Polskie Forum Psychologiczne, 2018, tom 23, numer 3, s. 610-627
DOI: 10.14656/PFP20180309

THE IMPACT OF READING OR LISTENING TO A CONTEXTUAL INFORMATION RELATING TO CONTEMPORARY PAINTINGS ON THE EVALUATION BY NON-EXPERTS IN THE FIELD OF ART

Magdalena Szubielska, Piotr Francuz, Ewa Niestorowicz, Bibianna Bałaj

Instytut Psychologii, Katolicki Uniwersytet Lubelski Jana Pawła II
Institute of Psychology, The John Paul II Catholic University of Lublin

Summary. The experiment concerned the impact of the catalogue description, experienced in various ways (reading a text or listening to audio material before seeing a picture; listening to audio material whilst looking at the picture; one group was devoid of any context information), on evaluation of the 21st century abstract and figurative paintings. The experiment was based on the reactions of laymen who were presented with copies of the paintings and provided with their catalogue descriptions. The paintings were evaluated from the perspective of form, content and axiology. The experiment indicated that the way of delivering of context material influenced the viewers' perception of the paintings and had a clear impact on the positive reaction, as well as helped to understand the symbolic meaning of the viewed piece of art. Moreover, differences in evaluation of abstract and figurative paintings were conspicuous. The overall results clearly indicate that laymen tend to appreciate contemporary figurative paintings more than abstract ones, and a positive evaluation is aided by audio context presented at the time of viewing the picture.
Key words: aesthetic judgment, contemporary art, abstract and figurative paintings, contextual information

Reception of contemporary art by non-expert viewers

The reception of contemporary art can be challenging for people who have no expertise in the field of visual arts. Non-experts in art share many stereotypes regarding the currently created artworks and doubts as to why they are as they are resulting from the lack of understanding and resistance to changes in arts initiated by the revolutionary acts of Marcel Duchamp (Bordens, 2010). Currently in arts, what the artist depicts is of less importance than how he does that. Modern art re-

Adres do korespondencji: Magdalena Szubielska, e-mail: magdasz@kul.pl

quires from the recipient certain consideration and in-depth interpretation, while the aesthetic experience resulting from the contact with art is largely dependent on the viewer's knowledge (Leder et al., 2004).

Looking at a painting, an amateur viewer, first of all, wants to see a depicted object and verbalize it without paying attention to the formal analysis of the artwork (cf. Cupchik, Gebotys, 1988; Bhattacharya, Petsche, 2002; Waligórska, 2006). This attitude makes it difficult for him to understand and accept modern and contemporary, and especially non-representational art.

The studies showed that unprofessional viewers tend to evaluate figurative paintings higher than abstract ones[1] (Furnham, Walker, 2001a, 2001b; Gerger, Leder, 2015; Szubielska, Niestorowicz, Bałaj, 2016). A similar effect was discovered in relation to the evaluation of illustrations (Millis, 2001) and sculptures (Cupchik, Shereck, Spiegel, 1994). Besides, non-expert viewers consider figurative art to be more comprehensible than abstract art (Millis, 2001; Swami, 2013). Information about the content of a painting, for example, its title or description, can facilitate comprehension of contemporary art (e.g. Russell, Milne, 1997; Russell, 2003; Swami, 2013).

Influence of contextual information on the reception of visual arts by non-expert viewers

Interpretation guidelines containing information about artworks are widely used in art galleries and museums. They may contain very different information, from author's biography, through the piece description, reasons behind its creation to artist's inspiration. Interpretation guidelines may take different forms: labels placed next to a painting, art curator stories, catalog descriptions containing the interpretation of the whole exhibition.

The research conducted by Temme (1992) shows that museum visitors most frequently use the labels placed next to a piece of art. Later studies (Barbieri et al., 2009; Locher, 2011), however, demonstrated that the visitors are more likely to use audio guides. Audio descriptions increase the audience's interests and engagement in the processing of the content presented. This is evidenced by the differences in the way a picture is viewed (in the path of eye motion) by unprofessional visitors who are

[1] Abstract art (non-representational art; object-free art) can be defined as art that does not represent anything or not depicting any objects. The representational art, on the other hand, depicts – in a more or less realistic (ie. reflecting reality) manner, different objects or persons (Aviv, 2014). Ingarden (1966) claimed that abstract paintings do not refer directly to the reality but instead, their focus is on composition and their artistic value lays in the masterfully combined formal means and the perfection of the artist's skills. Figurative paintings, in turn, even if their formal aspect is far from perfect, can "fool" (i.e. amaze) an inexperienced viewer by using adequate subject, for example referring to the highest literary values, while the evaluation of an abstract painting depends solely on its formal aspect.

listening to a description containing interpretation guidelines and by those viewers who have no information about an artwork (Bałaj, Szubielska, 2014). It is also commonly known that the use of audio description while appreciating works of art directs the visual attention of non-experts to the most important elements of a painting and makes the reception of the art systematic, regular and structured (Szarkowska et al., 2013).

The influence of contextual information can be moderated by its formal and content characteristics like length and type of contents (including if the information is coherent with a painting), and the manner in which interpretation guidelines are provided (visual or audible).

Wheater the information about a piece of art influences its evaluation depends on the length of contextual information. The research conducted by Temme (1992) showed that unprofessional viewers would like to see more than only standard information on labels placed next to a piece of art ('standard' meaning name, author's birth and death, title of the work, technique, and size). Amateur viewers would be interested in learning more about artist's life and style, and in receiving some tips as to the content of a painting. Importantly, these notes should not be too long otherwise they might discourage viewers from reading them (cf. Smith, Smith, 2001). It may be assumed, based on Temme's research (1992) that the optimal context information, meaning information that is not boring and increases viewer's interest in a painting should contain approximately 350 keystrokes. This conclusion has been confirmed by the comparison of results of later studies conducted by Russell (2003), Smith with the team (2006), and Specht (2010). Russell (2003) presenting descriptions of about 50 words (over 300 keystrokes) discovered a positive influence of the description on a painting evaluation. Smith and the team (2006), in turn, did not find any influence of more elaborate descriptions (175-200 words) on the perception of art. Specht (2010) observed only the influence of the shortest description used in his study (115 words).

