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EXPERIMENTAL RESEARCH ON THE COLOUR YELLOW MEANINGS IN BRITISH AND AMERICAN ROCK-DISCOURSE

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Abstract

This article offers the results of experimental research on the colour yellow in rock-discourses. The main aim of the research is to establish whether there is any correlation between the typical associations of English speakers from Asia, Europe and Russia and those typical of the British and American rock-discourse. At the pre-experimental stage, we determined those typical meanings by analysing the psychophysical, linguocultural, lexicographic interpretations of the studied colour, apart from that, the album covers (the iconic level of rock-discourse) were selected. A survey of 145 English speakers was conducted via Google Forms. The following data were obtained: in the first stage – respondents' free colour associations; in the second one – respondents' album cover associations; in the last one – respondents' fixed colour associations. As a result of the first stage, associative definitions (58,7%) were found to be more prevalent than metaphoric associations (41,3%). In the second one, respondents were able to identify all three components of the studied colour, more specifically "illness", "positivity" and "protest". The last one was identified by the majority only in the British album cover, while in the American one by the minority. In the third one, respondents chose all the given meanings of yellow to some extent. Prominently, each part of the world favoured a certain meaning more: Asia – "danger", Europe – "positivity", Russia – "positivity", "illness/morbidity".

Keywords: Colour, yellow, rock-discourse, British, American, covers.

1. Introduction

The article in question highlights the results of experimental research on the meanings of the colour yellow in the British and American linguocultures. More specifically, the study focuses on the meanings which are topical for the rock-discourse of these linguocultures.

Mainly, this research is based on a survey of 145 English speakers, which was conducted through Google Forms (see: Colour, 2019). All the respondents represent the following parts of the world geographically: Russia – 37%; Asia (e.g. China, Japan, Mongolia, Vietnam, and others) – 35%; Europe (e.g. France, Germany, Italy, Latvia, and others) – 28%.

Interestingly, the respondents equally reflect both linguistic (e.g. translation, linguistics, English teaching, and others) and non-linguistic (e.g. law, IT, design, engineering, and others) majors. Regardless of the major, the surveyed participants' proficiency is purported to be A2 (18%), B1 (17%), B2 (27%), C1 (25%), C2 (13%) in line with the CEFR.

The stages of the research are as follows:

1. Pre-experimental which includes collecting the material, namely album covers (the iconic level of rock-discourse), and study of the psychophysical, linguocultural, lexicographic interpretations of the colour yellow. It aims to inform the experimental stage;

2. Experimental which includes:

• free colour associations, i.e. the English-speaking respondents were asked to list the words they think of when they see the colour yellow – to establish the respondents' linguocultural associations in order to subsequently compare and contrast them with the ones in the studied linguocultures;

• album cover associations, i.e. respondents had to write the words they thought of when confronted with a pre-selected set of British and American rock album covers featuring yellow. The aim was threefold. First, to see how each respondent interpreted the colour yellow in each specific instance to note any patterns or similarities with the psychophysical, linguocultural, lexicographic data. Second, to determine whether and to what extent they could identify the linguocultural meanings on their own. Third, how much correlation there is between the responses and our pre-experimental stage interpretation;

• fixed colour associations – to obtain data as to how all the meanings of this colour identified at the pre-experimental stage correlated with the ones the respondents chose from a list so as to make conclusions about how prominent each meaning is in the studied linguocultures.

2. Problem Statement

First and foremost, there has always been a vivid interest in the colour interpretation, which differs tremendously from one culture to another, from discourse to discourse. Recent studies can be noted in the spheres of:

• *colour meaning, symbolism and associations*: yellow in social movements (Borodulina et al., 2019), abstract words and colour associations (Goodhew & Kidd, 2020), grapheme-colour association (Nagai et al., 2016), and others;

- *colour in discourses*: environmental discourse (Biros, 2014); discourse of children's clothing in the USSR in the 1950-1980s (Boitsova & Orekh, 2018), visual discourse (Sandywell, 2016), and others;

- *colour influences on* behaviour (Gil & Le Bigot, 2017), organization (Beyes, 2016), social media (Yu et al., 2020), law (Vaz et al., 2015), and others.

