

Car Pleasures Revisited: Remarks on the Discourse of Automotive Multimodal Aesthetics

Maciej Adamski
Kazimierz Wielki University, Bydgoszcz

Abstract

This paper attempts to analyse aesthetics in motoring discourse. The car offers aesthetic stimuli which stem from various sources. There are various levels of aesthetic experience that can be used to analyse phenomenon of motoring. Gołaszewska (1984) notices that cars are a very strong manifestation of human desires and are an aesthetic response to social or material deprivations. In the automotive environment we can distinguish also aural impressions (Bull 2005) and impressions connected with information conveyed visually (Müller 2012) which can be classified as an aesthetic value in the car and user context. However, aesthetic factors available to the driver and passengers cannot function in isolation – they are available only during travelling in the car.

Keywords: aesthetics, motoring discourse, car, driver, passenger

Abstrakt

Artykuł jest próbą zaprezentowania koncepcji estetyki w dyskursie motoryzacyjnym. Samochód oferuje bodźce estetyczne, które wpływają z różnych źródeł. Istnieje wiele poziomów doświadczenia estetycznego, które można wykorzystać do analizy zjawiska motoryzacji. Gołaszewska (1984) zauważa, że samochody są silną manifestacją ludzkich pragnień oraz stanowią estetyczną odpowiedź na społeczne i materialne deprivacje. W świecie samochodów można wyróżnić także przekaz słuchowy (Bull 2005) oraz

odnoszący się do informacji podanej w formie wizualnej (Müller 2012), które można zaklasyfikować jako wartość estetyczną w kontekście samochodu i jego użytkownika. Czynniki estetyczne są jednak dostępne dla kierowcy i pasażerów jedynie podczas podróży w pojeździe – nie można doświadczać ich poza samochodem.

Słowa kluczowe: estetyka, dyskurs motoryzacyjny, samochód, kierowca, pasażer

The aim of this paper is to show a selection of observations connected with the aesthetic approach to motoring. Loved by the adamant majority, hated by the growing minority, the car provides a vast range of pleasures that go beyond just the visual standards imposed by the aesthetic primacy of design. In the modern world virtually everything is subject to aesthetisation. We cannot limit ourselves here to the creations seen as immaterial with primarily intellectual value, such as literature, or intellectual-material – paintings, sculptures, or artistic installations. Items of everyday use are subject to aesthetisation and we assign a number of categories to them – beautiful/ugly, interesting/uninteresting. These sensory categories of external perceptions lead to the contextualised definition of aesthetics.

Towards a definition of aesthetics

The classical tradition in Greece concentrated on sensation, perception, and intuition. Modern aesthetics involves taste, and judgments of beauty and quality, but later on the term broadens and encompasses the collective imagination, a worldview, style, or sense of form of cultures, peoples, and historical periods. One may conclude that aesthetics as such has been undergoing change and evolution (Grafton et al. 2010, 11) Not only can we change the perspective or factors determining the very object of aesthetics (cf. broadening the scope of aesthetic determiners) but also we can subject a very broad range of objects to aesthetisation which in classical terms might be a violation of *decorum*. Beardsley (1975, 6) distinguishes between the two concepts – “making something for aesthetic apprehension” and “the work of art”. He claims that the former is just a good starting point but it is not a sole condition to consider naturally all the aesthetic objects as works of art. There are very often mixed motives behind the intentions with which such

objects are created. Some makers do not intend their artefacts to become works of art although they may naturally belong to an artistic genre.

However, as Elgin and Goodman (1989, 190) put it, art and aesthetic value aspire to beauty, and science aspires to truth. These stereotypical conventions try to keep one and the other apart in order to avoid contamination. In the aesthetic discourse it is very important to define the subject and object of the aesthetic experience similarly to the subjects and objects present in the language. This duality is indispensable for the qualification and categorization of objects, attitudes, experiences and values which are considered as aesthetic (ibid.). But aesthetic beauty is very often controversial because, as it is commonly believed, great art requires beauty. In the case of examples provided by Elgin and Goodman (1989, 190), Goya's *Disasters of War* and Botticelli's *Birth of Venus* cannot be called equally beautiful because the atrocities of war and divine beauty are incomparable with respect to their aesthetic value. The same accusation can be levelled in the case of the aesthetisation of the car since it is just a means of transport with purely utilitarian features. The vehicle causes pollution, congestion, and road accidents with casualties. For the opinionated, those facts may exclude the car from the realm of beauty.

