A SEMIOTIC TYPOLOGY OF DOCUMENTARY FILM ACCORDING TO PEIRCE'S SYSTEM OF 10 CLASSES OF SIGNS

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Abstract

Semiotic analysis of films is usually reduced to a trichotomy of signs invented by Charles S. Peirce in 1885: icon, index, and symbol. However, later he proposed two more trichotomies and systematised them into 10 classes of signs. In this article, a typology of documentary films based on this system is developed. The empirical material of the study is the newsreels produced by the Riga film studio in 1946–1990. As television took over the information function in early 1960s, documentary filmmakers engaged in bold experimenting with the means of cinematic expression. The experiments resulted in a stylistic diversity of the audiovisual information genre that can be systematised analytically with the help of Peircean semiotics.

Keywords: semiotics, Peirce, documentary film, newsreels, communication in the Soviet Union

Soviet documentary film: Ideology, history and pleasure

My interest in documentary film of the Soviet period developed during the COVID-19 pandemics. Due to restrictions on public life, online digital databases were the only source of primary information for the researcher. At that time, Latvian State Archive of Audiovisual Documents had provided free access to all digitalised documentaries produced in Latvia in the twentieth century. At first, I watched a dozen randomly selected newsreels of Soviet era to understand the basic principles of audiovisual propaganda. As a researcher, I discovered that this documentary

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genre was not homogeneous and far from dull indoctrination. The filmmakers experimented with visual and verbal narrative techniques, introduced uncommon persons and places. As an ordinary spectator, I was excited to see familiar places as they were decades ago; I found shots of familiar people and even of my mother. Sharing some newsreel segments on social media, I got an increasing number of subscribers who shared their memories about the recognised people, locations, and events. Films created for other purposes and not intended for posterity (who could have imagined then that once anybody would be able to find these shots in a few seconds?) are authentic documents of our private history now. With good reason, Bill Nichols wrote: "Every film is a documentary. Even the most whimsical of fictions gives evidence of the culture that produced it and reproduces the likenesses of the people who perform within it" [Nichols 2001: 1]. To make sense of the stylistic diversity and changing interpretation of what was considered boring audiovisual propaganda, I turned to Charles S. Peirce's system of 10 classes of signs. The aim is to develop a semiotic typology of documentary films that establishes principles of a research methodology.

In 1944–1990, the Riga Film Studio annually produced up to 48 newsreels. Each newsreel usually included 5–7 news segments, and the running time was close to ten minutes. A newsreel (or other documentary of the same duration) opened every cinema show, hence, besides the announced fiction film, the audience was obliged to watch the newsreel. The main newsreel was called *Padomju Latvija / Soviet Latvia*. Gradually, thematically specialised issues appeared under the original titles: *Pionieris / Pioneer* was addressed for school children, *Sporta apskats / Sports Review* covered sports events, *Māksla / Art* was dedicated to arts and culture, the target audience of *Karavīrs / Soldier* consisted of young men and army conscripts. Each of these titles was produced four times a year. The studio also produced documentaries, educational and promotional films of various durations.

In Marxist political philosophy, labour productivity and social cooperation are human goods par excellence [Canto-Sperber and Ogien 2017]. No wonder that the promotion of technological innovation and moral incentives for workers were crucial tasks of the Soviet press and television [Kruk 2015, 2023]. Content analysis suggests that documentary film was no exception. Eighty systematically sampled newsreels of *Soviet Latvia* include 538 news segments that cover industrial and agricultural production (31% of features), arts and culture (15%), ceremonial political events such as elections and parliament sessions (8%), commemoration of historical events, and persons (8%). The communicative purpose of these messages was to report achievements (32%), entertain (11%), portray outstanding workers and artists (10%), disseminate knowledge and skills (8%), and narrate the past (7%). The content looks routinised and dull indeed. Probably for this reason filmmakers avoided synchronous

sound until the mid-seventies. Rare interviews in the 1960s were sequences of stock phrases. Critics evaluated live sound as a failure [Ziemele 1967, Pauzers 1968]. Eventually, the studio decided to forgo interviewing as much as possible. The image was still another matter. Due to attractive visual content, these films are worth watching as documents of the epoch. For the researcher, there are other reasons to study newsreels. First, the newsreels belong to a definite genre which is a neutral background for identifying stylistic experiments. Second, informative messages tend to a narrative closure and an integral visual style that facilitate the classification of audiovisual messages. Third, a random diachronic sample of short newsreel segments (90–120 s) is representative of the long period but not too large for a time-consuming qualitative analysis.

Peirce's 10 classes of signs

It is no exaggeration to say that most visual communication scholars are familiar only with Peirce's first system of three classes of signs proposed in 1885. The trichotomy icon, index, symbol conceptualises the sign-object relationship. Later, Peirce developed systems of 6, 10, 28, and 66 classes of signs. Discussion thereof requires an acquaintance with the original terminology, which will be briefly explained below. A more comprehensive introduction to Peircean semiotics can be found in the special literature [Borges 2019; Farias and Queiroz 2014; Jappy 2013; Merrell 1996: 3–70; Short 2007: 178–262].