Another significant variable indicating an effect of contextual information on aesthetic perception is the content of the information, including if it is redundant to an image. Russell and Milne (1997) observed a positive effect of knowing the title on the understanding of a painting but only when the viewers knew real and not fake titles. In experiments conducted by Millis (2001), the increased understanding of illustrations and pictures was discovered for viewers who were provided with their elaborate titles (provoking metaphorical interpretation of visual aspect) or descriptive titles (describing what is depicted on a painting). Knowledge of the title increases the experience of positive emotions, liking, and appreciation of art – especially if the titles are semantically coherent with the paintings (Belke et al., 2010; Gerger, Leder, 2015). Similar conclusions were drawn by Swami (2013) who analyzed the influence of descriptions on the perception of painting. In his study, knowing the description resulted in better comprehension and higher evaluation of artworks provided however that the descriptions contained specific information

about the content of a painting. Jucker and the team (2014), in turn, observed that the title has a positive influence on the aesthetic experience if it suggests a specific interpretation of an artwork. On the other hand, Cupchik with the team (1994), showed how different types of descriptions have different effects on the evaluation of contemporary sculptures. Authors showed the subjects three types of descriptions, descriptive – enumerating elements of an artwork with their physical characteristics; formal – focused on the structure and inner quality of an artwork, and contextual – giving wider social context to an artwork. The aesthetic evaluation was higher after reading the contextual description, and lower after the descriptive one. In turn, the formal description increased the interest in a piece of art and at the same time, decreased the evaluation of how meaningful and expressive it was.

The influence of work description on the aesthetic perception is also moderated by the manner in which the contextual information is provided, including the sensory modality where the interpretational guidelines are addressed to. In the studies on the influence of contextual information on the perception of art, the contextual information rarely was given in an audio form (Swami, 2013; Szarkowska et al., 2013; Bałaj, Szubielska, 2014). More often it was displayed in a written form (Temme, 1992; Cupchik, Shereck, Spiegel, 1994; Russell, Milne, 1997; Millis, 2001; Russell, 2003; Smith et al., 2006; Belke et al., 2010; Specht, 2010; Jucker, Barrett, Wlodarski, 2014; Gerger, Leder, 2015). Szarkowska's and the team (2013) is the only research known to us where the influence of modality of the form of artwork description on the perception of a painting was compared. The research confirmed that the subjects tend to look attentively at a painting longer when an audio description is being delivered simultaneously than when there's no description available or when the description is placed next to a painting.

In experiments where a description was visual, the researchers not always made an effort to ascertain that the viewers have a chance to thoroughly read through it. For example, when analyzing the procedure applied by Smith and the team (2006) one may doubt whether the subjects read the description attached to the paintings at all. The descriptions were exposed in four different time conditions: 1, 5, 30, or 60 seconds. It seems that exposition of 1 or 5 seconds makes it impossible to look at a painting and read a textual description of around 200 words.

Theoretical framework of this study

Bullot and Reber (2013) postulate that the scientist studying the perception of art, should apply not only psychological or neurocognitive concepts as the theoretical background for their studies, they should also apply the knowledge of the history of art. The authors point out that the researchers of aesthetic perception often stimulate the subjects presenting them pieces of art without explaining the specific type of experience that exists in the confrontation with visual arts. They claim that in order to explain this experience, an interdisciplinary approach to research and in-

troduction to the theoretical context, described as a psychological and historical context, would be required. In our opinion, expansion of the approach to psychological studies on perception of painting with the context of the history of aesthetics is an interesting concept.

For the theoretical framework of our research, we have adopted the psychological theories of working memory (Baddeley, Hitch, 1974) and dual coding (Paivio, 1986), theory from the borderline of cognitive psychology and aesthetics by Reber and co-workers (2004) and deliberations on the aesthetics related to the classical concept of Ingarden (1958). Cognitive psychology concepts allowed us to formulate the research hypothesis, while the choice of the research instrument was made based on the aesthetic concept.

In accordance with the working memory theory, the more complex task a person has to perform, the more resources must be used to perform it. The resources of working memory are limited, thus in the case of a too complex task, the working memory system becomes overloaded. This may occur during the performance of so-called dual task. In such situation, individual attention or memory processes compete for the limited resources. Usually, one of the tasks at hand becomes a priority and is the only task performed at an optimal level (Baddeley, Hitch, 1974; Baddeley, 1986). According to the theory of dual coding by Paivio (1986), the author assumed that the reception of information through different senses (eg. sight and hearing) contributes to its understanding. In turn, according to the theory of processing fluency and aesthetic pleasure (Reber, Schwarz, Winkielman, 2004), the ease of art processing directly affects the aesthetic pleasure of appreciating a piece of art. In light of these concepts, the art should be understood better and should awaken more positive aesthetic experience when its appreciation is accompanied by listening to an audio information about it – since these are the conditions of dual coding. Non-professional experts looking at a painting without any contextual information has no interpretation guidelines. In turn, an amateur art appreciator looking at art after listening to or reading contextual information has to split his working memory resources between the processing of visual information (image) and extracting the verbal content from the memory. In the case of generally difficult to comprehend contemporary art, this situation may cause selective extraction of content from the memory. For interpretation guidelines longer than the title, storing the information in the phonological loop is not possible and it has to be transferred to the long-term memory. Reber's and his co-workers (2004), as well as oculographic research (Bałaj, Szubielska, 2014), provided information that the perception of abstract images requires more cognitive effort than figurative images. Based on this, it may be assumed that the non-professional viewers will prefer figurative paintings over abstract ones.