Levels of aesthetic experience

Aesthetic experience, which is defined by Roman Ingarden, a Polish philosopher and aesthetician, as taking a suitable approach by the subject of aesthetic process, can be perceived as a reaction to stimulus (Szczepańska 1989, 133–150). In the beginning, there is an initial emotion which is divided into:

- (1) passive and transient perception of quality,
- (2) interest and arousal coming from the perceived quality,
- (3) desire for learning about the item and for direct contact.

Later in this phase, involvement and association with the quality of the perceived object, and the pursuit of visual satisfaction are entailed. The perception of the external world is switched off and it is removed into the background which still remains present. An alteration in the perception or experience of the external world which seems strange or unreal lasts through the whole aesthetic experience until its end and until one takes a practical approach again. Aesthetic experience is isolated from other experiences and

the subject seizes the aesthetic moment. Eventually, everyday life determined by facts and real objects becomes peripheral to the moment important for an aesthetic experience. Then the intentional aesthetic object, which is going to have a certain quality after leaving behind the real layer, is determined. The sense of sight grasps the quality of the object. Thus, emotions and impressions emerge – liking, visual satisfaction, awareness of the presence of a given quality. If the aesthetic object has a more complicated structure, experience develops. The alteration of perception leaves the subject of experience with a harmonized collection of mutual relationships. This alteration shapes a new subject who associates themselves with these relationships and who responds to the created aesthetic object. In the initial phases of the aesthetic process one can see the dynamic and rough development of perception. The end finally brings peace and contemplation (Szczepańska 1989, 133–150).

Sensory impressions and feeling the car

Motoring is based on motion. The car, on the one hand, is a vital element of mankind's struggle for survival – on the other hand, it contributes to its downfall but the objectives underlying the emergence of the motor car seem to be mobility, pleasure and survival – the values positive from the aesthetic standpoint.

In perception, the sensory impressions of sight and hearing are the most important receptors of an aesthetic object. In the case of driving, olfactory and tactile impressions should be added. Taste might be a secondary impression in the motoring context since it obviously plays a secondary role e.g. during drinking beverages while travelling by car or in the case of adding attributive expressions of taste used in magazines with car tests. Smell accompanies impressions connected with perfumes – they trigger off satisfaction derived from the pleasant fragrance. In cars, the fragrance of the interior e.g. leather upholstery or standard fragrance released by air-conditioning/ventilation system (e.g. as in the Mercedes Benz S-Class) – add up to the sensory perception in this context.

Gołaszewska (2001, 187) refers to two divisions of human senses. The first divisions concerns senses of psycho-physical man:

- 1) Radiation senses – sight, heliotropism, sensitivity to radio waves and temperature;
- 2) Feeling senses – hearing, feeling of pressing, touch, sense of balance, sense of space;
- 3) Chemical senses – smell, taste, hunger and appetite, perception of humidity;

- 4) Mental senses – pain, fear, need for fun, sense of time, cognitive ability, intuition, sense of beauty;
- 5) Spiritual senses – feeling of love, sadness, guilt, forgiveness.

The second division includes stimuli¹ which are recognized empirically:

- visual experience (colour, line, shape)²;
- audible experience (pitch of sounds, their harmoniousness, articulation);
- tactile experience (touch, pressing);
- olfactory experience (type and intensity of smell);
- temperature (cold, hot);
- position and motion impressions (static experience of inertia, kinaesthetic impression, dynamic experience of motion) (ibid.)

Visual experience seems to be the most prominent quality which is closely related to language. According to Pinney (2013, 132), it must be said that language colonized the visual because the semiotic value of the visual had to find its code of expression. This view is supported by two senses – (1) visual signs have an arbitrary relation to what they signified; (2) the visual translates itself into linguistic meaning through decoding. Mitchell (1994, 14, quoted after Pinney 2013, 133) notices that the visual is “fraught with ‘textuality’ and ‘discourse’”.

Mimi Scheller (2005, 221–242) defines drivers and passengers as relational entities enjoying particular aesthetic orientations and kinaesthetic dispositions towards driving and travelling by car. The cars of today have been transformed into more intelligent cyber or hybrid systems because of a range of technological improvements for performance, safety, and entertainment, such as seatbelts, airbags, crumple zones, automatic gearboxes, cruise control, keyless entry and ignition, GPS navigation, digital music systems and mobile phones. The adventure with cars in almost every family starts very early. Scheller gives here an example of her daughter who was placed in the car seat at home and from this very moment she was expecting the road show to begin. This personal experience

¹ It should be noted, however, that experiences given above are recognised differently in geo-semiotic interactions (Scollon-Scollon 2003, 16). They are not referred to as empirical and emotional stimuli as in the theory of aesthetics but are linked to the channels of perception: visual space, auditory space, olfactory space, thermal space, haptic or tactile space.