Thus, taking into account the worldwide range of linguocultures, we may conclude that there is a vast field for any future research.

Secondly, the colour yellow, being one of the primary colours in the studied linguocultures, constitutes quite a developed system of meanings: *danger, fear, cowardice, betrayal, heaven, positivity*, and others. Hence, it is only logical to assume that some of them are more or less relevant in terms of a particular discourse – rock-discourse. The answer to "which is which" is likely to facilitate a more profound insight into a linguoculture.

Finally, our previous research on the colour yellow meanings in the British and American rock-discourse (e.g. Dymova, 2019) has prompted the overall necessity to carry out the survey under consideration so as to find further proof of our previous findings.

3. Research Questions

The questions posed prior to this experiment were as follows:

- What typical yellow colour associations do English speakers have?

- How do these compare to the ones common in the British and American rock-discourse?

- Are English speakers able to distinguish the meaning of the studied colour in a particular context?

- How precisely are they able to identify it?

4. Purpose of the Study

The purpose of the study is to establish whether there is any correlation between the theoretical data on the colour yellow, namely the psychophysical, linguocultural and lexicographic data, and English speakers' interpretations of this colour in the context.

5. Research Methods

The following methods were employed in the study: cognitive metaphor analysis, component and definition analysis, survey, associative experiment and cognitive discourse analysis (CODA).

CODA is of particular importance, as this is a systematic way to examine the human mind by studying the language used to express people's thoughts (Tenbrink, 2020). It was used at all the stages of the study and allowed us to gauge how linguocultural data, as well as public opinion, are reflected in the consciousness of English speakers around the world.

Moreover, the associative experiment has played a fundamental role in this research. Researches based on this method are believed to be a great source of knowledge and a means of understanding various

anthropocentric notions (Borisova, 2019). It has been actively used at the experimental stage as a tool for studying verbal associations for yellow typical of a linguoculture.

6. Findings

The experimental research consists primarily of two fundamental stages: *pre-experimental* (tested material selection and personal interpretation of the colour application based on psychophysical, linguocultural and lexicographic data) and *experimental* (the survey itself). Thus, the foundation of the latter rests entirely within the achievements of the former stage.

In its turn, the *experimental* stage largely consists of three parts.

I. In the first – *Free colour associations* – the respondents were to produce their own associations with the colour yellow in English. The aim of this step amounts to juxtaposing the meanings of the colour yellow extracted by us at the pre-experimental stage (see Table 1) from the psychophysical, linguocultural and lexicographic data of the British and American linguocultures with the meanings given by the English-speaking respondents.

Table 01. The Colour Yellow Meanings at the Pre-experimental Stage

Meaning	Source
psychophysical	
positivity	improving the mood, boosting the self-esteem
fear/insecurity	feeling frightened and insecure
linguocultural	
danger	sign "Danger", danger/hazard tape
betrayal	Judas' clothing colour in Christianity
liberalism	Liberal Democrats (UK), Libertarian Party (US)
sorrow	a yellow ribbon
divinity/heaven	Delivery of the Keys
lexicographic	
different nationality	"yellow skin"
danger	"yellow card", "yellow alert", and others
cowardice	"yellow streak", "yellow-bellied", and others
unreliability	"yellow journalism"
illness	"yellow fever", "yellow skin", and others
old age	"to yellow"

From Table 01, it can be understood that the analysis of the psychophysical, linguocultural and lexicographic data of the British and American linguocultures yielded a wide range of meanings of the colour yellow. Some of them are introduced by more than one data source (e.g. danger).

Furthermore, it is worth noting that the lexicographic data provides some associative definitions for yellow such as "ripe lemons", "egg yolk", "the sun', "sunflowers". This idea is of particular interest to us since all the responses given in the first part of the experimental stage can be grouped into *associative definitions* and *metaphoric associations* (see Table 02).

