrast, orientations, inscription* and *number* only in some of them.

It has already been mentioned that in the majority of traffic signs (91.06%) it is possible to distinguish Tr and Rh. However, in several cases (8.94%) it is not possible. For example in the following two signs, (4) and (5), it is not possible to tell that the white stripe in the middle or the yellow square are Rhemes:

(4)
Zákaz vjezdu všech vozidel, která (Th) zakazuje (Tr) vjezd v protisměru do jednosměrné pozemní komunikace (Rh)
(Prohibition of entry for all vehicles, which (Th) prohibits (Tr) entry into a one-way road in the opposite direction (Rh))

(5)
Hlavní pozemní komunikace, která (Th) označuje (Tr) hlavní pozemní komunikaci (Rh)
(Priority road, which (Th) indicates (Tr) a priority road (Rh))

The reason for this is probably the fact that in the case of signs where it is possible to distinguish Tr and Rh, the different parts of the sign are of a different type as regards the Peirce's typology of signs (icon, index, symbol), e.g. (6):

(6)
Triangle (Tr) – symbol,
Engine (Rh) – icon

While in the signs where it is not possible to distinguish Tr and Rh, all parts are of the same type as regards the Peirce's typology of signs (7). Chart 5 below shows the proportion of signs with clearly distinguished Tr and Rh:

(7)
Circle – symbol,
Stripes – symbol

Another interesting point revealed by the analysis is the fact that in most cases (79.46%), the basis of the traffic sign corresponds to Tr while the symbol in the centre corresponds to Rh (8).

(8)

However, in some cases (20.54%) the situation is different. E.g. in the following signs the stripe across the sign corresponds to Tr while the whole basis of the sign corresponds to Rh. (9) Chart 6 bellow indicates the proportion of signs with Tr as the main shape and Rh in the centre.

(9)

Konec nejvyšší dovolené rychlosti, která (Th) ukončuje (Tr) platnost značky č. B 20a (Rh),
(End of maximum permissible speed, which (Th) terminates (Tr) the validity of sign No. B 20a (Rh),)

Konec stezky pro cyklisty, která (Th) ukončuje (Tr) platnost značky č. C 8a,(Rh),
(End of cycle track, which (Th) terminates (Tr) the validity of sign No. C 8a,(Rh),)

CONCLUSION

The article focused on the analysis of four groups of the system of Czech traffic signs from the point of view of FSP. The first step was the analysis of FSP functions in the definitions of the traffic signs. The second step consisted in the identification of parameters used in the signs to convey information, and the third step examined by which parameters the individual FSP functions are expressed.

The analysis showed that all the traffic signs are structured, in all the signs it is possible to distinguish several (usually two) parts consisting of various parameters (shape, colour, orientation, inscription, number, location and size). Each of these parts forms something like a "communicative unit" which is a combination of all or some of these parameters. In the majority of signs (91.06%) it is possible to clearly distinguish two parts corresponding to two different FSP functions, Transition and Rheme, and this is apparently possible due to a different character of these parts as regards the Peirce's typology of signs (symbol, icon). In 8.94% of signs it is not possible to distinguish individual FSP functions, probably because their different parts

have the same character of sign – all are symbols. In most cases (79.46), the main shape of the sign corresponds to Tr and the symbol in the centre to the Rh, but in 20.54% of cases the configuration is different.