According to the Ingarden's theory (1958, 1966), the aesthetical values are considered as objective entities immanently enclosed within an object, and in order to see them, an interpretator requires an appropriate attitude while using aesthetic categories. The intersubjective categories allow the objectivization of art interpretation.

The author concluded that the artworks always are schematic and multilayered in their structure. One of the layers of an artwork is its form. It is manifested in its visual aspect. From the viewer's point of view, the form is what is perceived by senses. The content of an artwork lays in its meaning, it's ideology or a set of processes and events presented in it. The viewer apprehends the content from the form and creates it in his mind. And the aesthetic values derive from the relation between the form and the content. Referring to the aesthetic concept of Ingarden (1958) and his follower Popek (1999), Niestorowicz (2007) developed a model of an artistic creation and identified the following perspectives (aspects) of it: form, content, and values – axiology. The formal aspect refers to the form of presentation of the content and to the means of artistic expression used by an artist. The aspect of the content relates to what is presented on a piece of art, what is the cognitive content, how specific is the presented content, and how it approaches the reality. The axiological and aesthetical aspect contains elements of novelty and originality as well as the social acceptance, all of which can be concluded from the analysis of emotions revealed in the confrontation with an artwork or from the level of admiration declared by the viewers.

Hypotheses of the study

The above theoretical discourse let to the following hypotheses to be reviewed in this study:

H1. The evaluation of an artwork in the axiological aspect (i.e. in the aspect of values) is higher when amateur viewers are provided with a catalog description, especially when they listened to the description while looking at a painting.

H2. In the axiological aspect, unprofessional viewers tend to evaluate figurative paintings higher than abstract paintings.

Moreover, two research questions were explored:

P1: Does the method in which a catalog information is provided influence the evaluation of a contemporary painting on a formal aspect?

P2: Does the method in which a catalog information is provided influence the evaluation of a contemporary painting on a content aspect?

Method

Subjects

The study involved 67 students in the field of social sciences and humanities (psychology, journalism, philosophy, applied rhetoric) in the age of 19-22 ($M = 21.76$; $SD = 2.97$). None of them was an expert in the field of arts. According to their declarations, none of them had completed artistic education of any kind, had any interest in arts and their knowledge about the history of art was average, i.e. they had some basic knowledge about the history of art acquired in the course of standard educa-

tion. The subjects were divided into four groups; three groups were provided with a catalog description: 12 subjects (including 5 women) read the description before looking at the paintings, 15 subjects (including 6 women) listened to the description before looking at the paintings, 14 subjects (including 8 women) listened to the descriptions while looking at the paintings, while the last group of 26 subjects (including 14 women) looked at the paintings without any catalog description provided.

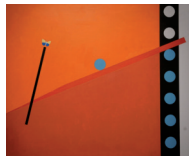
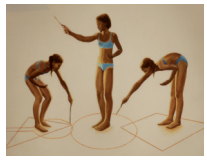
Materials and equipment

Six contemporary paintings by Polish artists were used, including three figurative and three abstract ones – see table 1 and their abridged catalog descriptions. Both paintings and the descriptions were used as stimuli in previous studies on aesthetical perception of contemporary art (Bałaj, Szubielska, 2014; Szubielska, Niestorowicz, Bałaj, 2016). All the paintings were created by contemporary Polish artists, thus the likelihood that the subjects who had no interests in arts, had seen them before, was close to zero. The original catalog descriptions prepared by the exhibition curators where the paintings had been originally exhibited, were abridged in order to limit them to the optimal word count, as empirically determined by Temme (1992). The group of 6 judges, also non-experts in the field of arts, reviewed the descriptions and highlighted phrases they found unclear or ambiguous. Those phrases were removed from the original description and thus abridged descriptions later used in the study were created. Here is an example of a description used in the study (pertaining to Paulina Sadowska's work): "Inspired by photos taken in the first half of the 20th century, the artist brings archives back to life. On canvas, she sets up dream-like situations in a monochromatic landscape of the past. Introducing movement, she activates the character's desires. The ambiguity of the scenes liberates the photos from their historical context and creates an intimate narrative about love, longing, and disappointment" (Bałaj, Szubielska, 2014, p. 90). All the descriptions were elaborate (cf. Millis, 2001), that is they did not describe the picture, instead, they metaphorically suggested how it should be interpreted.

In the study, an aesthetic evaluation form was used taking into account three aspects of a painting evaluation: aspect of (1) form, (2) content, and (3) axiology. A revised version of an evaluation survey of an artwork was used – a tool applied by experts to evaluate sculptures (Niestorowicz, 2007) and applied by experts and non-experts to evaluate a painting (Szubielska, Niestorowicz, Bałaj, 2016). The version used in this study was shorter than previously used by Szubielska and the team (2016) – in order to provide an equal number of questions for each aspect of aesthetic perception and to avoid questions referring to the knowledge about arts. The questionnaire used in this study consisted of 9 items. Statements "The dominant item of the piece is apparent in the painting", "The layout of the composition allows for adding more elements", "The composition layout seems harmonic" referred to the aspect of form. Statements "The painting may be considered to be non-representational, abstract", "The painting reproduces reality", "The painting has symbolic con-

tent" referred to the evaluation of a content of a painting. In turn, the statements referring to the axiological evaluation of a painting were the following: "The method of presenting the form and content of the painting is unique", "I like the painting", "The painting awakens positive emotions in me".