² Predominance of the visual layer of aesthetics is now criticized especially in the case of material objects, cf. Verbeek (2005, 211).

with Scheller's daughter is later extended into the observations of infants who are capable of playing with toy cars and learn how to identify different kinds and makes of cars by the age of two (2005, 227).

Movement and the state of being moved elicit the feelings of being in the car, for the car and with the car from the early age. In Scheller's view the car-driver assemblage creates a broader material relationship between human bodies and car bodies. Not only are humans the main agents among which emotions emerge but also material objects in the material world are capable of creating such bonds between the participants of the car-driver (or) passenger assemblage. Automotive emotions, such as visceral reactions connected with car use, as Scheller puts it, are key factors essential for understanding car-based cultures. Of course, they are as important as technical and socio-economic considerations in this respect. While driving the car one may experience pleasure, fear, frustration, euphoria, pain, and envy which are emotional feedbacks related to the very car as an artefact or driving activity (Scheller 2005, 224). Those emotions are as if pre-programmed by car manufacturers through emotional messages in their advertising campaigns.

**Table 1. Feelings and the car through promotional campaigns
(examples published in the UK)**

| Brand (type) | Promotional phrase | Element in focus | Feeling |
|--|---------------------------------------|--|--|
| Lexus IS200 (Scheller 2005, 224) | 'It's the feeling inside' | Leather seats, air-condition, digital audio system | The feel of the car interior, the feeling in the car, the feeling about oneself in oneself |
| Mercedes-Benz CL-Class | 'Stand back in awe. Sit down in awe.' | Top performance of the V12 engine whisking you from 0–62 mph in 4.6 seconds. | Respect, fear |
| BMW (<i>Car</i> , April 2007, issue 536) | 'Do you feel more THUNK or VROOM?' | Allusions to the audible part of motoring experience – door thunk-sound and engine vroom-sound | Sense of hearing |

As Scheller points out (2005, 235), feelings related to human bodies and car bodies are made manifest in sexual analogies too. Renault, while introducing its new luxurious models to Britain, stressed the design in motion and sensual velocities of the Avantime

and Vel Satis models. The exterior of the car attracts attention that resembles the attention during the first contact with another man or woman people are attracted to. The promotional text allures with the seats and the trim that is touched by the driver and passengers. What is more, the car receives the role of an agent and even possesses the driver. On top of that, it can be argued that this example is an Anglo-French reinterpretation of cultural hybridity which underscores modernity where high culture and popular culture blend successfully. What is more, the car receives the role of an agent and even possesses the driver (Scheller 2005, 235).

Feelings connected with the car are not limited to those between passengers, drivers and their cars. They are also connected with the national identity of the companies and very often constitute a springboard for successful sales of cars (Scheller 2005, 235):

Table 2. National feelings about the car (examples published in the UK)

| Brand | Promotional phrase | Feature | National feeling exposed |
|--|---------------------------|--|---|
| Nissan Micra (Scheller 2005, 235) | 'Do you speak Micra?' | Language, the car as a tool for communication | Language as a supranational bond |
| Audi A5 (<i>Car</i> , August 2007, issue 540) | 'Vorsprung durch Technik' | German identity – the slogan in original language, advanced German engineering | National traits, superiority of the brand |
| Seat Ibiza FR (<i>Car</i> , March 2007, issue 535) | 'Auto emocion' | Motoring emotions pertaining to the sports brand | National traits |

Identity connected to the place of manufacture of the car generates positive associations and the feeling of comfort. National traits used to promote cars enable users/drivers to participate in the multinational community of machines and users who communicate with the messages defined by the places of origin of a given make.

Aesthetic perception is encoded also in the sounds of the on-board audio systems (Gilroy 2001, 96–97 quoted after Bull 2005, 243–250). The 20th century is very often defined by three facts – the development of the marketable automobile, the moving image, and finally by mechanically reproduced sounds. First radios were installed in American cars in the 1930s; in the 1960s cassette decks became very popular; whereas today it is possible to switch between the radio, CDs, and portable devices at will (Bull 2005,

245–246). The automotive actors become externalized from the surrounding when they get into the car and listen to their favourite music. Bull (2005, 254–255) creatively links the human need of aural experience explored by Theodor Adorno, a German philosopher and theorist of music, with the car. Adorno noticed that sound technologies change human perception of connection and proximity explaining that the technological form for carrying sounds constructs the space of the so called ‘we-ness’. The car as an auditory box constitutes the homely warmth whereas the external world is the public ‘chill’ (Bull 2005, 254–255). The message coming from the mechanised medium is associated with the warmth generated by the accompanying music.