Table 1: Parameters Used in the Traffic Signs

Parameters	Vienna Conv.	List	No.
Colour	Art. 8, par. 1	White, Black, Red, Blue, Grey, Yellow, Green, Orange	**8**
Shape	Art. 8, par. 1	Basic: Triangle, Circle, Rectangle, Square, Octagon, Complex: 61 (arrow, car, bike, tram, …)	**66**
Contrast	Art. 8, par. 1	Red/white, black/white, red/amber/green, yellow/white, red/black, red/blue, orange/black, orange/black, blue/white, blue/black/white	**10**
Planar-dim. orientation	Anx 1, Sect. A, I., 1.	Basic, 45°, 180°	**3**
Linear-dim. orientation	Anx 1, Sect. A, II., 1. a, b	R, L, R or L, R + L, UP + DWN, UP, str + R, str + L, str or R, str or L, bottom R, bottom L, bottom R+L	**13**
Inscription of words	Art. 8, par. 1	12%, No. of t, No. of m., 80 (speed), STOP, CLO/ZOLL, SMOG, "Cyklisto, sesedni z kola"	**8**
Number	Anx 1, Sect. C, II., 1. d	No. of colours, shapes, contrasts, orientations, inscriptions: max. 5	**5**
Location: abs	Art. 6, par. 1, 2, 3, 4	On the supp., Centre, Across C, Top, Bottom, Corner, Margin, L, R, DL, DR, from BL to TR, from TL to BR	**13**
Location: rel.	N/A	Around Rh, inside Tr, under Tr, above Rh, inside other CF, on Rh, below Rh, around other CF, ar. + across Rh	**9**
Size: abs.	Art. 6, par. 4 (c)	Standardized	**N/A**
Size: rel.	N/A	>Rh, <Tr, 1d.=Tr + 1d.>Tr, 1d. = Tr + 1d.<Tr, <other CF, >other CF, 1d.=Rh + 1d.>Rh	**7**

Table 2: Danger Warning Signs

Turn to the right	which (Th)	gives warning (Tr)	of a bend (Rh)
			
Colour		Red, White	Black
Shape		Triangle, Border	Bent arrow
Contrast		Red/White	0
P.-d. orientation		1 s. dwn, 1 vertex upwards	0
L-d. orientation		0	Right
Inscription		0	0
Number		2 colours, 2 shapes	1 colour, 1 shape
Location - abs.		On the supp., border: marg.	Centre
Location - rel.		Around Rh	Inside Tr
Size - abs.		Standardized	Standardized
Size - rel.		Larger than Rh	Smaller than Tr

Table 3: Priority Signs

Priority for oncoming vehicles	**which (Th_1)**	**instructs (Tr)**	**the driver (Th_2)**	**to give priority to a vehicle coming from the opposite direction in case the oncoming vehicles cannot pass safely (Rh_2)**
				
Colour		Red, White		Red, Black
Shape		Circle, Border		Arrow
Contrast		Red/White		Red/Black
P.-d. orientation		0		0
L-d. orientation		0		Up, Down
Inscription		0		0
Number		2 colours, 2 shapes		2 colours, 1 shape 2x, 2 dir.
Location - abs.		On the supp., border: m.		Centre
Location - rel.		Around Rh		Inside Tr
Size - abs.		Standardized		Standardized
Size - rel.		Larger than Rh		Smaller than Tr

Table 4: Mandatory Signs

Lowest permissible speed	which (Th_1)	instructs (Tr)	the driver (Th_2)	to travel at a minimum speed in km/h specified by the figure on the sign (Rh)
				30
Colour		Blue		White
Shape		Circle		0
Contrast		0		0
P.-d. orientation		0		0
L-d. orientation		0		0
Inscription		0		30
Number		1 colour, 1 shape		1 colour, 1 inscription
Location - abs.		On the supp.		Centre
Location - rel.		Around Rh		Inside Tr
Size - abs.		Standardized		Standardized
Size - rel.		Larger than Rh		Smaller than Tr

Table 5: Prohibitory or Restrictive Signs

Prohibition of entry for indicated vehicles,	which (Th)	prohibits (Tr)	entry for vehi-cles of indicated types; (Rh)
			
Colour		Red, White	Black
Shape		Circle, Border	Lorry, Motor-bike, Bike
Contrast		Red/White	0
P.-d. orientation		0	0
L-d. orientation		0	0
Inscription		0	0
Number		2 colours, 2 shapes	1 colour, 3 shapes
Location - abs.		On the supp., border: marg.	Top, Down L, Down R
Location - rel.		Around Rh	Inside Tr
Size - abs.		Standardized	Standardized
Size - rel.		Larger than Rh	Smaller than Tr