Table 1. Experimental stimuli

Painting	Author	Type of painting
	Magdalena Franczak	Abstract
	Mariusz Kruk	Abstract
	Ewa Niestorowicz	Abstract
	Viola Głowacka	Figurative
	Julita Malinowska	Figurative
	Paulina Sadowska	Figurative

The presentation of paintings and their catalog descriptions was prepared using e-Prime software. The paintings and textual descriptions were presented on a computer screen. The audio descriptions were available through headphones.

Procedure

The research was carried out individually. The independent variables in the experiment were: method of provision of a catalog description (intra-object variable) and figurativeness of a painting (inter-object variable). The dependent variables were the aesthetical evaluation from the point of view of form, content, and axiology.

There were four methods in which a catalog description was provided: (1) no catalog description (control condition); (2) visual before looking at a painting (the text description was to be read); (3) audible before looking at a painting (recording of the description); (4) audible while looking at a painting (recording of the description). The subjects looked at each painting for 30 seconds. Exposition time of the audible description was equal to the exposition time of an image. The subjects who read the catalog description individually controlled the exposition time of the description.

The figurativeness of a painting was an independent variable in a repeated measurement scheme. All subjects looked at 6 paintings, including 3 figurative and 3 abstract ones (see table 1). The paintings were presented in random order. The following operational definition of a variable figurativeness was adopted: (1) a figurative painting is a painting depicting rather realistically objects or people (more or less symbolically); (2) an abstract painting is a painting that does not depict anything specific. The accuracy of the paintings qualification to each category was confirmed empirically (Szubielska, Niestorowicz, Bałaj, 2016).

Directly after looking at each painting, the subjects were asked to perform an aesthetical evaluation of an artwork. The statements of the evaluation form were displayed on a computer screen one at a time. The subjects chose their answers by marking an appropriate option on an interval, bipolar, seven-grade scale from "I completely disagree" (1) to "I completely agree" (7). For each perspective of the aesthetic evaluation, choosing one option for each statement was considered to be an operational definition of a painting evaluation from the point of view of form, content, and axiology, respectively.

After completion of the experiment, the researchers made sure that the subjects hadn't known the presented paintings before.

Results

The descriptive statistics for each statement on an evaluation form divided by experimental conditions are shown in table 2.

Table 2. Aesthetic evaluation: medium (*M*) and standard deviation (*SD*) for each evaluation indicator in aspects of form, content, and axiology divided by type of painting and method of provision of a catalog description

		Description read before looking				Description listened to before looking				Description listened to while looking				No description available			
		Abstract paintings		Figurative paintings		Abstract paintings		Figurative paintings		Abstract paintings		Figurative paintings		Abstract paintings		Figurative paintings	
		M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Evaluation of form	The dominant item of the piece is apparent in the painting	4.11	1.15	4.94	0.94	3.84	1.51	4.6	1.54	3.76	1.46	4.55	0.87	4.29	1.34	4.94	1.37
	The layout of the composition allows for adding more elements	3.69	1.38	3.5	1.21	4.27	1.6	3.62	1.29	4.02	1.39	2.9	1.17	3.82	1.25	2.97	1.45
	The composition layout seems harmonic	3.39	0.85	4.97	0.82	2.38	0.95	4.76	1.57	3.45	1.07	4.83	1.22	3.1	1.04	4.96	1.04
Evaluation of content	The painting may be considered to be non-representational, abstract	6.44	0.48	3.42	0.97	5.84	1.26	2.89	1.09	5.9	1.07	3.12	1.47	5.68	1.06	3.46	1.03
	The painting reproduces reality	1.72	0.86	4.67	0.91	1.73	0.94	4.36	1.55	1.88	0.46	4.38	1	2.15	1.12	4.32	0.8
	The painting has symbolic content	4.89	1.42	5.28	0.87	3.76	1.52	5.18	1.18	5.07	1.08	5.69	0.9	4.72	0.84	5.33	0.92
Evaluation of axiology	The method of presenting the form and content of the painting is unique	5.22	1.15	4.33	0.93	4.36	1.94	4.38	1.4	4.9	1.12	5	0.94	4.94	1.08	4.79	0.93
	I like the painting	3.97	0.93	4.56	0.91	2.84	1.62	4.29	1.21	4.4	1.19	4.88	1.03	4.19	1.24	4.72	1.05
	The painting awakens positive emotions in me	3.78	0.9	3.67	1.15	3.09	1.5	3.56	1.35	4.33	1.13	4.5	1.13	3.79	1.07	3.73	1.04

Statistical analysis was performed individually for each statement of the evaluation form. The distribution of differences between repeated measurements (i.e. results of evaluation of abstract and figurative paintings) was checked. Only for statements *The painting may be considered to be non-representational, abstract* and *The painting reproduces reality* the distribution was not normal (significance in the Shapiro-Wilk test: $p > .05$) and for those two indicators, nonparametric tests were calculated. The impact of variable Painting Type was checked with the Wilcoxon test (z) for the whole test sample and the impact of variable Method of Provision of a Catalog Description was verified separately for abstract and figurative paintings with the use of Kruskall-Wallis H test. For the remaining indicators of the aesthetic evaluation, ANOVA with repeated measurement was calculated, for the inter-object factor Painting Type (abstract; figurative) and for the intra-object factor Method of Provision of a Catalog Description (read before looking at a painting; listened to before looking at a painting; listened to while looking at a painting; no description available – control group). The dependent variables were measured on an interval scale, which means they are quantitative variables and meet the requirement to apply the variance analysis. Due to lack of homogeneity of variance, for the effect of a significant factor Method of Provision of a Catalog Description a nonparametric *post-hoc* Games-Howell test was performed taking into account a correction for lack of variance equality and sample size.