Table 02. The Colour Yellow Meanings at the Experimental Stage

Associative definitions		Metaphoric associations	
"the sun"/"(sun)light"	27%	emotions ("happiness", "positivity", "fun", "negativity", and others)	20%
food ("banana", "lemon", "honey", and others)	22%	"warmth"	5%
wildlife ("giraffe", "bee", "duck")	5%	seasons ("summer", "autumn")	4,3%
vegetation ("chamomile", "sunflowers", "tulip")	2%	"energy"/"life"	3%
"submarine"	1%	"attention"/"warning"	3%
"traffic signal"	1%	"divinity"	3%
"cab"	0,7%	"ripe"	3%
58,7%		41,3%	

As is seen from Table 02, the associative definitions, which define yellow by means of a real object of this colour, are more prevalent (58,7% of all answers) among the respondents. Importantly, we observe that all the most common associative definitions (e.g. "the sun", "lemon", "sunflowers", and others) are the ones that have previously been singled out at the pre-experimental stage. As for the metaphoric associations, about half of the responses coincide with the ones derived at the pre-experimental stage. "Warmth" (5%), seasons (4,3%), "energy"/"life" (3%) and "ripe" (3%) make the exception.

II. In the second stage – *Album cover associations* – the surveyed were to comment on the use of yellow in the provided album covers of the British and American rock-discourse. Importantly, at the pre-experimental stage, the meanings of yellow were preliminarily determined by means of cognitive discourse analysis, cognitive metaphor analysis, component and definition analysis. All the covers were chosen for the experiment based on the popularity of the meaning of yellow in the particular rock-discourse. Logically, the covers were mingled in the test.

One of the components of yellow shared by both the British and American rock-discourse is "illness". Thus, Figure 01 represented this component in the survey for the British rock-discourse and Figure 2 – for the American. Both covers depict some mental illness/disturbance, which is accompanied by and expressed through the use of yellow in the background. Furthermore, the idea of some mental disorder is conveyed both contextually (e.g. a cracked face of a smiling doll, a brain swarming with roaches) and lexically (e.g. "Wild Mood Swings" stands for extreme mood changes, whereas "Hate Me" expresses some internal anger or even loathing towards oneself).
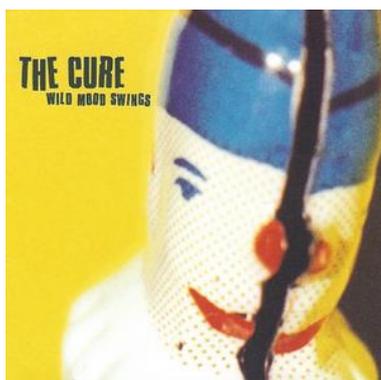