The car as the system of sounds

Bull (2005) quotes 24 interviews with drivers who talk about their driving experience. Some of them complain about driving to the sound of the engine alone, so they automatically switch their audio systems on to “get themselves ready for the day”. The sound from the speakers becomes a competition to that of the engine. Drivers in big cities, such as London, get immersed with techno-oriented dance music which is not very challenging but good for the fast-moving urban reality. They even call the music playing in their car “the driving music”. If they set off for a longer trip by car, they want to have a soundtrack of their trip – they redefine the concept of film soundtrack and give a new meaning to it. They treat the journey as a film watched from inside the car. While listening to music, they just relax and turn the volume up – the louder the better. The idea of loud music in the car gained huge popularity and widely circulates on social network sites in the form of a meme: “Never underestimate the therapeutic power of driving and listening to very loud music” (IS1).

The automotive-aural reality, the sounds entwined with pleasures derived from driving develops as a mobile subsystem consisting not only of the car, the audio system, but also dedicated portable devices which in some cases become portable components of the system of automobility that can be taken out everywhere:

Indeed I would suggest that the twenty first century will be the century of ‘inhabited machines’, machines inhabited by individuals or very small groups of individuals. It is through the inhabiting of such machines that humans will come to ‘life’. Further, machines only function because they are so inhabited; they are machines only when one

or more humans come to inhabit them. Such machines come to 'life' when they are humanly inhabited. These inhabited machines are miniaturized, privatized, digitized and mobilized ... Such machines are desired for their style, smallness, lightness and demonstrate a physical form often closely interwoven with the corporeal (Urry 2002b, quoted after Burns 2008, 150).

John Urry refers to several concepts that turn out to be undiscerned reality – people take it for granted and can barely appreciate their benefits. They more often condemn technophiles and see disadvantages of advanced personal technologies. The world of machines has become inhabited for the personal well-being of people. The relationship is mutual and reciprocal since the new life begins for the machine itself but also for the new man in the digital era. The aesthetic experience stems not only from the sound surface but also from the proximity of stylish, sleek design of appliances people take everywhere. Each sphere, be it the audio device, the car or eventually the human being, has their own essence. Those 'essences' permeate themselves more and more closely producing more and more impressions.

iPod culture, which dominates all portable MP3 devices, emerged when Apple introduced iPod in 2001 (Burns 2008, 148). This fact was preceded by the invention of the file digital format called MP3 (Motion Picture Export Group-1 Audio Layer 3) in 1991, which began the digital era of compressed storage, distribution and portability of music production. Since its release, the iPod has been in the lead product as far as portable music devices are concerned and has influenced domains of human activity other than just the music industry itself. Nowadays the motoring industry has recognized the power of the media and entered into the relationship with infotainment.

Information aesthetics in the car

Information aesthetics, as described by Maria Gołaszewska, boils down to cybernetics and technological information methods. Max Bense, a philosopher and semiotician, was researching early information technology with respect to aesthetics in the 1950s and 1960s (Klüttsch 2007, 421–425). His research included information aesthetics of computer graphics. In a general sense that seems vital to extend the objective, scientific perception of aesthetics onto the ground of motoring, Gołaszewska introduces the analogy of structure for all physical phenomena occurring in the nature to the structure of human

facts (2001, 184). The world of mathematics and life sciences and art allow for the implementation of the same research methods. In many cases information aesthetics has to go beyond science and empirical knowledge and concentrate on intuitive ingenuity because the world consists of two processes – physical and aesthetic. Bense described aesthetics as an equation for entropy – measurement for indefiniteness, chaoticity, and degree of disorder:

Artistic and aesthetic processes inhibit the entropy of anthroposphere, bring a tense moment that induces change, and a transformation to prevent the termination of movement necessary for the occurrence and duration of any process. The new works of art characterized by an unlikely, yet unpredictable, rearrangement emerge; works of art are single, unique and represent a peculiar manifestation of mankind struggle for survival. Aesthetic values are grounded in this happening as creation and reception, propelling indefiniteness while existing also in the natural environment (Gołaszewska 2001, 185, translation mine, MA) .