Documentary filmmaking is a process of semiosis that transforms the reality phenomena into audio (speech, incidental sound, music) and two-dimensional visual signs. Applying Peirce's terminology, one can explain the film semiosis, as follows. The film intends to inform about objects possessing volume, mass, texture, and other physical characteristics - this is a dynamical object which, according to Peirce, is efficient but not immediately present in the sign [1958: 8.343]. The film provides only partial information as a sequence of two-dimensional images captured and edited from the point of view of the cameraman and the film director. The spectator can perceive the dynamical object only insofar as it is represented by the sign – this is the immediate object [1958: 8.343]. Since the sign carries only partial information about the dynamical object, the spectator himself must interpret the meaning that is not accessible immediately. The interpretation process consists of three parts. First of all, the spectator perceives forms, colours, and light contrasts that produce impressions on the mind, but still, these are not the spectator's actual reflections or reactions, Peirce explains [1958: 8.315; 1977: 110–111]. This is the immediate interpretant "that would enable a person to say whether or not the sign was applicable to anything concerning which that person had sufficient acquaintance" [Peirce 1977: 110-111]. From this percept, the spectator develops an idea about the missing properties of the dynamical

object. The reflection upon the sign configures the dynamical interpretant which allows the spectator to understand the object, whereas the final interpretant (also called "normal interpretant") is configured by "the way in which every mind would act" [1958: 8.315]. The final interpretant is formulated "after sufficient development of thought" [1958: 8.343]; being general in character, it allows intersubjective agreement and guarantees future interpretations.

In the process of semiosis, the sign is a mediator between an object and its meaning. Sign as such is a complex phenomenon described by three trichotomies. The first describes how signs are mobilised for communicative purposes. The qualisign is of the nature of appearance. It is a set of visual elements that demonstrate their mutual relations, patterns of combination: colours, lines, forms, and rhythm of editing. Sinsign is an individualisation (hence the prefix sin - joint action) of appearance, a representation of a unique object or fact. Legisign is a general type (from the prefix legis - "of the law"), and is recognised as a shared semiotic form that can be used to exchange meaning in various circumstances. Legisigns specific to film are the principles of montage. The documentary genre suggests that a sequence of shots represents the spatio-temporal unity of the event that can be secured in various ways. In a customary practice, establishing long shots demonstrate the context of events. To reveal the personality of the protagonists, the filmmakers recourse to staging. Everyday interactions with people and objects staged in private and public settings provide spectators with familiar contexts necessary to understand the characters and motivations of the protagonists. The Russian montage splits an event into a series of close and medium shots; the spectator reconstructs the unity relying on the personal experience of acting in similar situations. Juxtaposition of two unrelated shots can evoke a new meaning: this editing technique is known as the Kuleshov effect.

The second trichotomy describes the relation of the sign to the represented object: likeness, contingency, and convention. Icon refers to the object merely by virtue of characters of its own [Peirce 1932: 2.247]. The index is really related to and really affected by its dynamical object [Peirce 1977: 33; 1998: 292]. The symbol refers to the object "by virtue of a law, usually an association of general ideas, which operates to make the symbol interpreted as referring to that object" [Peirce 1998: 292]. Symbols are the products of social agreement; their use is institutionalised at least in some spheres of social life. Jean-Marie Klinkenberg distinguishes between two subcategories of symbols [Peirce 1996: 189]. Symbols stricto sensu like words can be divided into discrete units (morphemes, sememes) which can be analysed independently, whereas symbols like flags are holistic units. For the purposes of documentary film analysis, verbal and visual symbols should be distinguished. The verbal symbols stricto sensu are words that denote the image; verbal symbols that connote the image (metaphors) evoke attitude. Visual symbols stricto sensu are

non-verbal behaviours denoting professions (e.g., gestures of a traffic policeman); connotative visual symbols are images carrying conventional meaning (e.g., launch of a space missile stands for technical progress).

The third trichotomy describes the variability in the interpretation of signs as a discourse. A rheme is "a sign of qualitative possibility, that is, it is understood as representing such and such a kind of possible object; a dicent is a sign which, for its interpretant, is a sign of actual existence; an argument is a sign of law" [Peirce 1998: 292]. Interpreted as a rheme, a film is an example of camera work, montage, or narrative technique. In this article, the newsreels are treated exactly as rhemes: examples of audiovisual communication that illustrate 10 classes of signs. In general, however, documentaries are the dicents, because they show the actual persons, things, and places. My social media subscribers interpret newsreels as dicents that represent something they are familiar with. As for critical researchers, they tend to interpret actual phenomena as symbols that refer to social class, political system, or ideology: for them, filmic signs are arguments.