**Figure 01.** The Cure *Wild Mood Swings*
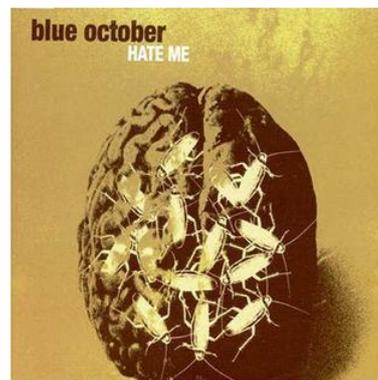
Figure 02. Blue October *Hate Me*

All the answers provided by the participants for Figure 01 and Figure 02 can be roughly grouped into two categories: 1) connected to the concept of "illness"; 2) other answers. The results are presented in figure 3 by geographical division.
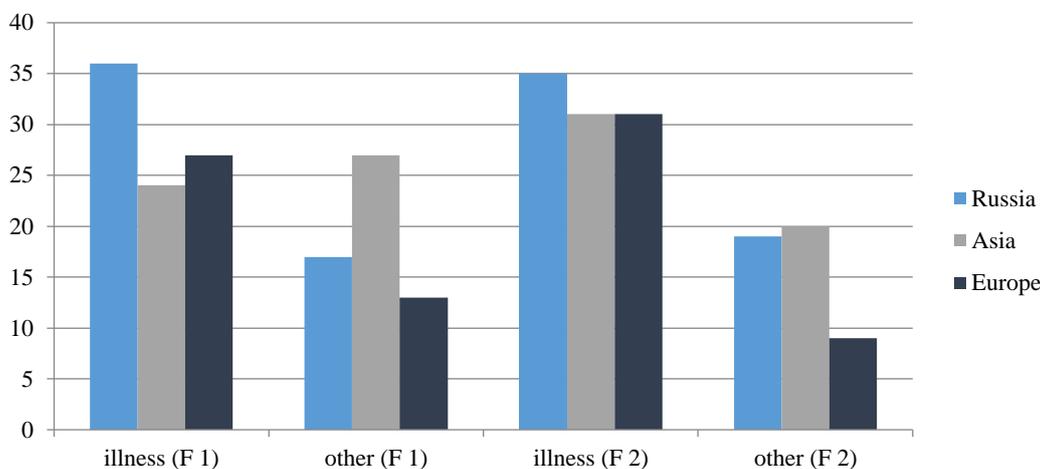

Figure 03. Album Cover Associations for Figure 01 and Figure 02

As is seen from Figure 03, the majority (60%) of all the answers for Figure 01 are in the category "illness". It includes such common responses as "depressed", "split personality", "crazy", "irritation", "madness", "mania", "anxiety", "mental illness", "disease", "stress", "frustration", "danger", "caution", "pressure", "sick", "disorder", and others. Conversely, 40% of the answers refer to the group "other" because they either include some irrelevant answers (e.g. "background", "nothing", "I have no idea", and others) or nonrecurring ones, hence, unable to constitute a pattern.

Respectively, the category of "illness" prevails (66%) among the answers for Figure 02. The typical answers boil down to "illness", "sickness", "misery", "nausea", "mental disorder", "depression", "craziness", "disease", "anxiety", "infection", "virus", and others. As for the other 34% of the answers, not only do they similarly contain irrelevant and nonrecurring answers, but also the category "dirt" (e.g. "dirty", "disgusting", "corrosion", and others). The latter can be explained by the dark hue of the colour and the presence of roaches.

From the experimental stage of Figure 01 and Figure 02 analysis, we see that the prevalent number of answers coincide with the dominant meaning of the colour yellow in these album covers, which was determined at the pre-experimental stage.

The next set – Figure 04 and Figure 05 – presents the correlation between "positivity" and yellow in British and American rock-discourse. Firstly, in both pictures, the concept of "positivity" is prominently manifest in the lexical way. In Figure 04 the title "Lucky Man" speaks of positive things happening to the protagonist, i.e. "bringing good things" and "success" (Lexico, 2020), whereas in Figure 04 "Wow" stands for such positive impressions as being "impressed", "surprised", "pleased" (Collins, 2020). Both cases are graphically supported by the use of the colour yellow (e.g. the font colour, light colour, background, and others). Secondly, these album covers share the concept at the contextual level as well, i.e. in Figure 04 a warmly sunlit street is depicted and in Figure 05 the letter "O" is substituted with a mouth opened in excitement and sensually holding a cherry.

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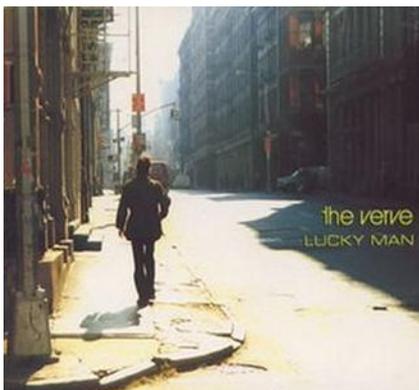
**Figure 04**. The Verve *Lucky Man*

