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Audiovisual Rhetoric

A Metatheoretical Approach to Design

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1. Introduction

Rhetoric enables basically anyone to communicate successfully in all kinds of situations. It is a communication theory describing rules and techniques for effective communication with different media, for example speech, image, film, or design product. These techniques aim for efficient and aesthetical attractive communication, avoiding boredom (teadium) and grabbing the audience's attention (attentum parare). "Pause your talk, raise your forefinger and lower your voice when there is a crucial thing to say", this is an example for a basic technique from ancient rhetorical scholarship to advice the rhetor. Hence, the rules are a more generic explanation of the main forces in communication processes. They explain e.g., that for a severe topic like peace, war, or the nation itself, a high style communication using pathos is appropriate. The coherence between rules and techniques is a core element of rhetorical scholarship, enabling the rhetor to understand the fundamental principles of successful communication as well as providing him or her with precise directions how to use signs and media.

Audiovisual rhetoric is an approach from design research based on further developments of the ancient scholarship within new rhetoric and semiotics. It investigates communication with audiovisual signs in all kinds of electronic media. For these media, the goal is to explore the underlying framework of rules and techniques in order to understand the main forces in a better way. This understanding can in turn be ascribed to designer's practical doing, aiming to optimize working processes. One basic task for audiovisual rhetoric is to describe the interaction between the designer, the medium, and the user. This interaction is explained later on in the text, using the rhetorical communication model. It elicits the techniques that are applied by a designer using a medium in order to address an audience in an appropriate way. Furthermore, there are two main questions to be answered:

- Can rhetorical scholarship provide categories for structuring and evaluating design processes?
- How would a toolbox for designers look like, that is based on rhetorical knowledge?



The first question will be answered by presenting the model of five production phases as well as by naming evaluation criteria that are based on rhetorical scholarship. The idea is that this knowledge can be transferred to design processes to provide a common understanding of the tasks and forces. The second question will be addressed within the case study. It draws the attention to film making as a design process. For film design and advertisement we speak about the designer, the medium, and – specifically – the addressed audience. For this example, it will be explained how such a toolbox would look like in terms of rhetorical figures. Additionally, the rhetorical structure of some exemplary film scenes will be shown visually. With this visual structure we explore how rhetorical figures are applied to film.

2. The Renaissance of Rhetoric

The reference to ancient rhetoric as a comprehensive communication theory attained new prominence in the twentieth century. Rhetoric is understood as having a central social function and has been reconstructed as a metatext to describe the cultural system. New demands were made on the theory formation due to the rapidly increasing influence of mass media. This influence resulted in a reversion to the rhetoric tradition. Warrantors of this movement are the representatives of new rhetoric, Kenneth Burke, I. A. Richards, R. Weaver and C. Hovland in the USA, as well as the representatives of nouvelle rhétorique, Chaim Perelman and Roland Barthes in France. Burke refers to the function of rhetoric in the social context basically as "the use of words by human agents to form attitudes or to induce actions in other human agents" (1950, p. 41). According to Burke, rhetoric has an important function in the social community as it steers all kinds of communicative interaction.

With this update and the simultaneous opening of the theoretical framework the field has been prepared for new theoretical references to rhetoric. The focus shifted from verbal talks aiming for explicit persuasion to media communication in general aiming to have a certain impact on an audience, be it to communicate a product's specific "look & feel" or to emotionally move an audience with a movie scene. The following approaches are of vital importance for design. First of all, Gui Bonsiepe (1965, 1996) presented the outline of a visual/verbal rhetoric as early as the 1960s. He continued his work until today stretching his approach from print media to film and interactive media. He first used the term audiovisual rhetoric in the late 1990s and provided the basis for this concept. Umberto Eco (1972) and Roland Barthes (1990) worked on rhetoric of the image, whereas Hanno Ehses (1984, 1986, and 1988) continued from the designer's perspective. Richard Buchanan was the first who labelled the design process programmatically as a rhetorical argumentation (Buchanan, 1985). He derived a new definition of design from this idea: "Design is an art of thought directed to practical action through the persuasiveness of objects and, therefore, design involves the vivid expression of competing ideas about life" (1985, p. 7). With this notion he already spoke about persuasion and competition, two important triggers of any rhetorical action. As a result, Buchanan's work is an important contribution to the subject of design and rhetoric, although it is limited to product design. Still his main ideas can be transferred to media interaction and hence be understood as basic principles of design and rhetoric as such. Recent work has been done on visual rhetoric especially by Charles Kostelnick (1998, 2003), Sharon Helmer Poggenpohl (1998), Kevin LaGrandeur (2003) and Charles Hill and Marguerite Helmer (2004), the latter collected some important contributions in a comprehensive anthology on this topic.