Evaluation of the painting's form

The dominant item of the piece is apparent in the painting. A significant influence of variable Painting Type was revealed, $F(1, 63) = 11.83$; $p = .001$; $\eta^2 = .16$, *observed power* = .92: the subjects tended to notice the dominant element of a figurative painting more often ($M = 4.76$; $SD = 0.16$) than in abstract paintings ($M = 4.00$; $SD = .18$). No significant influence of variable Method of Provision of a Catalog Description $F(3, 63) = .90$; $p = .445$, nor for interaction between analyzed factors $F(3, 63) = .04$; $p = .988$ was identified.

*The layout of the composition allows for adding more elements.*A significant influence of variable Painting Type was determined, $F(1, 63) = 13.49$; $p < .001$; $\eta^2 = .18$, *observed power* = .95: the subjects declared that the composition of abstract paintings ($M = 3.95$; $SD = .18$) gives more possibilities to add more element, than the composition of figurative paintings ($M = 3.25$; $SD = .17$). No significant influence of variable Method of Provision of a Catalog Description $F(3, 63) = .80$; $p = .500$, nor for interaction between analyzed factors $F(3, 63) = .89$; $p = .449$ was identified.

The composition layout seems harmonic. The main effect of factor Painting Type was determined, $F(1, 63) = 170.37$; $p < .001$; $\eta^2 = .73$, *observed power* = 1: the subjects observed a lot more harmony in the the composition of figurative paintings ($M = 4.88$; $SD = .15$) than in abstract paintings ($M = 3.08$; $SD = .13$). No significant influence of variable Method of Provision of a Catalog Description $F(3, 63) = 1.29$; $p = .287$, nor for interaction between analyzed factors $F(3, 63) = 2.30$; $p = .086$ was identified.

Evaluation of the painting's content

The painting may be considered to be non-representational, abstract. An influence of variable Painting Type was discovered, $z = -6.67$; $p < .001$; $\eta^2 = .66$. The subjects classified as more non-representational abstract paintings ($M = 5.97$; $SD = .13$) rather than figurative paintings ($M = 3.22$; $SD = .16$). No significant influence of variable Method of Provision of a Catalog Description on the evaluation of abstract $x^2(2) = 5.47$; $p = .065$ nor figurative paintings $x^2(2) = 1.12$; $p = .570$ was identified.

The painting reproduces reality. An influence of variable Painting Type was discovered, $z = -6.98$; $p < .001$; $\eta^2 = .73$. The subjects concluded that the figurative paintings ($M = 4.43$; $SD = .14$) reproduce reality more that abstract paintings ($M = 1.87$; $SD = .12$). No significant influence of variable Method of Provision of a Catalog Description on the evaluation of abstract paintings $\chi^2(2) = 1.61$; $p = .447$, nor of figurative paintings $\chi^2(2) = 1.76$; $p = .415$ was identified.

The painting has symbolic content. A significant influence of variable Painting Type was discovered $F(1, 63) = 18.54$; $p < .001$; $\eta^2 = .23$, *observed power* = .99: the presence of symbolic content was noticed more often in figurative paintings ($M = 5.37$; $SD = .12$) than in abstract paintings ($M = 4.61$; $SD = .15$). Furthermore, a significant influence of variable Method of Provision of a Catalog Description was found $F(3, 63) = 3.09$; $p = .033$; $\eta^2 = .13$, *observed power* = .7; however, the post hoc tests did not reveal any significant differences between people who evaluated the presence of symbolic content in different experimental conditions. For each multiple comparison, the significance of Games-Howell test was $p > .05$.

Evaluation of the painting's axiology

The method of presenting the form and content of the painting is unique. No main effect was discovered for factors Painting Type $F(1, 63) = 2.06$; $p = .156$; Method of Provision of a Catalog Description $F(3, 63) = .98$; $p = .408$; nor interactions between the factors $F(3, 63) = 1.66$; $p = .185$.

I like the painting. The main effect of factor Painting Type was discovered $F(1, 63) = 15.56$; $p < .001$; $\eta^2 = .20$, *observed power* = .97: the subjects significantly more liked figurative paintings ($M = 4.61$; $SD = .14$) than abstract paintings ($M = 3.85$; $SD = .16$). Furthermore, the main effect of factor Method of Provision of a Catalog Description was found $F(3, 63) = 4.18$; $p = .009$; $\eta^2 = .17$, *observed power* = .83. The subjects significantly less liked paintings they saw after listening to the catalog description ($M = 3.57$; $SD = .23$) versus those they saw while listening to the catalog description ($M = 4.64$; $SD = .24$; Games-Howell post-hoc: $p = .044$) The interaction of analyzed factors was statistically insignificant $F(3, 63) = 1.45$; $p = .236$.

The painting awakens positive emotions in me. No significant influence of factor Painting Type was discovered; $F(1, 63) = .44$; $p = .509$. However, the main effect of factor Method of Provision of a Catalog Description was discovered $F(3, 63) = 3.33$; $p = .025$; $\eta^2 = .14$, *observed power* = .73: the paintings awaken significantly more positive

emotions when they were admired while listening to a catalog description (M = 4.42; SD = .25) then when they were admired after listening to a catalog description (M = 3.32; SD = .24; post-hoc Games-Howell p = .043). No interaction of the analyzed factors was observed, $F(3, 63) = .60$; $p = .615$.

Discussion

The experiment was conducted with the aim to verify the following hypotheses regarding the aesthetical perception of contemporary paintings by amateurs: (H1) The axiological evaluation of a painting is higher when a viewer is provided with a catalog description, especially when they listen to a catalog description while looking at a painting; (H2) In the scope of axiology, figurative paintings are evaluated higher than abstract ones. Additionally, the purpose of the experiment was to check if the method in which a catalog description is provided influences the evaluation of form and content of contemporary paintings?