Figure 05. Beck *Wow*
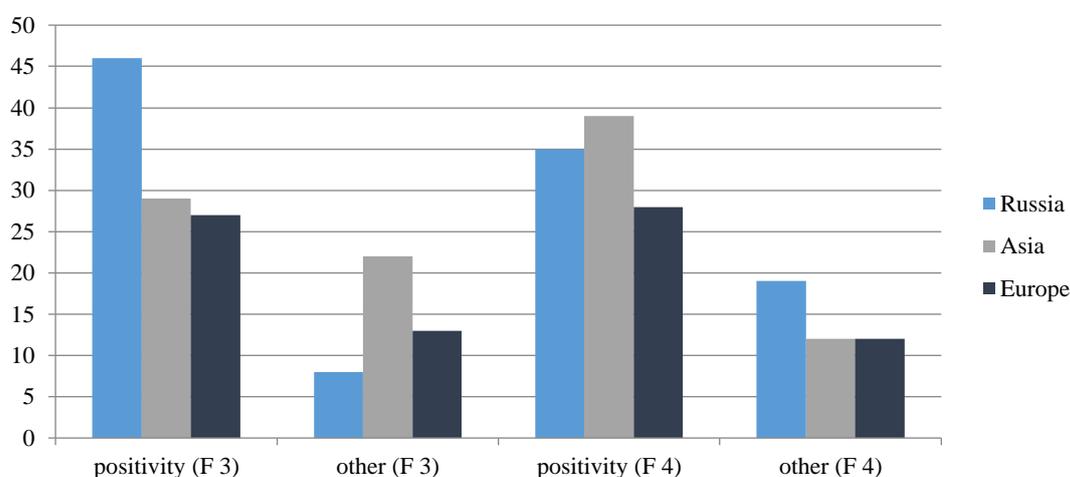
Figure 06. Album Cover Associations for Figure 04 and Figure 05

Figure 06 demonstrates that 75% of the answers for Figure 04 are classified within the "positivity" category. Some characteristic responses include "peace", "comfort", "love", "luck", "sunshine", "hope", "warmth", "happiness", "energy", "success", "positive", "good mood", "joy", and others. The ones that underline the use of yellow as an emphatic tool for the title "Lucky Man" are also quite typical. Thus, the connection of the colour to the lexical meaning in terms of Figure 04 is noted by the majority of the respondents. In contrast, 25% of the responses present some nonrecurring answers and the category "loneliness" (e.g. "lonely", "desolation", "alone", and others). The latter could be explained from the compositional point of view as we see only one person in the whole street.

As for Figure 05, in Figure 06, we see a similar trend as "positivity" (74%) prevails. Interestingly, the answers in this category contain both the aforementioned lexical (surprise) and contextual (sexuality) notions. Thus, the typical responses are, on the one hand, "entertainment", "amazing", "fun", "pleasure", "energy", "party", "positive", "brightness", "joy", on the other, "sexy", "kiss", "desire", "temptation". The other half (26%) might be accounted for by some irrelevant answers.

The experimental stage of Figure 04 and Figure 05 analysis has once again revealed the similarity between the pre-experimental interpretation of the colour meaning in these album covers based on the psychophysical, linguocultural, lexicographic data and the interpretations by the English speakers.

The final set – Figure 07 and Figure 08 – provides the meaning of yellow, which interestingly was not singled out by us through psychophysical, linguocultural, lexicographic data, but was identified through the component analysis of the British and American rock-discourse, i.e. "protest". Both figures express this meaning lexically, i.e. "power" and "dissident", which are either coloured or supported by yellow (excluding other colours) in the background. Additionally, Figure 07 provides contextual support in the form of a fist raised in the air for a riot.
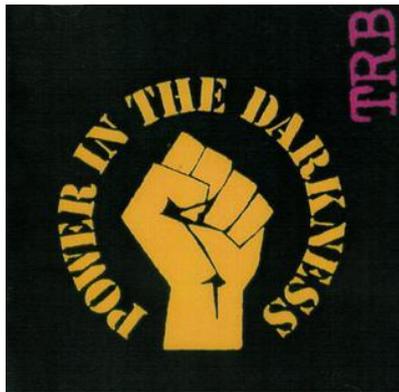