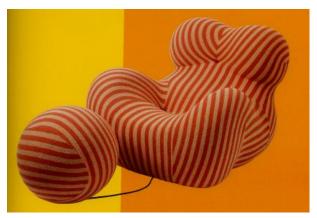
3. The model of rhetorical communication and its impact on design processes

The new approach on audiovisual rhetoric presented here goes beyond these contributions. It is not a pure style theory and not just a collection of rhetorical patterns or standardized design solutions. Rhetoric in principle is rather conceived as a metatheory of design. Therefore, the approach refers to the media theoretical aspects of rhetoric which can already be found in the Aristotelian conception. A significant difference towards traditional analytical tools is that rhetoric is basically independent of content. Within rhetorical analysis, the aim is not content interpretation, but rather it aims to provide an understanding of the technical basis of any design action. Therefore, Roland Barthes describes rhetoric as a machine that transfers basic communication "material" into a rhetorical discourse designed to attract an audience (Barthes 1988, S. 52). With this metaphor, he points out that content is nothing more than basic "material" that is rhetorically shaped towards the audience.

A model which describes the communicative forces between rhetor, medium and addressee (see Joost 2006b, Scheuermann 2006) translates those aspects to the domain of design. The rhetor is the initiator of the communication process, for our context it is the designer himself/herself or his/her team. The rhetor's intention is the driving force of this structure, as he/she must address an audience effectively with his/her communication in order to be successful. Based on this intention, the rhetor will choose the most promising techniques and patterns to design the medium, which can be e. g. an action adventure movie, an industrial design product, or a website. All these items can be defined as media within the rhetorical communication model, because a rhetor uses them in order to reach an audience. For each specific medium, the appropriate tools and techniques will change accordingly, but from a high level perspective, they can all be treated as media in terms of the impact category within this model. Within the communication process, the rhetor always has to evaluate the strategy he/she used, due to the expected reactions of his/her audience. After the communication has ended, the evaluation of results starts, and the rhetor has to compare his/her assumptions with the real outcome. This evaluation is the basis for the next design process, because the rhetor, here understood as the designer with his/her team, gains new experiences from each process. This can be understood as an iterative process: testing new rhetorical techniques in the design process for their effectiveness, then evaluating and redesigning them for further applications.

Let us illustrate the coherency with an example. The armchair "Donna con bambino" by Gaetano Pesce has a strong rhetorical appeal towards the customer. When we look at that chair we see a voluminous lady in a laid-back position attracting us with sex-appeal and offering us maternal security at the same time. We can infer that Geatano Pesce had a strong willing that this chair should have an emotional impact on the customer. As a rhetor, he decided to use the rhetorical technique of attracting the addressee by an object's sexual connotations. The whole object could be read as a metonymy, using a female body to arouse the feeling of opulent comfort and joy. When the product came to the market, Pesce in his function as rhetor had to evaluate, whether his rhetorical decisions were successful and whether the customer was addressed in the right way. Today, the chair's status as a "design classic" proofs that the rhetorical decisions, that where made in the late 1960s, were of great success.





Gaetano Pesce, Chair "Donna con bambino", 1969

Design processes are thereby presented as rhetorical communication. This notion opens up a new way of reading, which deals with the role of design in the social structure. Now, the focus goes beyond the mere product, shifting to the point that products are used as media to address an audience. The design process and the resulting products become an expression of social, cultural, and aesthetic concepts gaining acceptance in a competition of convictions, like we saw in the example of "Donna con bambino". In this process rhetorical techniques are used to form the argumentative strength of an artefact. Any design which refers to the expectations and ideas of the addressee shall be effective and gain acceptance. Audiovisual rhetoric means the competence by which information is structured and presented efficiently resulting in a strong communicative benefit on the side of the addressee. In his latest works on this subject, Gui Bonsiepe (2001) stresses the importance of this aspect for the assimilation and distribution of knowledge within a society. Design, understood as a rhetorical act, is closely interwoven with social communication processes and takes the function of making knowledge available. Therefore, the perspective on a socio-cultural discourse in design opens up, redefining design's function and location.