Setting the trichotomies in three columns, one can combine their components in ten classes of signs (Table 1). In other words, spectators have ten possible ways to interpret newsreels. The first trichotomy allows three ways of recognising something

Table 1
Sign trichotomies.

	Sign trichotomies			
Mode of being	Sign in itself	Relation of the sign to its object	Interpretant	Form of experience
FIRSTNESS Qualitative possibility	QUALISIGN An appearance of quality	Icon Sign has some character of the object	RHEME A sign of possibility	MONADIC No reference to something else; the sign is appreciated it itself
Secondness Actual fact	SINSIGN An individual token (object, fact, event)	INDEX Sign has some existential relation to the object	DICENT A sign of fact	DYADIC Reference to an existent object
THIRDNESS Law that will govern facts in the future	LEGISIGN A general law, habit, convention, type	SYMBOL Sign has a relation to the interpretant of the object	ARGUMENT A sign of reason	TRIAD Reference to an object by means of a convention

The table compiled after Peirce [1955: 75-118].

Table 2
Ten classes of signs.

Class of signs	Mode of being	Peirce's definition	Merrell's designation
1	111	Mode of apprehension of the sign itself	Feeling
2	211	Mode of presentation of the immediate object	Imaging
3	221	Mode of being of the dynamical object	Sensing
4	222	Relation of the sign to its dynamical object	Awaring
5	311	Mode of presentation of the immediate interpretant	Scheming
6	321	Mode of being of the dynamical interpretant	Impressing-Saying
7	322	Relation of the sign to the dynamical interpretant	Looking-Saying
8	331	Nature of the final interpretant	Identifying–Saying
9	332	Relation of the sign to the final interpretant	Perceiving attributes of the sign–Saying
10	333	Triadic relation of the sign to its dynamical object and to its final interpretant	Realising

Source: Peirce [1958: 8.344], Merrell [2003: 53].

as a sign, the second trichotomy allows three relations of the sign to the represented object, and the third trichotomy allows three ways of understanding meaning. The components of the upper row called "sensible" or "Firstness" are the simplest: These are the pure forms perceived by the senses; they do not refer to anything other than themselves. The components of the middle row called "existential" or "Secondness" are related to reality, they refer to a unique existing phenomenon. The components of the lower row called "conventional" or "Thirdness" are generalisations that enable communication about other phenomena. The rules limiting the number of signs to ten are simple: if the component of the first trichotomy is Firstness, then the dependent elements can only be of Firstness, if the component of the first trichotomy is Secondness, then the dependent elements can be of Firstness or Secondness, if the component of the first trichotomy is Thirdness, then the dependent elements can be of Firstness, Secondness or Thirdness.

Ten classes of signs have different abilities to represent objects and suggest interpretants. Floyd Merrell [2003] coined each class by a suggestive term that captures the essence of semiotisation and enables a concise and vivid reference to them. Both classifications are listed in Table 2.

The mode of being of the 1st class of signs is 111. It means that the sign in itself, the relation of the sign to its object, and the interpretant involve only Firstness. Such

a film proposes a monadic experience of the formal properties of audiovisual signs: form, contrast, rhythm.

The sign classes 2 to 4 involve Secondness: these films propose a dyadic experience of the object as it is represented (immediate object) or as it exists (dynamical object).

The sign classes 5 to 10 involve Thirdness: these films propose a triadic experience of the object by virtue of conventions. The legisign suggests a rule of treating the percept as a sign, while the symbol as a component of the signs 8 to 10 suggests also the meaning which cannot be found in the direct dyadic experience of the object as it is represented.

Documentary film studies and semiotics

The existing typologies of documentary film do not refer to semiotics. The pioneering work of Erik Barnouw [1974, 1993] was a social history of the changing role of filmmakers: prophet, explorer, reporter, painter, advocate, bugler, prosecutor, poet, chronicler, promoter, observer, catalyst, and guerrilla. Michael Renov [1993] considered the sender's communicative intentions: to record, persuade, analyse and express. Patricia Aufderheide [2007] focused on the film content: public affairs, government propaganda, advocacy, historical, ethnographic, and nature. For Bill Nichols [1991, 2001], the sender's positioning in relation to subjectivity and objectivity of documentary discourse is important: expository, poetic, observational, participatory, reflexive, and performative film. Keith Beattie [2004] followed suit, adding the recent mixture of reality and fiction on television: reconstruction (docudrama) and observation-entertainment (reality TV). William Guynn [1990] studied the ways how spectators addressed cinematic codes in fiction and documentary film.