Figure 07. Tom Robinson Band *Power in the Darkness*
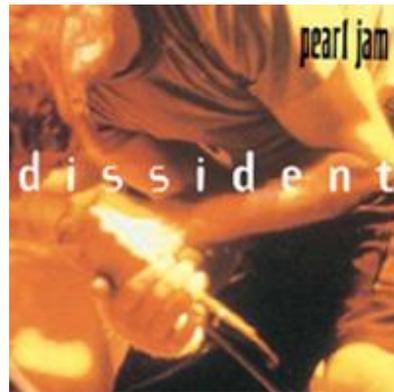
Figure 08. Pearl Jam *Dissident*

The responses by the participants for Figure 7 and Figure 8 are grouped into two categories: 1) connected to the concept of "protest"; 2) other answers, and presented in Graph 8 by geographical division.
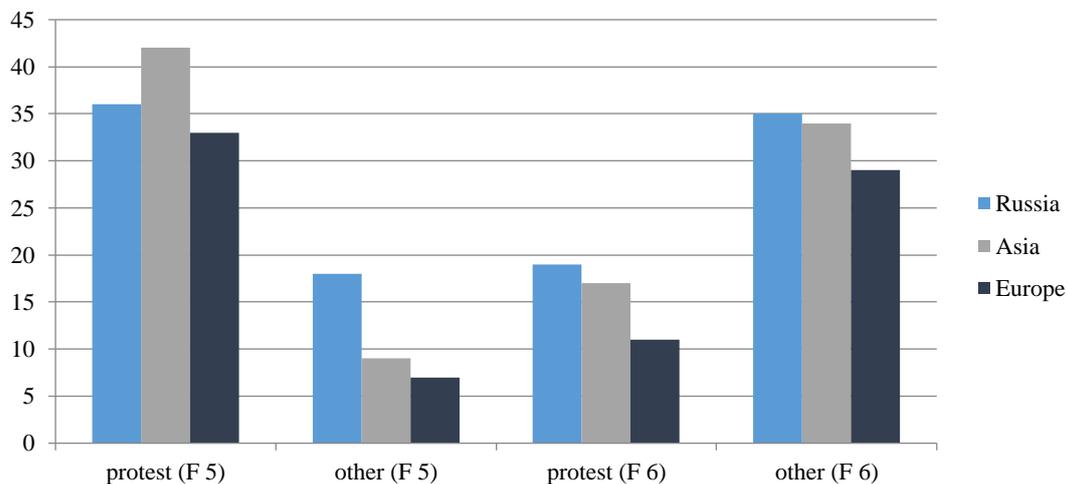

Figure 09. Album Cover Associations for Figure 07 and Figure 08

According to Graph 09, 78% gave the answers related to "protest" for Figure 07. Hence, in this picture yellow is proven to mean "strength", "power", "fight", "victory", "rebellious spirit", "refuse", "force", "revolution", "riot", "call to action", "aggression", and others. The remaining 22% stand for some irrelevant and nonrecurring answers.

Astonishingly, in comparison to all the previous cases, only the minority (36%) has identified "protest" in Figure 08: "unfair", "desperate", "struggle", "strength", "force", "revolution", "despair",

"rebellion", "opposition", "fire", and others. Not only do the other 64% include some irrelevant and nonrecurring answers, but also the category "illness" (e.g. "ill", "disease", "sickness", and others) and, surprisingly, "warmth" (e.g. "sun", "memories", "warm", and others). This situation might have occurred due to the contextual ambiguity as the person in the background may be described as both jaundice-like and sunlit.

As a result, the experimental stage of Figure 07 and Figure 08 analysis has shown the presence of "protest" in the interpretations by the English speakers. However, the majority identified it in Figure 07, whereas the minority did in Figure 08.