The Graphic User Interface (GUIs), which is the core of the interactive devices, represents information and functions available to the user through graphical icons and visual indicators. GUIs are nowadays taken for granted because they have successfully replaced verbal commands on PCs and mobile phones. The invisibility of these amenities and intuitive interfaces dismissed complicated computer codes. The first GUIs were proposed by Xerox in 1981. The young Steve Jobs, CEO of Apple, in 1984 installed his graphic interface on the Apple Macintosh and finally, in 1990 Microsoft introduced the Windows operating system which became a worldwide standard in graphic designs of PC operating systems. GUIs showed its full potential with multi touch screens. The first touch screen was developed in 1965 by E. A. Johnson in Britain at the Royal Radar Establishment. This technology enables the user to operate a device with touch. The information encoded in the GUI icon responds to the disruption of an electrical field. In order to describe the actions users have to perform in order to operate the device, we use the names of the moves made on the screen – tap, drag, swipe, pinch, flick, or twist of the fingers (Coates – Ellison 2014, 17–18).

Taking the example of the Audi brand belonging to the Volkswagen Group, one can observe the fusion of the car with infotainment devices. iTechnologies or even iCulture consisting of iPods or iPhones or iPads can be successfully connected to the car info-

tainment system providing a broad range of services (IS2). It is possible through iPod adapters which were developed right after the launch of iPod in 2001 and 2002. With the course of time, new devices enriched the portfolio of Apple delivering more mobile services, which were up to then reserved only for desktop computers or laptops. The following list of options is available for the all-new A3 and A3 Sportback models available from 2012:

City Events, Facebook, Flight information, Mail, Messages, News online, Navigation with Google Earth™ mapping service and Google Street View™, Picturebook Navigation, Point-of-interest search, Travel information / weather, Fuel stops, Twitter, Online traffic information, Wi-Fi hotspot, Destination entry via myAudi or Google Maps™, Train information.

The graphic functions are available through the mediation of iPhone or iPad devices through the dedicated Audi Multi Media Interface. Audi MMI premiered in 2010 in the A8 model range with a revolutionary capacitive touchpad (Müller 2012, 24). The tool proved to be a precise device for entering navigation details or phone numbers at the touch of the driver's fingers. The whole concept was further developed in 2013 the all-new A3 model where the touchpad was transformed into the touchwheel. The device includes the capacitive panel which is touch sensitive. The user may enter any graphic sign which is then accepted by the interface by returning acoustic feedback to the user. The idea behind this communicative device involves the implementation of haptics. Of course, haptics means non-verbal communication by gestures. These are used in this case to manage electric capacity in the electric chip, which is then analysed by the integrated processor. The shapes in the form of letters from various alphabetical systems (Latin, Arabic or Cyrillic alphabet) create a unique human-machine language to command the navigation system, DVD or images (Müller 2012: 24–25). When a corresponding MMI-dedicated application is uploaded on iPhone/iPad, it is possible for the user to use functions via the on-board wireless system. The pleasure of driving or being in the car while stopped is enriched by aural and visual material. Conventional message related to positioning or traffic is still the core of multimedia system though.

Haptics and acoustics, the core features in aesthetics, are widely used in car interior design especially. At Audi, a special team has been developing the way in which the driver and passengers experience the car interior. It is said that 80% of the stimuli from our

surroundings come from touch. Human fingers are capable of sensing the most gentle touch, vibrations or texture of the surface. Kinaesthetic perception, in turn, provides an input for the brain about the size of the object being touched. On top of that, through the mediation of haptic perception, the brain notices the difference between the real aluminium surfaces and their plastic look-alikes and obviously prefers the ideal aluminium touchwheel. But the very sense of touch and haptic experience is augmented by acoustic impulses. When the car interior is under development, the perfect conditions for optimal frequencies at which human ear is able to get the acoustic feedback after a given button has been pressed or clicked are agreed with the interior stylists and engineers. The audible part of feedback obtained while operating the functions available from the buttons and levers on the dashboard and panels has become the strong part resonating precision, emotions and reliability in the Audi brand (Müller 2013, 27).