4. Prospects: Rhetoric as a description model for design

In the context of audiovisual rhetoric the following prospects for design *and* rhetoric can be pointed out (see Joost 2006a):

4.1. Rhetoric as production theory and analytical tool

Rhetoric can be consulted as a description model for the design process since it names categories both for the production and analysis of media. There are two approaches: on the one hand, the question aims at the influence of rhetorical strategies on the *productive process* of design, on the other hand it aims at the application of rhetorical categories for the *analysis* of media (compare Plett 1985, p. 3). This dual perspective is also stated by Umberto Eco in his definition of modern rhetoric. He describes rhetoric both as a generative technique for the production of persuasive argumentations and as a collection of coded solutions for efficient communication. This collection can be literally understood as a repertoire of samples and motives with a certain connotative content (compare Eco 1972, p. 184).



Learning from this perspective, the rhetoric of the design process can thus be formulated as:

- a.) A production system that includes a collection of communicative strategies and techniques which are used in the production of media. This production aims at a convincing and appealing design for the addressee;
- b.) An instrument for media analysis aiming at the exploration of argumentative, affective and stylistic construction principles.

These two approaches are significantly connected with each other: the rhetorical dimension of the production process is recapitulated in the analytical approach. This connection can also be seen the other way around, when the results of the rhetorical analysis are understood as new input for the production process. Therefore, these two approaches can be seen as an iterative process, where both sides learn from each other, as already shown in the communication model.

4.2. The production stages

As we saw, the knowledge of the rhetorical system can support the design activity in the production process. In rhetorical scholarship, the production is divided into five phases: inventio as a collection of material and arguments, dispositio as structure and structuring advice, elocutio as stylistic production, memoria as the memorization of the content as well as actio as the presentation. These production stages can also describe the design process in a systematic way. Applying these stages to the design process means to open the rhetorical knowledge base connected with this system. It must be understood as a continuum of the different stages of development, describing precisely the connection between the topic and the strategies of production. These strategies are characterized with regard to their convincing mode of action on the addressee. As a result, a typical design process would be specified as follows: First comes a process of recognizing the topic and its content (intellectio), which means to understand the task, its forces and problems and to become aware of the addressed user group. From this basis on the designer collects possible design arguments, motifs and techniques of addressing. In the second phase, this collection is transferred into a structure, which means a comprehensible information architecture and contextualization. Here, knowledge about an effective dramaturgy is applied to the single parts. The third phase then appears to be the formal implementation including "wording" and formal design solutions. In this phase the media artefact is designed and the conceptional ideas from the two prior phases have to be transferred to a specific design. The conceptional ideas come into Gestalt at this point. Here, the designer can refer to rhetorical figures and affective techniques of addressing the user in order to get a convincing artefact in the end. The two last phases, memoria and actio, are relevant for the presentation. Here the designer finds techniques to prepare an eloquent presentation, to grab the audience's attention and to persuade them of the artefact's quality. Altogether, this model provides a broad systematic approach to understand the design process in its different stages, interdependencies and tasks.

4.3. Rhetorical criteria and suitable styles

Adequacy (aptum) is a basic category to measure the quality of rhetorical communication. It is considered an important criterion for a successful, that is, efficient and effective design, meaning that communication has to be adequate to topic, context and addressee. The adequacy determines the selection and



the order of the material which has substantial influence on the functionality of the design. On the one hand, the inner aptum refers to an inner coherence of the design solution, that is e.g., coherence of colour design, shape, and usage logics. On the other hand, this category refers to the outer aptum and thus denominates the dimension of reference to the addressee: does the design meet the requirements of the target group? Is the chosen style adequate: either purely informative style, or entertainingly and attractively designed, or is it an emotionally and infectious style? Considering the adequate style is important for the topic's persuasiveness, because with an adequate form of representing a topic, user's trust and courtesy can be gained. The simple style (genus subtile) meets an informative purpose and demands sharpness and accuracy of expression. The middle style, referred to as genus medium, is suitable for the entertainment of the audience and works with gentle emotions and a moderate use of rhetorical figures. The high style, known as genus grande, arouses intense emotions in the addressee and uses strong affective steering for this. Altogether, the success oriented rhetorical communication stands out in clarity in structure and meaning, referred to as perspicuitas in rhetoric. The clarity of guidance and economy of the order are - besides the demand for formal correctness (puritas) - central criteria for convincing communication. All in all, these criteria hold as well for the classical communication setting as well as for design processes. Here, we see the parallels between rhetoric and design, because design is in this sense described as a specific kind of rhetorical communication. We learn from this description first, that rhetoric is a high level communication technique that can be adapted to different contexts, and second, that the design process includes specific aspects of strategic communication that can be described comprehensively as rhetorical communication.