The contacts between film studies and Peircean semiotics cannot be recognised as a success story. Peirce was writing at the very advent of the cinema, consequently, his theory of visual signs does not cover the moving image. Peter Wollen [1969] introduced Peircean semiotics to film studies in a reduced form. Wollen picked up only one trichotomy of signs that explains the relation of the sign to its object. Taken alone, it cannot address the semiotic complexity of various styles and genres of audiovisual media. All films are necessarily icons because the picture resembles objects; at least all analogous films are indexes because they carry the optical traces of objects; some images are symbols because they refer to something else than what we see on the screen. Despite the limitations, Wollen's selective introduction to Peirce dominates the theory of audiovisual [cf. Altman 2017; Beattie 2004: 10–25; Kuhn and Westwell 2020: 366–367; MacDougall 1998: 236; Mitry 2000; Nichols 2010; Plantinga 1997]. However, even in this reduced version, Peirce remains so marginal

that a comprehensive historical overview of the film semiotics mentions no research paradigm inspired by his semiotics [Kickasola 2009].

Among the established theoreticians only Gilles Deleuze [1986] overcame the limitations of the icon, index, symbol trichotomy. He relied on the Peircean concept of a mode of being to build a taxonomy of the film signs. Unfortunately, Deleuze's superficial reading of Peirce resulted in an unsystematic list of signs. Ronald Bogue [2003: 65–105] inferred "more or less" 18 possible signs in Deleuze's theory. Some are difficult to understand and operationalise for fiction film and adapt to documentary film analysis. Some other signs could have been conceptualised in the Peircean paradigm more consistently, but Deleuze ignored many other concepts, notably, the first and the third sign trichotomy. Peirce's originality was overshadowed by a great dependence on Henri Bergson. Deleuze reproaches Peirce for his exclusively cognitive concept of sign; nevertheless, Peirce had also envisaged gratification and action as the final interpretants that do not require cognitive elaboration [Peirce 1958: 8.372]. Bogue [2003] and Sobchak [1991] provided a substantial critical analysis of Deleuze's sign system. I should add to their criticism the misconceived communication of emotions. First, Deleuze's affection-image reduces the expression of emotions to facial mimics and, consequently, to close-up. The motricity of the entire body is treated in terms of action-image: a shot that includes the actor's body interacting with an object and/or an environment. Nevertheless, the body itself is a sign vehicle of emotions [cf. Fontanille 2001; Kruk 2021]. The appearance of a still or walking body (apparently not interacting with something else) could suffice to evoke a gut feeling about the inner state of the person. For actor Oleg Basilashvili, it sufficed a peculiar gait and stooped posture to create a character of timid and indecisive intellectual in Осенний марафон / Autum Marathon (1979, USSR).

Second, Deleuze conceives expressions of emotions as natural iconic signs based in biology: thus, the Firstness of facial expression. Three centuries earlier Charles LeBrun [1702] strived to design an exhaustive album of emotions as a manual for painters; the scholar of non-verbal communication Paul Ekman [1969] reduced the number of natural emotions to six, whereas cognitive theory treats emotional expressions as conventional symbols at large [e.g., Solomon 1976]. The current view is that emotions are both natural and socially learnt phenomena [Hufendiek 2015]. Contrary to Deleuze, facial close-ups can have three modes of being. As the Firstness, they can impress at pre-reflexive level, as the Secondness, emotional expressions can be understood in the given context, but as the Thirdness, they require knowledge about non-verbal communication cultures.

Peirce's extended system of ten classes of signs has a wider potential for investigating the role of image, verbal comment, and the generic definition of film. Hing Tsang [2013], the filmmaker and scholar, was the first to apply the system

in documentary film analysis. Unfortunately, he neither proposed an exhaustive description of all ten signs as they are manifest in the film, nor developed a research methodology of shots and sequencies. In a more convincing way, Pierluigi Basso Fossali and Maria Giulia Dondero [2006] adapted ten classes of signs to the analysis of photography, but motion pictures were not within their field of interest.

Ten classes of signs of documentary film

- 1. Feeling or Mode of apprehension of the sign itself. The components of this class of signs belong to Firstness. By themselves, these signs do not communicate information; they are building blocks for other classes of signs. The spectator apprehends the sign in itself, the plastic qualities of shots: colours, forms, light, rhythm. The filmmakers build geometrical visual compositions of industrial objects from unusually low and high angles, harmonise and contrast the shots that captured the motion direction of objects, and use match cut editing. In a 70-second feature about a weightlifter, the director put together a sequence of several repeated attempts to lift the bar, focussing on the facial expression and muscle tension of the athlete (*Sports Review*, No. 4, 1970, Laima Žurgina, 2:48–3:58)¹. The newsreel feature is a self-sufficient sign that does not carry information about something else, but directs attention to the film making technique. The sign can also be apprehended negatively. An entire issue of *Soviet Latvia* was assembled of mostly close and medium panning shots; their quick succession creates an impression of decontextualised chaotic movement (No. 15, 1963, Irina Mass).
- 2. Imaging or Mode of presentation of the immediate object. The sign class model, sinsign icon rheme, suggests that a sign-event is interpreted as possibly (rheme) standing for its object (icon) [Peirce 1932: 2.255]. The Secondness of the sinsign means that the sign refers to an existing object which we identify through the iconic representation, although as a rheme the sign connotes no additional information. The sign presents the immediate object, which is the object as the sign represents it [Peirce 1958: 8.343]. The purpose of this sign is to create visual impressions in the spectator's mind, but it does not require further cognitive processing. A newsreel feature appeals to the spectator's imagination by evoking the pleasure of recognising something familiar. Such stories depict rural and urban landscapes in different seasons and weather conditions. The launch of a new public bus transportation line served a newsworthy event to create a road movie depicting countryside landscapes (*Soviet Latvia* No. 29, 1955, Ada Neretniece, 5:06–6:36).