The verification of the first hypothesis did not lead to clear conclusions. It turned out that the approval of art is influenced not as much by a contextual information enabling the understanding of work (as confirmed by other studies: Temme, 1992; Cupchik, Shereck, Spiegel, 1994; Russell, Milne, 1997; Belke et al., 2010; Specht, 2010; Swami, 2013; Jucker, Barrett, Wlodarski, 2014; Gerger, Leder, 2015) but rather by the method in which it was provided. The viewers liked the paintings less when they looked at them after listening to catalog descriptions then when they looked at them while listening to catalog descriptions. Besides, more positive emotions accompanied those viewers who simultaneously listened to a catalog description, than those who listened to a catalog description before looking at a painting. The results may be referred to the concepts of working memory (Baddeley, Hitch, 1974; Baddeley, 1986), dual coding (1986), and processing fluency and aesthetic pleasure (Reber, Schwarz, Winkielman, 2004). Simultaneous looking at a painting and listening to its audio catalog description is a typical example of information received through several modalities – in this case, sight and hearing. It turns out that the simultaneous listening to a catalog description and looking at a painting makes it easier for a viewer to understand the painting and has a positive effect on fluency of information processing derived from the painting's content, and consequently brings more pleasure associated with contemplation of the painting and increases the preference. For a non-professional viewer, admiring a painting after listening to a catalog description seems to be the least comfortable situation. They must divide their cognitive resources between looking at a hard-to-comprehend contemporary art piece and remembering information from the catalog description heard before. In addition, the catalog description by itself without the visual reference (i.e. the reference painting) could be difficult to understand for a person with no interest in the arts. Let's note that the subjects couldn't listen again to a catalog description nor could they control the speed of the recording. Hence, those who didn't understand or remember the de-

scription could not use the interpretation guidelines while looking at a painting. In conclusion, the most favorable situation, from the point of view of an unprofessional viewer, is the simultaneous looking at a painting and listening to a semantically correlated information (cf. Russell, Milne, 1997; Millis, 2001; Russell, 2003; Belke et al., 2010; Swami, 2013; Jucker, Barrett, Wlodarski, 2014; Gerger, Leder, 2015), while the least favorable – when a viewer looks at a painting after having listened to a contextual information. In accordance with our knowledge, so far none of the studies on the influence of contextual information on the evaluation of art took into account both aspects inclusively: when (before or during) and how (with which modality) is the information containing interpretation guidelines provided to a viewer. The obtained results are new and applicable; for instance, it may be used by gallery staff to increase the interest and appreciation of art in non-professional viewers.

The method in which a catalog description is provided did not affect the evaluation of art uniqueness. It is possible that an adequate assessment of an art uniqueness requires references to other paintings and the viewers who declared lack of any interest in arts and the history of art could not possibly do it. The lack of significant impact on the method in which a description is provided could be an effect of our study being performed in an inter-group scheme where the possibility of revealing the effect of a contextual information is lesser than in the intra-group scheme (cf. Russell, 2003). The aesthetic perception of art is subjective. Each viewer has its preferences and enjoys some pieces of art more (cf. Vandenabeele, 2008). In this regard, our study is worthy of continuation, this time with a repeated measurement scheme in order to avoid a situation where individual differences in aesthetic preference increase the variance between the compared experimental conditions. The study with a repeated measurement would have some limitations, though – we would need to consider two measurements only. Therefore, a study with such a scheme should consist of a series of experiments where the subjects in a pretest evaluate paintings without any description available and then reevaluate them again after having the information provided in an audible or textual form, before or while looking at a painting.

It may be assumed that the second hypothesis was positively verified – the unprofessional art viewers appreciated abstract paintings less than the figurative ones. This confirms that the viewers like the latter more. Our result is consistent with the results of earlier studies on the visual art perception by inexperienced art viewers (Cupchik, Shereck, Spiegel, 1994; Furnham, Walker, 2001a, 2001b; Millis, 2001; Gerger, Leder, 2015; Szubielska, Niestorowicz, Bałaj, 2016). The differences in the perception of figurative and abstract pieces of art were previously discussed by Ingarden (1966). Ingarden observed that the figurative art has been present in our culture for thousands of years and a man is evolutionarily equipped in perception mechanisms necessary for the reception of art containing as much as fragments of reality known and understood by men. For this reason, the figurative art that refers to objects or phenomena does not require great cognitive effort. While the abstract art does not allow one to refer to models or templates known from the reality and

requires reaching beyond the reality which is effortful. The requirement of greater effort in the reception of art translates into the decrease of aesthetic pleasure experienced by a viewer (cf. Reber, Schwarz, Winkielman, 2004). The difficulties in understanding contemporary abstract paintings by unprofessional viewers are confirmed by their evaluation of form. The amateur viewers were more likely to state that the composition layout of paintings allows for adding more elements in case of abstract than figurative paintings. Recognition of abstract painting as requiring additional elements may be associated with the difficulties in their interpretation (cf. Ingarden, 1966). Moreover, the nonprofessional viewers in our study observed less harmony in the layout of abstract than figurative paintings. Based on this fact it can be concluded that they considered the composition of abstract paintings as less deliberate or complete as compared to figurative paintings. The obtained results further confirm the tendency of unprofessional users to concentrate on the content analysis and the difficulty in the analysis of the formal aspect (cf. Cupchik, Gebotys, 1988; Bhattacharya, Petsche, 2002; Waligórska, 2006) – the dominant element was more often noticed in figurative that abstract paintings.