5. Rhetorical patterns

Rhetorical patterns can be understood as a tangible toolbox for designers. In the rhetorical system they are part of the third production stage, the elocutio, because they provide the knowledge how to transfer the communication concept into a suitable design. They function as a toolbox as they provide a collection of best practice examples for different tasks and applications. Therefore, the box provides basic rhetorical patterns and recurring solutions that are helpful for the production process. Heinrich Lausberg (1963, p. 15) points out that rhetorical figures are only "forms" which are being filled with the relevant content due to the intentions of the producer in the specific context. Thereby, vivid figures arise from rigid patterns (p. 14), which develop in the context of usage. What kind of figure should be used for a specific design task is depending on the categories that were already mentioned, the inner and outer aptum, perspicuitas and the selected communication style. Most important is that the figures are used to address a specific audience, tying in with his/her experiences. The audience's personal experiences, seeing habits, and the context of use, are central reference points for design in general. Therefore, rhetorical patterns represent a catalogue of forms to meet these experiences, because they are in the majority of cases known to the addressee. The basic requirement to consider the audience's expectations and prior knowledge can be met by using best practice examples that have been established in usage as conventions. Such conventions of media design support the cognitive process of understanding and using.

A simple example of an established rhetorical figure is the *metonymy* used to visualize a tool within software like Adobe Photoshop. The functionality e.g. of the eraser is not verbally described, but communicated via a visual analogy: the eraser functions as an index for deleting. Other metonymies are the



ruler for measuring the length or the pencil for drawing a line, that we are all used to interact with. These signs are established as visual shortcuts the user understands due to his/her prior knowledge from the non digital world. Therefore, they are rhetorical patterns, which help to design an easy understandable artefact that ties up to user's experiences.

Within the following case study I present the outline of a toolbox for film designers. We all know a lot of rhetorical figures implicitly due to our own experience in watching movies or advertising films. With the list of rhetorical figures for film design, I want to make those figures explicit and elaborate on the patterns that are used by film makers. These patterns are part of a tangible toolbox for designers, providing proven solutions for design problems and tasks. Literally every designer works with such a toolbox, because it consists out of his or her empirical design knowledge – although it is rarely made explicit. Specific toolboxes for the different design domains have to be developed yet, whereas some recent approaches on a pattern language for interface design take a step into this direction. (see Borchers 2001; Tidwell 2006)

6. Case Study 1: A Design-specific method for rhetorical investigation

If we consider rhetoric as a basic design theory as outlined above, is there still any design specific contribution to this approach? This question leads us to question the relationship between the two disciplines again. If rhetoric can define fundamental design principles, we can also see it from the other perspective: design is also a specific principle for rhetoric. We illustrated the consequences of this double-perspective with applying a visual beuristic for contemporary media rhetoric. If we analyze electronic media, we have to cope with aspects of image, movement and interaction. To describe these parameters we can use new forms of what Edward Tufte calls "visual explanations" (Tufte 1997). These are image-based methods to display more complex information structures. As an example how to realize this idea, the author investigated a notation system for film to display its auditory, visual and dynamic parameters as well as rhetorical patterns. It is a design-specific approach for the research on audiovisual rhetoric.

The notation system is based on a set of icons within a notation framework displaying basic units like different shots, editing structures, linkage types and sound structures. Furthermore, this notation shows rhetorical patterns within the film "texture", like repetition, climax or auditory and visual correlations. It can be compared to a music notation or score that is designed for film. On the one hand, it is used as an analytical tool, but on the other hand, it can also be understood as a tool for concept and production. It is more abstract than a story board, and shows the basic composition of a sequence focusing on the dramaturgy. Thus, it is also a convenient tool for film makers.