¹ The reference mentions the newsreel title, issue number, year, director's name, the beginning and the end of the cited feature. Internet users with the Latvian IPs can access films at the webpage of the Latvian State Archive of Audiovisual Documents, https://redzidzirdilatviju.lv/en/.

Today, the feature can be perceived as the fourth class of signs because we witness transformations that have occurred in these areas.

3. Sensing or Mode of being of the dynamical object. The sign enables a sensual experience of those properties of the dynamical object that cannot be captured by flat images. The model sinsign - index - rheme suggests that a signevent is interpreted as possibly standing for another event represented by an index [Piece 1932: 2.256]. The indexical sinsign shows the dynamical object as it exists here and now, but the rheme still does not permit a cognization of its properties. The term "sensing" suggests that the spectator can apprehend the dynamical object by "feeling into" the context of its existence. Cameramen examine the dynamical object from unusual points of view that the film audience cannot access in real life: from the top of a power mast and factory chimney, walking on the shaking timber float, standing near to the brightly lit open-hearth plant. The camera allows the viewer to experience the perspective of the worker. A new sensory experience is not limited to the unusual points of view. The picture reduces dynamical objects to two dimensions, whereas they possess volume and mass, as well as kinetic, olfactory, and textural properties. To some extent, the human brain can reconstruct these properties from two-dimensional visual input. Observing the motion of people in the film, spectators can understand their sensory experience. The brain mechanism that enables understanding of motor experience is known as the mirror neurone system. Mirror neurones are activated when we execute movements and also when we perceive movements executed by others. It is possible to understand actions executed by others directly, without relying on explicit inference. Motor cognition is related to the spectator's own motor expertise acquired during his development [Gallese et al. 1996; 2009]. Film audiences can cognise the motion even reacting on the movement of camera [Gallese and Guerra 2014].

A newsreel segment about timber floating carries any newsworthy information: the voice-over only identifies people and place (*Soviet Latvia* No. 25, 1965, Mihails Poseļskis, 1:16–2:38). The cameraman is on the log raft alongside the timber floaters; his camera focuses on the physical effort of the workers and the coordination of bodily movements. The sight of workers walking on an unstable, slippery surface evokes kinetic sensations. The effect of the Sensing class of signs can be grasped by comparing this feature with another report about timber floating that is concentrated on details and does not evoke a comparable feeling (*Soviet Latvia* No. 20, 1961, Maija Selecka, 4:08–5:32). This 85-second-long segment contains nine long shots showing full body in action and the environment, and 23 medium shots showing parts of the bodies and small fragments of the environment. To compare, Poselsky's feature of the same length contains 18 long and 4 middle shots. Arguably, his montage facilitated the motoric understanding of others through the intensive use of long shots that show the whole

body acting in space. Arguably, editing of close and medium shots can evoke other kinds of sensing effects. Such is the segment about a young surgeon conducting his first unsupervised surgery (Soviet Latvia No. 34, 1958, Mihails Poselskis, 4:21–5:16). Close-ups of the eyes, delicately moving fingers, and perspiration on the forehead reveal the surgeon's internal state of extreme concentration. The shots are not accompanied by the voice-over. In this case, we are dealing with social rather than motoric cognition. The areas of the brain designated as the "social brain" perceive biological motion so that the observed movements of other people can evoke in the observer feelings associated with these movements; simulating the feelings of others, the observer can understand their inner states [Kruk 2022; 2024a]. Close and medium shots focus the spectator's attention on the movement of body parts, and familiarity with the social setting shown can evoke moods that the spectator's memory associates with personal experience in similar settings. In 1960s, Riga Film Studio produced a number of newsreel segments prompting an emotional identification with the film protagonists (Soviet Latvia No. 25, 1964, Aivars Freimanis; 0:18-2:30; No. 3, 1965, Biruta Veldre, 2:31–8:02; No. 7, 1967, Imants Brils, 3:02–4:52; No. 14, 1967, Imants Brils, 5:41-7:57). Emotional expressions of workers interacting with objects and peers can evoke similar internal states in spectators. Such a feeling into other person (German – Einfühlung) may reveal the mode of being of the represented dynamical object, be it a thing or a person.