Chart 1: Danger Warning Signs, Representation of Individual Parameters in Tr and Rh

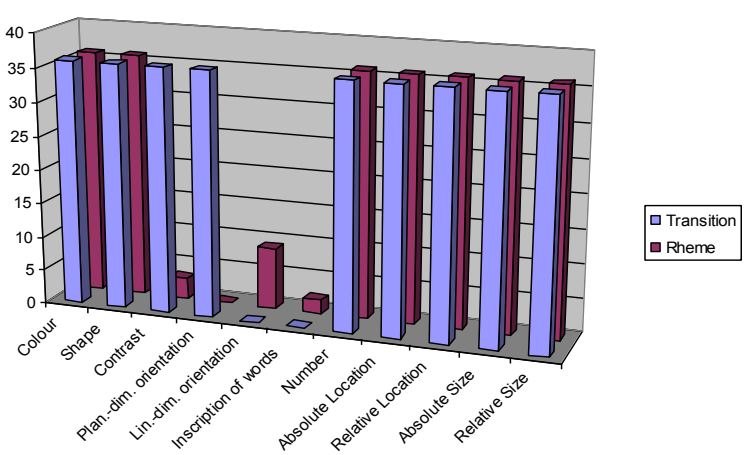


Chart 2: Priority Signs, Representation of Individual Parameters in Tr and Rh

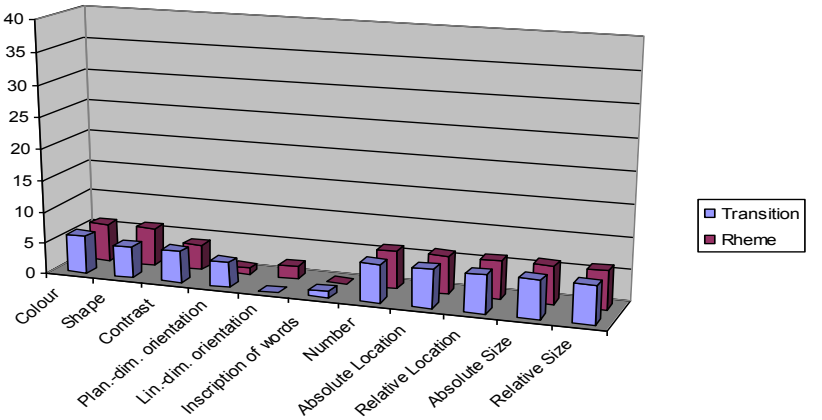


Chart 3: Mandatory Signs, Representations of Individual Parameters in Tr and Rh

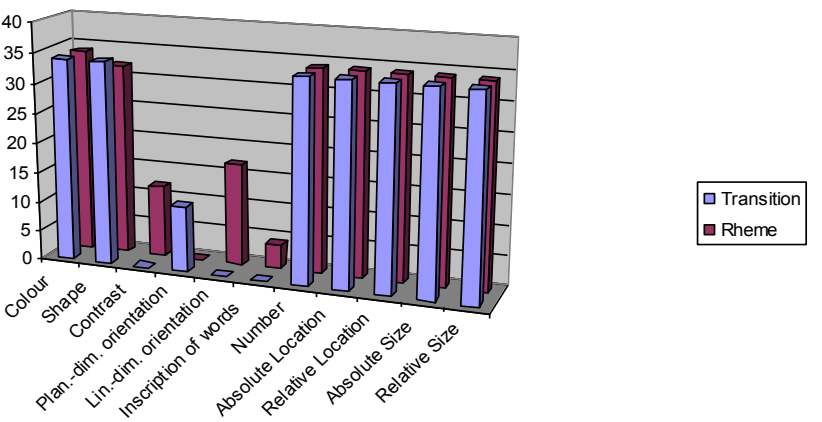


Chart 4: Proportion of Signs with Tr as the Main Shape and Rh in the Centre

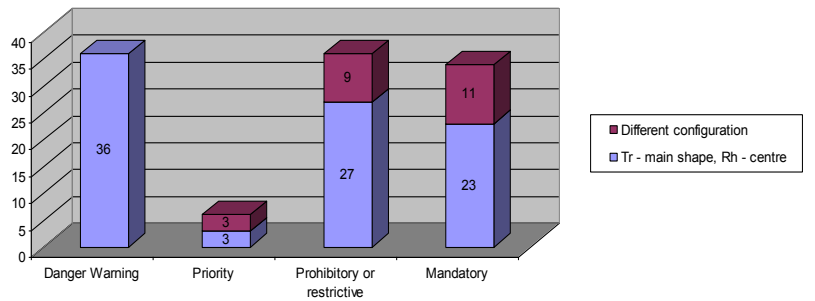


Chart 5: Prohibitory or Restrictive Signs, Representation of Individual Parameters in Trand Rh

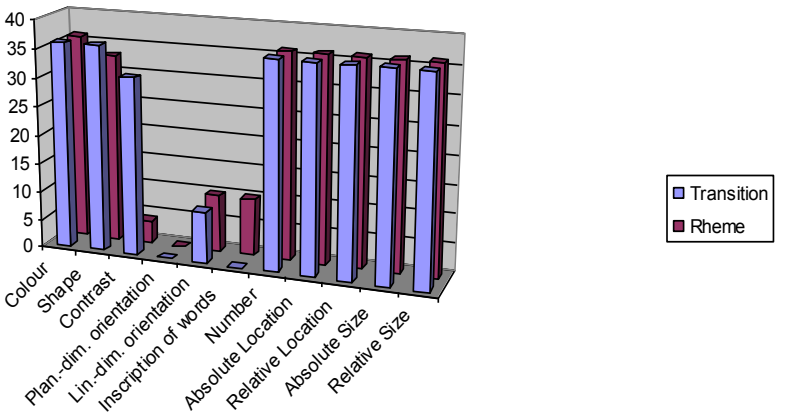
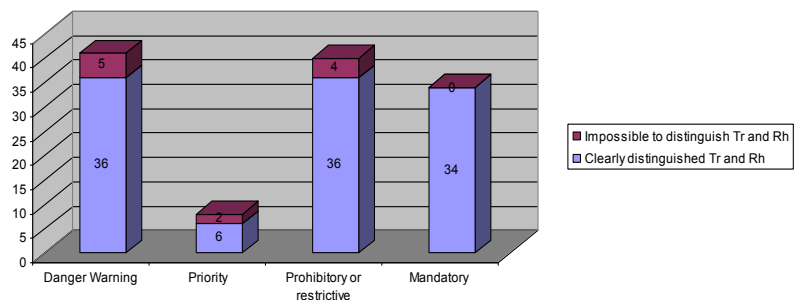


Chart 6: Proportion of Signs with Tr as the Main Shape and Rh in the Centre



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ABSTRACT

Functional sentence perspective is one of the theories studying the information structure of language - a system of signs which have to be ordered in a line (i.e. one-dimensionally) to convey information. But there are also other systems of signs, which convey information using two dimensions, they are two-dimensional or planar (traffic signs, information symbols, etc.). And one of these systems is the focus of the present paper, which aims to explore a possible parallel between the information structure of language and the information structure of two-dimensional signs. The paper is based on an analysis of part of the system of Czech traffic signs and their definitions from the point of view of FSP. It tries to find out whether it is possible to identify various degrees of communicative dynamism even in a system so different from language.

AUTHOR

Mgr. Lenka Stehlíková is enrolled in the English Linguistics doctoral programme at Masaryk University and is writing her dissertation under the supervision of Jana Chamonikolasová. Her main research interest focuses on the information structure of language, especially on the theory of Functional Sentence Perspective.