In this case study the system was taken for analytical purpose only. Using the notation system for film analysis means an innovation for film scholarship in general. It is a contribution from the designer's perspective to the problem, how dynamic media can be analyzed without just describing it verbally. Therefore, this approach has a strong interdisciplinary impact, bringing together design and rhetoric as well as film studies. The visualization is used to produce a "cognitive metabolism", how Gui Bonsiepe (2001) puts it, and so to enhance the cognitive effectiveness of the displayed information. Film sequences are notated within the framework to show the underlying structures and rhetorical patterns on first sight. In the case study it is applied to different film genres each with a specific focus, for example on editing patterns, on color or on the overall dramaturgy.



The first example shows a screenshot from a demonstrator showing the notation system (see figure 1). It is realized as an animation parallel shown to the film sequence within a quick time movie. We see an analysis of a Sony TV commercial based on the notation system. The system is basically divided into two areas: in the upper part the auditory parameters like sound, music or dialog are notated whereas in the lower part the visual elements are displayed, that is camera perspective, graphical elements, object reference, and further more. With the notation protocol the scholar can see the basic structure of this TV commercial which is dominated by a parallel shot of "man and machine" elements. The whole sequence is realized as a slow zoom out, showing the product itself in the end. This is a recurring pattern for commercial design: on the one hand, the emotional addressing is driven by metonymies for the human senses, on the other hand, the product is shown just at the very end of the whole sequence, at about 4/5 of time. Especially this timing can be defined as a metapattern of commercial film design in general.

The second example shows a different field of application. Here, we see an analysis of a sequence of the silent film *Staroye i novoye* by Sergej Eisenstein based on the notation system (see figure 2). The system is used to explore the rhetorical techniques that Eisenstein and his production team used in these films. The most interesting point is the editing technique that is visualized in this diagram, providing deep insights into the rhythmic editing and climax structure of the famous sequence. Furthermore, using colors within the icon set to distinct the different motives in the film, the pattern structure becomes quite obvious. The composition scheme consists of three recurring motives that are edited in accelerating pace and with increasing tension to the final climax of the sequence. We could name this diagram a visualization of Eisenstein's specific pattern language of film.

The third example shows a different notation system that focuses on the color code of film (see figure 3). Here, a trailer for *Casino* by Martin Scorsese is analyzed. In this diagram the color dramaturgy becomes evident, shifting from warm tones (yellow and red) to cool blue and back to red. The system shows the dominant color within a shot and describes the chromatic conjunctions in between. This is another example for using notation techniques to focus on specific parameters of media within the analysis.

7. Summary and Outlook

Within the research field of audiovisual rhetoric the basic theoretical framework has now been developed. Especially within the emerging Master- and PhD-programs at the design faculties such an approach is of significant importance providing a theoretical design expertise for scholars. Further research activities are continuously broadening the scope of this approach to new topics. The aim is to develop a basic theoretical framework for design scholarship as well as comprehensive tools for the analytical work in the field of design theory. One important topic is audiovisual rhetoric for interactive media as a contribution to usability studies. Scope is to explore rhetoric's potential to analyze and evaluate human computer interaction to enhance the usability. If we follow the approach outlined here, further interesting results for the theoretical base of design have to be expected. The reception of rhetorical studies for design opens up a possibility for the distinction and structuring of design processes. By conducting further development of rhetoric as a metatext for design, an inspiration of the disciplines of design and rhetoric arises in *both* directions. The reformulation and expansion of rhetoric outlined here derives from a design specific context and thus questions the bounds of the rhetoric discipline. The questions arising from the practice of design therefore release an impulse for



theory formation. As a result, transdisciplinary approaches arise, dealing with the requirements of the information society. Theoretical models will be developed from these approaches which can be made utilizable for practice. The opening quotation can thus be varied in the two directions: Wherever there is rhetoric, there is design.