A question if the method of provision of a catalog description influences the evaluation of paintings' form and content, required further exploration. It was discovered that the viewers who received interpretation guidelines, regardless of the method, as well as those who had no access to a catalog description, did not evaluate paintings' form or content differently. It is consistent with the results obtained by Szubielska and the team (2016) where no significant influence of a catalog description on the evaluation of paintings' form and content was found. It is possible that the lack of differences results from the fact that even amateur art viewers are sensitive to formal and content attributes of an artwork (cf. Chatterjee et al., 2010). This interpretation can be further confirmed by the differences in aesthetic perception of figurative and abstract paintings by amateurs discovered in other studies. The viewers accurately recognized abstract paintings as more non-representational and at the same time as reproducing reality to a lesser extent and containing less symbolic content versus figurative paintings. Abstract art is defined as art that does not represent anything and its purpose is other than the reproduction of reality perception (Aviv, 2014) and being such, it cannot depict reality and even more, it cannot have symbolic content (cf. Ingarden, 1966).

Finally, it would be appropriate to mention again that our study was conducted in laboratory conditions, while the natural context for art appreciation is a gallery or a museum. There the visitors have different kind of contextual information available – from the exhibition catalogs, through information labels and audioguides to qualified staff, custodians, educators, and curators. In continuation of research how the method of provision of a contextual information influences the evaluation of contemporary art, being of so hard to comprehend for amateur viewers, visiting an exhibition should be considered. Those would be conditions to observe if, when and how the viewers use contextual information and what is the preferred form of such information.

References

Aviv, V. (2014). What does the brain tell us about abstract art? *Frontiers in Human Neuroscience*, 8, 85, doi: 10.3389/fnhum.2014.00085

Baddeley, A.D. (1986). *Working memory*. Oxford, UK: Claredon Press.

Baddeley, A.D., Hitch, G. (1974). Working memory. W: G.A. Bower (red.), *The psychology of learning and motivation* (s. 47-89). New York: Academic Press.

Baddeley, A., Hitch, G. (1974). Working memory. *Psychology of Learning and Motivation*, 8, 47-89.

Bałaj, B., Szubielska, M. (2014). Influence of listening to a catalog description of a painting on the optical scanning of a painting [Wpływ słuchania opisu katalogowego dzieła malarskiego na skaning wzrokowy obrazu]. W: S. Grucza, M. Płużyczka, P. Soluch (red.), *Studi@ Naukowe*. T. 20: *Widziane inaczej. Z polskich badań eye-trackingowych* [*From the Polish eye-tracking research*] (s. 77-90). Warszawa: Wydawnictwo Naukowe Instytutu Kulturologii i Lingwistyki Antropocentrycznej.

Barbieri, G., Celentano, A., Orsini, R., Pittarello, F. (2009). Understanding art exhibitions: From audioguides to multimedia companions. W: *International conference on distributed multimedia systems* (s. 250-256). US: Knowledge Systems Institute Graduate School.

Belke, B., Leder, H., Strobach, T., Carbon, C.C. (2010). Cognitive fluency: High-level processing dynamics in art appreciation. *Psychology of Aesthetics Creativity and the Arts*, 4, 214-222.

Bhattacharya, J., Petsche, H. (2002). Shadows of artistry: Cortical synchrony during perception and imagery of visual art. *Cognitive Brain Research*, 13, 179-186.

Bordens, K. S. (2010). Contextual information, artistic style and the perception of art. *Empirical Studies of the Arts*, 28, 111-130.

Bullot, N.J., Reber, R. (2013). The artful mind meets art history: Toward a psychohistorical framework for the science of art appreciation. *Brain and Behavioral Sciences*, 36, 123-137.

Chatterjee, A., Widick, P., Sternschein, R., Smith II, W.B., Bromberger, B. (2010). The Assessment of Art Attributes. *Empirical Studies of the Arts*, 28, 207-222.

Cupchik, G.C. (2006). Emotion in aesthetics and the aesthetics of emotion. W: P. Locher, C. Martindale, L. Dorfman (red.), *New Directions in Aesthetics, Creativity and the Arts* (s. 209-224). Amityville, NY: Baywood.

Cupchik, G.C., Gebotys, R.J. (1988). The search for meaning in art: Interpretative styles and judgments of quality. *Visual Art Research*, 14, 38-50.

Cupchik, G.C., Shereck, L., Spiegel, S. (1994). The effects of textual information on artistic communication. *Visual Arts Research*, 20, 62-78.

Furnham, A., Walker, J. (2001a). Personality and judgment of abstract, pop art, and representational paintings. *European Journal of Personality*, 15, 57-72.

Furnham, A., Walker, J. (2001b). The influence of personality traits, previous experience of art, and demographic variables on artistic preference. *Personality and Individual Differences*, 31, 997-1017.