III. In the final stage - *Fixed colour associations* – the respondents were asked to select more than one association they had from a list of all the meanings of the colour yellow which were established from the psychophysical, linguocultural and lexicographic data at the pre-experimental stage. The results presented in Figure 10 are divided by country of origin.
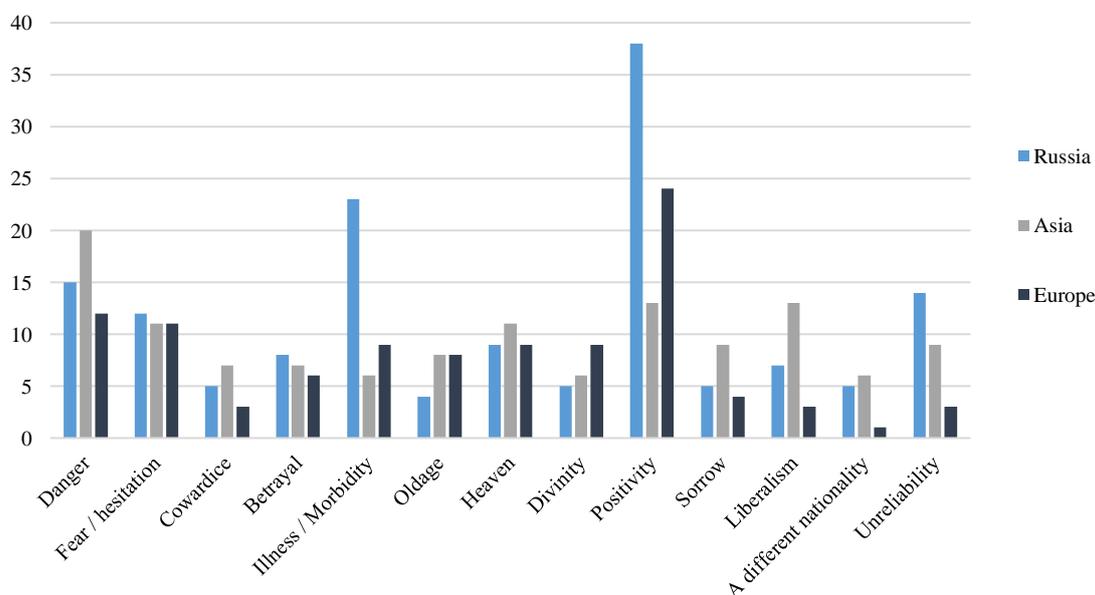

Figure 10. Fixed colour associations results

Unlike their European counterparts, for whom "positivity" was the most widely selected with 24%, the dominant meaning among the English speakers from Asia was "danger" accounting for 20% of the answers. The English speakers in Russia favoured "positivity" so much so that a staggering 38% chose it; the next most widespread was "illness and morbidity" around 23%.

The category which was least popular with the respondents was "different nationality". Interestingly, roughly 5% chose it from Asia and Russia, whereas in Europe it was virtually non-existent, only 1%.

As can be seen from Figure 10, all the distinguished meanings are perceived to be to some extent connected with the studied colour by the English speakers, thereby validating our theoretical findings.

7.   Conclusion

As a result of the research, we reached the following conclusions:

• the associative definitions ("the sun"/"(sun)light", food, and others) were more prevalent than the metaphoric associations (emotions ("happiness", "positivity", "fun", "negativity", and others), "warmth", seasons, and others) among the surveyed English speakers with 58,7% and 41,3% respectively;

• when distinguishing the meaning of the colour yellow in the album covers of American and British rock bands, the majority of the respondents successfully identified all three of the given meanings, "illness", "positivity" and "protest". The last one – the cover of an American rock band – was not evident to all the respondents, only to a minority, possibly due to the ambiguity of the image since the British one was;

• all the meanings of the colour yellow determined at the pre-experimental stage with the help of the psychophysical, linguocultural and lexicographic data were chosen by the English speakers in the fixed colour associations part of the experiment. Thus, it has been proved that the data are quite accurate. However, there was a clear delineation of the meanings according to the country: Asia – "danger" (20%), Europe – "positivity" (24%), Russia – "positivity" (38%), "illness and morbidity" (23%).

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