4. Awaring or Relation of the sign to its dynamical object. Components of this class of signs belong to Secondness, thus the sign refers to a unique existing phenomenon and it is related to the dynamical object. The sign-event is interpreted as spatio-temporally standing for another event, defines Peirce [1932: 2.257]. Strictly speaking, Awaring is the *modus essendi* of documentary film: the sequence of shots has captured the event to communicate its meaning. Insisting that the production of any documentary film involves at least technical codes, one denies film the status of Secondness. Perceived as Thirdness, such documentaries are deemed to communicate about something other than the persons and things captured by the camera. However, spectators recognise individuals and places as they were at that moment in that situation; they can learn about dressing style, manners of acting, technological processes, climate, etc. A feature filmed by Juris Podnieks has recorded an ambitious project of a tower hothouse (Soviet Latvia No. 24, 1973, Rūta Celma, 7:47–10:12). The construction turned out to be structurally unsound and was soon dismantled. When I posted this feature on Facebook, I received enthusiastic feedback from village residents. They recognised the project team and the impressive construction of which they had an indistinct memory. The visual document became a cue to reconstruct childhood memories. The neural mechanism of such a reconstruction is explained in another study by the author of the current article (Kruk 2024b).

5. Scheming or Mode of presentation of the immediate interpretant.

Immediate interpretant is "the effect the sign first produces or may produce upon a mind, without any reflection upon it" [Peirce 1977: 110–111]. In the case of the audiovisual, Scheming is a visualisation of a phenomenon that enables people to apprehend its general properties and distinguish similar phenomena in the future. The model legisign – icon – rheme means that a dynamical object has some essential properties (legisign) that the filmmaker has identified explicitly (icon), and this sign can be used to refer to similar objects (rheme). In other words, this is a type that by virtue of some shared characteristics represents different tokens as the members of the same class. Such a sign can be interpreted as possibly standing for its object, Peirce defines [1932: 2.258, 2.293]. Individual objects grouped in a class may possess some other properties (hence, Peirce writes that the sign **possibly** stands for the object) that distinguish them from other members of the class, but in the current event of communication they were considered irrelevant.

In newsreels, Scheming is the dissemination of visual models of social behaviour, habits, and professional skills that respond to the conditions of modernity [Kruk 2015]. This is the propaganda in the original sense of the word: propagation or spreading of knowledge. For example, the aim of scientific and technical propaganda was to bridge science and business. The news reports informed about research and development and instructed about the use of new machines and technologies. The newsreel *Square pocket potato planting using cultivators, sprinklers and ploughs* (*Soviet Latvia* No. 17, 1954, Aleksandrs Gribermans) explained the agricultural process in detail; filmed and drawn images demonstrated the appropriate use of machines, and the voice-over explained the operations. The purport of the Scheming features was education through vivid examples.

6. Impressing-Saying or Mode of being of the dynamical interpretant.

The dynamical interpretant is "an effect actually produced on the mind by the sign" [Peirce 1958: 8.343]. Whereas Scheming relies on the icon as the sign vehicle that suggests likeness, for the Impressing-Saying the Secondness of the index is of importance because

likeness, for the Impressing-Saying the Secondness of the index is of importance because it affirms the existence of the object. Some properties of the object are subjectively selected (legisign), but they can be used (rheme) to refer to other objects of this class. The indexical shots of **these** fishermen, **this** fishing vessel, and **this** yield can visualise stories about other fishing crews. Foregrounding some properties at the expense of others, the legisign has ideological potential. A case in point is consumer interest stories like one about a charcuterie in the capital city (*Soviet Latvia* No. 35, 1959, Mihails Poseļskis, 2:02–2:22). The Impressing-Saying class of the signs suggests a dynamical interpretant: the state economy provides a great variety of goods, and this is how it looks like. Those spectators who had a negative experience with shopping may have decided that the rheme was not applicable to all cases but only to elite consumer practices.

7. Looking-Saying or Relation of the sign to the dynamical interpretant. The model legisign – index – dicent means that some properties of the existents (index – dicent) can be apprehended only knowing a rule (legisign). This is a type interpreted as spatiotemporally reacting with its object or another event [Peirce 1932: 2.260]. Whereas the Awaring film represents the dynamical object visually and the spectator can infer a dynamical interpretant, the Looking-Saying film imposes a dynamical interpretant because some important properties of the dynamical object resist visualisation. The legisign component brings logical causality into the sequence of shots. News reports on research and development display new technologies in work, but understanding of the invention requires a verbal comment.