Gerger, G., Leder, H. (2015). Titles change the aesthetic appreciations of paintings. *Frontiers in Human Neuroscience*, 9, 464, doi: 10.3389/fnhum.2015.00464
Ingarden, R. (1958). *Study of aesthetics* [*Studia z estetyki*]. Warszawa: PWN.
Ingarden, R. (1966). *Study of aesthetics* [*Studia z estetyki*]. T. II. Warszawa: PWN.
Jucker, J.L., Barrett, J.L. (2011). Cognitive constraints on the visual arts: An empirical study of the role of perceived intentions in appreciation judgements. *Journal of Cognition and Culture*, 11, 115-136.
Jucker, J.L., Barrett, J.L., Wlodarski, R. (2014). "I just don't get it": Perceived artists' intentions affect art evaluations. *Empirical Studies of the Arts*, 32, 149-182.
Leder, H., Belke, B., Oeberst, A., Augustin, D. (2004). A model of aesthetic appreciation and aesthetic judgments. *British Journal of Psychology*, 95, 489-508.
Locher, P. (2011). Contemporary experimental aesthetics: State of the art technology. *i-Perception*, 2, 697-707.
Millis, K. (2001). Making meaning brings pleasure: The influence of titles on aesthetic experiences. *Emotion*, 1, 320-329.
Niestorowicz, E. (2007). *World in the mind and sculptures by deaf-blind individuals* [*Świat w umyśle i rzeźbie osób głuchoniewidomych*]. Lublin: Wydawnictwo UMCS.
Paivio, A. (1986). *Mental Representations: A Dual Coding Approach*. New York: Oxford University Press.
Popek, S. (1999). *Colors and psyche* [*Barwy i psychika*]. Lublin: Wydawnictwo UMCS.
Reber, R., Schwarz, N., Winkielman, P. (2004). Processing fluency and aesthetic pleasure: Is beauty in the perceiver's processing experience? *Personality and Social Psychology Review*, 8, 364-382.
Russell, P.A. (2003). Effort after meaning and the hedonic value of paintings. *British Journal of Psychology*, 94, 99-110.
Russell, P.A., Milne, S. (1997). Meaningfulness and the hedonic value of paintings: Effects of titles. *Empirical Studies of the Arts*, 15, 61-73.
Smith, J.K., Smith, L.F. (2001). Spending time on art. *Empirical Studies of the Arts*, 19, 229-236.
Smith, L.F., Bousquet, S.G., Chang, G., Smith, J.K. (2006). Effects of time and information on perception of art. *Empirical Studies of the Arts*, 24, 229-242.
Specht, S.M. (2010). Artists' statements can influence perceptions of artwork. *Empirical Studies of the Arts*, 28, 193-206.
Stojilović, I.Z., Marković, S. (2014). Evaluation of paintings: Effects of lectures. *Psihologija*, 47, 415-432.
Swami, V. (2013). Context matters: Investigating the impact of contextual information on aesthetic appreciation of paintings by Max Ernst and Pablo Picasso. *Psychology of Aesthetics, Creativity, and the Arts*, 11, 1-11.
Szarkowska, A., Krejtz, I., Krejtz, K., Duchowski, A. (2013). Harnessing the potential of eyetracking for media accessibility. W: S. Grucza, M. Płużyczka, J. Zając (red.), *Translation Studies and Eye-Tracking Analysis* (s. 153-183). Frankfurt am Mein: Peter Lang.

Szubielska, M., Niestorowicz, E., Bałaj, B. (2016). Influence of a painting figurativeness and catalog description on the aesthetic perception of contemporary paintings by experts and amateurs [Wpływ figuratywności obrazu i informacji katalogowej na percepcję estetyczną malarstwa współczesnego przez ekspertów i laików]. *Annales Universitatis Paedagogicae Cracoviensis. Studia Psychologica*, 9, 21-34.
Temme, J.E. (1992). Amount and kind of information in museums: Its effect on visitors satisfaction and appreciation of art. *Visual Arts Research*, 18, 74-81.
Vandenabeele, B. (2008). The subjective universality of aesthetic judgements revisited. *British Journal of Aesthetics*, 48, 410-425.
Waligórska, A. (2006). The eye and narration: Relations of artistic expertise and mode of interpretation of narrative and non-narrative paintings. *Psychology of Language and Communication*, 10, 45-64.

WPŁYW CZYTANIA LUB SŁUCHANIA INFORMACJI KONTEKSTOWEJ DOTYCZĄCEJ WSPÓŁCZESNYCH DZIEŁ MALARSKICH NA ICH OCENĘ PRZEZ OSOBY, KTÓRE NIE SĄ EKSPERTAMI W DZIEDZINIE SZTUKI

Streszczenie. Celem badania była analiza wpływu zapoznania się z opisem katalogowym w różnych warunkach: przeczytania lub wysłuchania opisu przed obejrzeniem obrazu, wysłuchania opisu w trakcie oglądania obrazu, braku opisu (warunek kontrolny) na ocenę abstrakcyjnego i figuratywnego malarstwa współczesnego. W badaniach uczestniczyli studenci, którzy nie byli ekspertami w dziedzinie sztuki. Badani oglądali reprodukcje obrazów, znając bądź nie ich opisy katalogowe. Obrazy oceniano z perspektywy formy, treści i aksjologii, z wykorzystaniem kwestionariusza oceny dzieła malarskiego. Jego konstrukcję wywiedziono z teorii estetyki Romana Ingardena. Za podstawę teoretyczną badań posłużyły koncepcje: (1) pamięci roboczej, (2) podwójnego kodowania oraz (3) płynności przetwarzania i przyjemności estetycznej. Weryfikowano hipotezy, zgodnie z którymi nieprofesjonalni odbiorcy oceniają wyżej na wymiarze aksjologicznym obrazy, jeśli zapoznają się z ich opisami katalogowymi (zwłaszcza w sytuacji jednoczesnego oglądania obrazu i słuchania opisu); a także jeśli są to obrazy figuratywne. Okazało się, że nieprofesjonalni odbiorcy sztuki bardziej doceniają współczesne obrazy figuratywne niż abstrakcyjne – co potwierdza przyjętą hipotezę. Stwierdzono też, że wartościowanie dzieła przez niedoświadczonego widza zależy nie tyle od podania mu informacji katalogowej, ale od sposobu zapoznania się odbiorcy z tą informacją. Odkryciem nowym w stosunku do wcześniejszych badań jest ustalenie, iż nieprofesjonalnym odbiorcom sztuki współczesne obrazy podobają się bardziej i w większym stopniu wzbudzają pozytywne emocje, gdy ich oglądaniu towarzyszy wysłuchanie informacji katalogowej, niż gdy informacja katalogowa wysłuchana jest tuż przed oglądaniem dzieła. Rezultat ten jest ważny aplikacyjnie i może zostać wykorzystany m.in. przez działy edukacji galerii i muzeów.
Słowa kluczowe: ocena estetyczna, sztuka współczesna, malarstwo abstrakcyjne i figuratywne, informacja kontekstowa

Data wpłynięcia: 6.02.2016
Data wpłynięcia po poprawkach: 30.01.2018
Data zatwierdzenia tekstu do druku: 30.05.2018