All the details defining the general concept of aesthetics seem to be crucial in the discussion of the car as an aesthetic object. If one juxtaposes allegedly incongruent perceptions and aesthetic needs in the car context, aesthetic needs are still fully satisfied. Gołaszewska in *Estetyka rzeczywistości* (1984, 217–224) makes an attempt at encompassing car as an aesthetic object in our reality. She uses the car in order to show the aesthetic relationship between humans and cars. Car dominates the man, seizes him, and becomes value in itself. On the one hand, car owners get addicted to the car. They excessively take care of it, and seem to forget about the primary function of the car, which is utility. On the other hand, the car symbolizes social position, the attitude towards material objects, love for order or keeping surrounding tidy. These environments can constitute a plain for social interactions. Mobility of car gives vent to one's emotions, e.g. during fast drive. According to Gołaszewska, joy is manifested in the seizure of space and in the control over machine. Driving style shows very often the second nature of man who wants to condescend towards others and show their superiority. The car environment is a compensation for everyday misfortunes.

Concluding, the car complements the personality of man as if it was an aesthetic combat with deprivations. The car is also a fulfilment of sophisticated needs for coexistence, sense of aesthetics, and getting closer to the very nature, development of own capabilities and overcoming personal constraints. The car facilitates tightening bonds with the world and constitutes a socializing factor. As all the emotional bonds with the car go beyond any economic costs and benefits and seem to outweigh rational opinions concerning the public good or prospects of the planet, it is not possible to neglect or condemn the car-related aesthetic pleasures coming from various sensory sources.

Works cited

- Beardsley, Monroe C. 1975. *Semiotic Aesthetics and aesthetic Education*. [in:] *Journal of Aesthetic Education*. Vol 9. No. 3 (Jul. 1975. University of Illinois Press (<http://www.jstor.org/stable/3331902>) (date of access 5 October 2014).
- Bull, Michael. 2005. *Automobility and the Power of Sound*. [in:] Featherstone, M. (eds.) *Automobilities*. London: Sage Publications.
- Burns, Peter M. et al. 2008. *Everyday Techno-social Devices in Everyday Travel Life: Digital Audio Devices in Solo Travelling Lifestyles*. [in:] Burns, P. M. et al. (eds.) *Tourism and Mobilities: Local-Global Connections*. CAB International.
- Coates, Kathryn, Ellison, Andy. 2014. *An Introduction to Information Design*. London: Laurence King Publishing.
- Elgin, Catherine. Z. – Goodman, Nelson. 1987. *Changing the Subject*. [in:] (ed.) Shusterman, R. 1989. *Analytic Aesthetics*. Oxford: Basil Blackwell Ltd.
- Gołaszewska, Maria. 2001. *Estetyka współczesności*, Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Gołaszewska, Maria. 1984. *Estetyka rzeczywistości*, Warszawa: Instytut Wydawniczy PAX.
- Grafton, Anthony. Most, Glenn. W, Settis, S. (eds.) 2010. *The Classical Tradition*. Cambridge, Massachusetts, and London, England: The Belknap Press of Harvard University Press.
- Klüttsch, Christoph. 2007. *Computer Graphic–Aesthetic Experiments between Two Cultures* http://www.academia.edu/755230/Computer_Graphic-Aesthetic_Experiments_between_Two_Cultures (date of access: 6 October 2013).
- Müller, Hermann. J. 2012. *Magiczny panel. Audi magazyn*. 04/2012. Warsaw: Yo Media Consulting.
- Müller, Hermann. J. 2013. *Wszystko na kliknięcie. Audi magazyn*. 03/2013. Warsaw: Yo Media Consulting.
- Pinney, Christopher. 2006. *Four Types of Visual Culture*. Tilley, Christopher, Keane, W. Kuchler, Susanne. Rowlands, Michael. Spyer, Patricia. (eds.) 2013. *Handbook of Material Culture*. London: Sage Publications Ltd.
- Scollon, Ron. – Scollon Suzie, W. 2003. *Discourses in Place. Language in the material world*. London: Routledge.
- Scheller, Mimi. 2005. *Automotive Emotions*. Featherstone, M. (eds.) *Automobilities*. London: Sage Publications.

Szczepańska, Anita. 1989. *Estetyka Romana Ingardena*. Warszawa.

Verbeek, Peter, P. 2005. *What things do. Philosophical Reflections On Technology, Agency And Design*. University Park: The Pennsylvania State University Press.

Car, March 2007, issue 535

Car, April 2007, issue 536

Car, August 2007, issue 540

Internet sites

IS1 – <http://lessonslearnedinlife.com/> (date of access: 17 February 2014).

IS2 – http://www.audi.com/com/brand/en/models/infotainment_and_communication/audi_connect_services.html#source=http://www.audi.com/com/brand/en/models/infotainment_and_communication/audi_connect_services.html&container=page (date of access 18 February 2014)