Social frames are another legisign. In 1950s newsreel, directors were seeking ways to reduce the dependence of image from the voice-over. Spectators do not need the commentary to understand social interaction staged in real-life situations. The aim of such dramatisations was to reveal the personality by showing the protagonist in informal settings. Montage as a cinematic legisign suggested an emotional attitude as the dynamical interpretant. A soft feature about an elderly winter swimmer owes its appeal to the inserted shots of smiling children (*Soviet Latvia* No. 9, 1959, Aloizs Brenčs, 6:40–7:34). The absence of an establishing long shot makes the researcher think that the swimmer and children were filmed on different occasions, but the Kuleshov effect as a legisign preserved the spatio-temporal unity, presenting the film as a real event. In short sports segments, expressive close-ups of the fans communicate their reaction to the action, which sometimes is difficult to understand while watching film.

Fiction film iconography is one more legisign. An advertisement for the *Vyatka* scooter revives the mood of William Wyler's *Roman Holiday* (1953, USA). Iconographic likeness is evoked by *Vyatka* itself, which was an unlicensed copy of *Vespa 150*, by the appearance of the young couple driving the scooter and by the camera work (*Soviet Latvia* No. 30, 1957, Aloizs Brenčs, 5:06–6:20).

8. Identifying-Saying or Nature of the final interpretant. Pointing at the final interpretant, these films strive for generalisations. The sign class "is a type interpreted as possibly standing for its object (law)" [Peirce 1932: 2.261]. An indexical shot of a phenomenon can outline the law when it is accompanied by a verbal comment or when the phenomenon is a symbol. The images of the ship, the fishermen and the yield can be used as a vivid illustration of a verbal account of the general stand for the deep-sea fishing in the USSR. The symbolic status of shots is common in reports about commemorative and ceremonial events whose purport is the construction of power relations. A shot of the organised crowd of marching people can symbolise unity. Non-verbal behaviours are visual symbols stricto sensu. The staged frontal composition of individuals standing or sitting in a semicircle and looking at their peers connotes cooperative behaviour; image of a person reading

a newspaper connotes political communication; image of an industrial worker in the library connotes the dissemination of technological progress.

9. Perceiving attributes of the sign - Saying or Relation of the sign to the final interpretant. The sign is a type interpreted as physically standing for its object [Peirce 1932: 2.262], and it explains the meaning of or attributes meaning to the image. The voice-over names some attributes of the person, object, or event and offers these attributes as the final interpretant. Words as symbols stricto sensu are related to the object by convention; the spectator can doubt the attributed meaning if it is not supported by evidence or experience. Latvian filmmakers recur to verbal metaphors that imply qualities but do not affirm them. The Perceiving-Saying class of signs was developed in the features about work ethics of young people in the 1960s. In the previous decade, work ethics was attested by verified facts: the tangible products of the film protagonist's labour. Now the measure of a moral person is the interiorization of values, and the protagonist should bear a testimony of her moral position. The first such segment was dedicated to fourteen girls and boys who just graduated school and decided to start their work carrier in a collective farm (Soviet Latvia No. 23, 1960, Laimons Gaigals, 3:58-5:38). After the graduation exams, they come to the school to visit their teacher. Camera shows face-shots of the youth sitting in the classroom in front of the teacher. Since the Perceiving-Saying involves symbols rather than indexes, the words lose physical connection with the protagonists. The young people do not talk; the sublime thoughts are attributed to them by the off-screen announcers speaking in the first person over silent face-shots. Scripted text and the intonation of the announcers presented as the inner voice of the protagonists sublimes their facial expression. The protagonists look as if immersed in moral reflections; however, mimics per se do not communicate a certain meaning. When there is no voice-over, facial expression can be interpreted as embarrassment in the presence of the camera. In another segment about a young female textile worker, the female voice in the voiceover speaks on her behalf, praising the enthusiasm of her colleagues (Soviet Latvia No. 7, 1961, Laimons Gaigals, 1:32-2:48).

Despite the fictitious character, the Perceiving-Saying documentary enriched the stylistic diversity of visual communication. Intimate close-ups and poetic texts brought to the forefront the worker as a moral person, while the off-screen actor's voice produced the impression of authentic testimony. However, inevitably, as the filmmakers were striving for a sublime portrayal of common people, the final interpretant got disconnected from the visual image.

Visual symbols as metaphors are created by associative montage in features about political history. Indexical shots of the spring debacle and drifting ice introduced the archival images of the Bolshevik revolution in a feature dedicated to Vladimir Lenin's anniversary (*Soviet Latvia* No. 14, 1962, Mihails Šneiderovs, 0:25–1:47).