Appendix 1 Notation systems for film (Joost 2005, 2006)

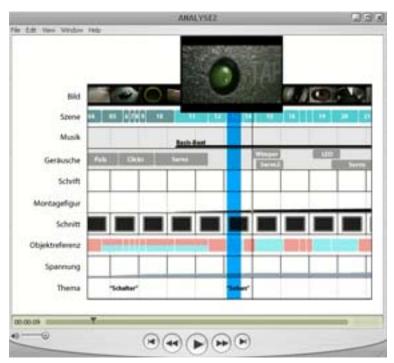


Figure 1: Analysis of a Sony TV commercial based on the notation system, student's work by Raphael Ratsch, Manuel Götzke and Krystian Majewski

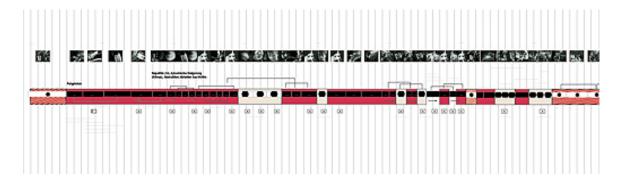


Figure 2: Analysis of a sequence of the silent film *Staroye i novoye* by Sergej Eisenstein based on the notation system, Gesche Joost





Figure 3: Analysis of a trailer for the film *Casino* by Martin Scorsese with a pattern based visualization, student's work by Juan Arroyo and Oliver Hochscheid

Appendix 2

List of rhetorical figures in film (Joost 2006)

1. Auditory visual figures

- Analogy: A verbally expressed issue is equivalent transferred to auditory visual signs
 Antithesis: A semantic contradiction between two issues (for example image and sound, image and text, image and music)
- Emphasis: Giving prominence to quality or trait by audiovisual sings
- Hyperbole: Exaggeration accomplished via visual or auditory signs beyond credibility, often with a
 pathetic effect
- Climax: An arrangement of shots in an order of increasing importance, where the single elements can be arranged in a loose order and substitutions with synonyms or tropes are optional
- Metaphor: Substitution of the "proper" image with an "improper" transfer
- Metonymy: An associated detail or associated image is used to evoke an idea or illustrate an issue
- Parallelism: Similarity of structure in a pair or series of elements of the auditory or visual track
- Paronomasia: Repetition of shots or sequences with a minimal variation on the auditory or visual track
- Polyptoton: Repetition of shots or sequences with a formal variation (for example change of perspective, color, size)
- Repetitio: Major rhetorical strategy for producing emphasis, clarity, amplification or emotional
 effect; repetition of auditory or visual structures as, for example, narrative, formal, chromatic
 repetitions
- Synecdoche: On the visual track a whole is represented by showing one of its parts or vice versa
- Variation:
 - o auditory: Melodic, harmonic or rhythmic variation of a musical motif
 - o visual: Repetition of a visual motif with modification
- Verbal anchor: A visually expressed meaning is semantically specified by verbal signs

2. Auditory figures

- Illustrative music
 - Of space: Music indicates a specific room or space
 - o **Of motion:** Music indicates motion (for example acceleration, slow motion)
 - Of time: Music indicates, for example, a time of day, season, era
- **Evocative music:** Music evokes specific affect



- Illustrative sound: A sound illustrates a visual motif
- Metonymic sound: A sound hints to something that is not (yet) visible
- **Pseudo-realistic sound:** A visual motif or a shot is accompanied with a apparently realistic sound (for example "bang" in a boxing match)

3. Editing figures

- Alternating editing: Continuous alternation of two or more shots or motifs
- Accelerating editing: Sequence of shots in abbreviated intervals
- **Deductive editing:** Constant editing from long shot to close up ("zoom in" of shots)
- Inductive editing: Constant editing from close up to long shot ("zoom out" of shots)
- Jump cut: Cut that breaks continuity in time and space as a spatial or temporal ellipsis
- Contrast editing: Two or more shots are set in contrast to each other to achieve an aesthetic
 quality or a semantic emphasis
- Match cut: Assembling cut achieved by a repetition of form or action
- Parallel editing: Two or more actions are edited in parallels, for example, to show their concurrency
- Rhythmic editing: Shots or sequences are edited according to rhythmic criteria, often in accordance to the auditory sphere

4. Auditory-visual correlations

- **Congruency:** Auditory and visual sphere are corresponding (for example via illustrative, pseudorealistic, realistic sound)
- **Divergency:** Auditory and visual sphere are contradictory (for example as antithesis)
- Complementary: Auditory and visual sphere complement and boost one another (for example via metonymic or evocative sound, rhythmic parallels)