To commemorate the peasant revolt of 1905, the cameraman filmed the historical locations with the hand-held camera from the point of view of the rebels walking to the place of execution, and falling after the shooting (Soviet Latvia No. 25, 1963, Irina Mass, 0:14-0:56). The visual symbols *stricto sensu* found in the news reports are specific manual gestures denoting professions and non-verbal behaviours denoting mental acts such as reflection, discussion. The latter usually was dramatised. Let us take as an example a reportage about a mechanical invention which took some burden away from dairymaids (Soviet Latvia No. 6, 1962, Irina Mass, 3:15-4:48). The cameraman captured the new machine at work, while the design process was staged as an attractive interaction between a mechanician and a livestock expert. Five shots include images of paradigm research and development: close-up of the mechanic lighting a cigarette, pan to the livestock expert, middle shot of a hand turning over a technological document, middle shot of two men sitting at a table and drawing, close-up of two men, close-up of a hand drawing a line. The success of the dramatisation depends on the ability of the film crew to build trusting relationships with the protagonists and reconstruct the natural setting.

10. Realising or Triadic relation of the sign to its dynamical object and to its final interpretant. This class of signs tends to give an analytical description (final interpretant) of a phenomenon (dynamical object). All three components – legisign, symbol, and argument – are of the Thirdness that enables communication about something else which is not actually present. An argument is a type interpreted as semiotically standing for its object [Peirce 1932: 2.263]. Being a symbol stricto sensu (verbal proposition), the argument is related to the image by convention, and words tend to be detached from pictures. Even if the images are used to illustrate and evidence, the audio is sufficient to understand the message. The Realising became popular in the mid-1970s. Television established itself as the most appropriate medium for hard news, and newsreel makers turned to an in-depth analysis of problem issues. Reliance on the symbolic argument resulted in the expanded use of synchronous sound. Although the filmmakers missed investigative reporting and dialogical skills to arrange a visually attractive verbal interaction in front of the camera. Thus, a critical discussion of the city master plan turned into four monologues of architects speaking on camera and off-screen; the visual content included shots of city landscapes, technical drawings, and 3D architectural models, which did not communicate genuine information (Soviet Latvia No. 29, 1977, Andris Slapiņš).

Documentary film director Juris Podnieks assembled his first analytical newsreel in the same way: monologue voices reflected about demography issues; B-reel shots of maternity, nursery, baby strollers, and playing children created a routine image of the topic (*Soviet Latvia* No. 3, 1977). Soon Podnieks adapted the 10th class of signs for newsreels by combining talk and image meaningfully. In a feature on an art

exhibition in a factory, a female worker demands that the artist explain the content of his canvases (*Art* No. 2/3, 1983, 10:57–12:57). The following exchange of words must be heard and seen. The artist's talk is the argument to support subjective perception of art, the image is his non-verbal behaviour that reveals the attitude towards the argument and the audience. In the Realising films, bodily expressions take the function of modal words that demonstrate the speaker's commitment to the proposition.

Conclusion

Objective representation of reality is the main concern of the theory of documentary. Scholars focus on the relationship between the sign and its object and assign meaning to icons, indexes, and symbols. Methodology that disregards the sign itself and the relationship between the sign and the interpretant fails to explain the diversity of perception and understanding of the film. The system of ten classes of signs admits that the documentary can address only our senses (rheme), or represent existing objects (dicent), or construct objects with the help of verbal comments and montage (argument).

The 10th class of signs is the only one that explicitly asserts something about the filmed object. The spectator can follow the logical causality and engage in an analytical discussion with the author.

The classes of rhematic signs 1, 2, 3, 5, 6, and 8 do not assert something about the reality; thus, they open the way for subjective interpretations. The 8th class of signs informs about the nature of the final interpretant but the relation between the represented object and its understanding remains weak.

The classes of dicent signs 4, 7, and 9 build a dyadic relation with the object, thereby they realise the main purpose of the documentary. Peirce suggests that semiosis can take place in three ways. Film assembles single shots in a holistic picture that suggest a dynamical object, a dynamical interpretant, or a final interpretant. In case of Awaring (mode of being 222), the spectator relies on everyday knowledge to fill in the void created by editing of shots. Film may demonstrate fragments of technological process or social interaction that are related in a logical cause-and-effect chain. Looking-Saying (mode of being 322) involves Thirdness – legisign (verbal comment, montage) that suggests a context of interpretation. Filmmakers offer a subjective frame of reference that the spectator can challenge, but do not change the dynamical object itself. The 9th class of signs, Perceiving attributes of the sign-Saying (mode of being 332), interferes more in the dynamical object. The filmmaker selects the attributes of the object that the spectators cannot see and identifies them by words or visual associations. This class of signs has a larger potential to impose a preferred interpretation.

The 3rd class of signs, Sensing, is the most fascinating. Since, according to Peirce, such signs convey the mode of being of the dynamical object, they must be capable to address not only sight and hearing (as the film usually does), but other senses like proprioception, too. In non-mediated interaction, the meaning of objects is not limited by the information communicated by sight and hearing. Other senses, as well as memory, provide information that is integrated into the semiosis. Empirical neuroscience suggests that a two-dimensional black-and-white film can support this kind of semiosis. This is a topic for special experimental research of the audience of the documentary film.

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