5. Conjunctions

- Auditory conjunction: Shots are connected using an auditory bridge (for example via dialog, sound or music)
- Conjunction of motion: Shots are connected using a repeated motion or direction of movement
- **Conjunction or form:** Shots are connected using formal elements in the visual sphere (for example as a Match cut)
- Conjunction of colour: Shots are connected using chromatic repetitions
- Narrative conjunction: Shots are connected using a narrative bridge due to the logic of narration



References

Barthes, R. (1988). Die alte Rhetorik. In R. Barthes. Das semiologische Abenteuer. (pp. 15-101). Frankfurt a. M.: Suhrkamp.

Barthes, R. (1990). Rhetorik des Bildes. In R. Barthes. Der entgegenkommende und der stumpfe Sinn. (pp. 28-46). Frankfurt a. M.: Suhrkamp.

Bonsiepe, G. (1965). Visuell / verbale Rhetorik, Visual / verbal Rhetoric. ulm. Zeitschrift der Hochschule für Gestaltung 14/15/16, 23-40.

Bonsiepe, G. (1996). Interface - Design neu begreifen. Mannheim: Bollmann.

Borchers, J. (2001): A pattern approach to interaction design, Wiley.

Buchanan, R. (1985). Declaration by design: Rhetoric, argument, and demonstration in design practice. *Design Issues 2* (1), 4–23. Repr. in V. Margolin (Ed.) (1989), *Design discourse: History, theory, criticism.* (pp. 91–109). Chicago, London: University of Chicago Press.

Buchanan, R. (1995). Rhetoric, humanism, and design. In R. Buchanan & V. Margolin (Eds.), Discovering design: Explorations in design studies. (pp. 23–68). Chicago: The University of Chicago Press.

Eco, U. (1972). Einführung in die Semiotik. München: Fink.

Ehses, H. (1984). Representing Macbeth: A case study in visual rhetoric. Design Issues 1 (1), 53–63. Repr. in V. Margolin (Ed.) (1989), Design discourse: History, theory, criticism. (pp. 187–197). Chicago, London: University of Chicago Press.

Ehses, H. (1986). Design and rhetoric: An analysis of theatre posters. Design papers 1. Halifax, Nova Scotia: Nova Scotia College of Art and Design.

Ehses H. & E. Lupton (1988). Rhetorical handbook: An illustrated manual for graphic designers. Design papers 5. Halifax, Nova Scotia: Nova Scotia College of Art and Design.

Hill, C. & M. Helmers (Eds.). (2004). Defining visual rhetoric. Mahwah, NJ, London: Erlbaum.

Joost, G. (2006a). Audio-visuelle Rhetorik und Informationsdesign. In M. Eibl, H. Reiterer, F. Thissen & P. F. Stephan (Eds.), Knowledge Media Design – Grundlagen und Perspektiven einer neuen Gestaltungsdisziplin (pp. 211–224). München: Oldenbourg.

Joost, G. (2006b). Grundzüge der Filmrhetorik: Theorie, Systematik und Praxis einer audio-visuellen Medienrhetorik. Forthcoming in 2006.

Kostelnick, C. (1998). Designing visual language: Strategies for professional communicators. Boston: Allyn & Bacon.

Kostelnick, C. (2003). Shaping information: The rhetoric of visual conventions. Carbondale, IL: Southern Illinois University Press.

LaGrandeur, K. (2003). Digital images and classical persuasion. In M. Hocks & M. Kendrick (Eds.), Elaquent images: Word and image in the age of new media (pp. 117–136). Cambridge, MA, London: MIT Press.

Poggenpohl, S. (1998). Visual rhetoric: An introduction. Visible Language 32 (3), 197-199.

Poggenpohl, S. (1998). Double damned: Rhetorical and visual. Visible Language 32 (3), 200-234.

Scheuermann, A. (2006). Film als rhetorisches Design: Grundzüge einer Theorie des Filmemachens – mit einer Fallstudie zu den präsentativen Affekttechniken in der Inszenierung von Flugzeugabstürzen im Action-Adventure. Forthcoming in 2006.

Tidwell, J. (2006): Designing User Interfaces, O'Reilly.

Tufte, E. (1997). Visual Explanations. Cheshire, CT: Graphics Press.