DESIGN AS RHETORIC
—
BASIC PRINCIPLES FOR DESIGN RESEARCH

1   ABSTRACT

In principle, rhetoric enables everyone to communicate successfully in varying contexts. Thus, it links different media theories with its communicative practice and creates a highly efficacious communication system, which has proved its worth over the centuries. This article describes how rhetoric, as a composite of different individual sciences and as model for an intrinsic relationship between theory and practice, can be beneficially used to research into design. A theoretical model is presented for this purpose, one which describes the design process and its precepts according to rhetorical criteria. In this model, theory and practice are indivisibly intertwined. A parallel is drawn between the knowledge and the methods pertaining to common rhetoric and to design in this approach. Two current examples show how rhetoric contributes in this manner to the consolidation of design theory and practice by providing models, and, thus, furnishing topics, methods and results for design research.

2   INTRODUCTION TO THE TOPIC

Rhetoric [*ars rhetorica*] was one of the core sciences in Europe from ancient times up to around 1800. Its origins go back to the antique period, more precisely to the Greek state. As the art of making persuasive speeches, it was directly linked to the creation of democracy. *Ars rhetorica* is a neutral technique which can be learned: speakers [*rhetores*] learn how to make a speech by analysing other people's speeches and then delivering speeches themselves. Rhetoric is classified on several levels, with this purpose in mind, and the subject matter becomes the theme of different disciplines: the evaluation of the importance and form of the speech, the sequencing of the component parts of a speech and a speech's dramaturgy, the application of rhetorical devices, the creation of a suitable form, the procedural stages the speaker follows and the art of memorising. These individual parts of rhetoric are applied not only to speech but also to other artistic forms and genres: paintings, buildings, and pieces of music are formulated in a rhetorical manner. And in return, components from painting, architecture and music flow back into *ars rhetorica*. Rhetoric should always be considered as interdisciplinary, and the strategically effective communication it strives for, can be and is put to use in disparate media.

Ars rhetorica provides a vivid example of just such inter-medial knowledge resources: the five phases in the development of a speech all have a field of study devoted to them. First of the all, the speaker seeks arguments which are appropriate to the subject of the speech [*inventio*] and organises them [*dispositio*]. Then the speech is written [*elocutio*], learnt by heart [*memoria*] and, finally, it is delivered [*actio*]. The fields of knowledge mapped out for these different stages of the process can be found in other art genres: the dispositio exploits knowledge about the application of decoration in architecture, whereas elocutio offers the tools for analysing literary style. *Actio*

imparts knowledge about the evaluation and effective use of gestures in acting and the fine arts e.g. painting and sculpture. Finally, the concepts of arranging temporal contents spatially in *memoria* are established as an organising principle in the sciences.

In the 18th century the importance of rhetoric began to wane, and other, so-called idealistic aesthetics superseded rule-based art forms. Only in the middle of the 20th century was there a revival in interest in rhetoric – and, this time, the interest was not limited to the reception and analysis of classical rhetoric. Rhetoric was revived and gained the title ‹New Rhetoric› in the English speaking world. One of the most important exponents of this renaissance is Kenneth Burke, who provided a theoretical basis for the opening up of rhetoric for the mass media. His programme dissociated rhetoric from its focus on speech in favour of a wider conception in which rhetoric is, [once again], seen as a fundamental communication technique which varying media can use to reach an audience. In the German speaking world, ‹Allgemeine Rhetorik› was based on this opening up, and focussed on media rhetoric. The key notion of this movement is that the analysis of the media is made easier by the knowledge of rhetorical methods of analysis. Both systems refer to the antique ground rules of the discipline, especially as represented by Aristotle, Cicero and Quintilian and, thereby, consolidate the growth of rhetoric also in a historic sense.

3   CONCEPTUALISATION OF DESIGN AS RHETORIC

Against this background, Gui Bonsiepe developed the first analogy between rhetoric and design [Bonsiepe 1961, 1965, 1996] in the early 60s. Bonsiepe did not only create an explicit transfer of rhetoric to the visual but later also to audio-visual media, a development which had only been prepared by ‹New Rhetoric›. Moreover, he aimed to sharpen design analysis vocabulary and to show that the designer uses certain defined figurations in design, enabling more effective communication. Thus, he shows that a design should not merely be considered as intuitive and to some extent a ‹work of genius›, but as an activity based on rules.

The leitmotiv of the following works on this topic is essentially the analysis of rhetorical figures, especially in the field of graphic design. [cf. Ehses 1984, 1986, 1988; Kostelnick 1989, 1998, 2003; Poggenpohl 1998] In addition, the works of Richard Buchanan [1985, 1993, 1995], in which he creates an [industrial] design rhetoric are of importance. Among other features, he touches on the rhetorical effect and function of logos, ethos and pathos, and the products' function of argument. Finally, in an omnibus volume about visual rhetoric, published in 2004, Charles Hill and Marguerite Helmers provide a good overview of further current works.

In this respect, the theory put forward here goes beyond the previous hypotheses, because it conceives of design as essentially a form of rhetoric in its own right. It

is not about transferring patterns, figures or processes, piece by piece, from the rhetoric of speech on to design but about acknowledging design *as* rhetoric in a fundamental communication model. Its importance for design theory stems from this point. By means of some salient points: intention of effectiveness, analysis and production, transmission of rules, rhetorical measures as theory and practice, the theory transfer should be made explicit in order to present its essential features. We, thereby, show which central mechanisms are common to design and rhetoric and, what the consequences are for the theoretical conception of design.

4   INTENTION OF EFFECTIVENESS

The starting point of our work stems from an intrinsic characteristic of rhetoric: its actions are intentional. That means: rhetorical means are used to achieve a previously designated objective – whether it be with the intention of educating the public, amusing it or arousing emotions.

Production of effectiveness is the central driving force behind rhetorical communication, and thus it follows that every decision regarding production is made taking into account its impact on the public. The success of communication can be at least partially verified, i.e. when public reaction is assessed. So even if rhetoric initially provides its knowledge dissociated from the object of its communication, the aim and means are systematically linked by the concept of effectiveness. Thus, for example, the especially strong emotional effect of a voice becoming louder is emphasised at a particular points in a speech, e.g. at the end of an accusation. Other rhetorical devices are available for ill-humoured or jolly comments which should only convey moderate emotion. Pathos-laden appeals for justice: «Hang the murderer!», on the other hand, should be declaimed in a highly emotive manner, because this should have the most intense emotional effect on the public, who should actually rise up and proceed to carry out the deed.

In brief: Occasion or setting, content, aim and means are interrelated in one common system. These features are arranged depending on the impact which should be achieved. This is also a fundamental principle in design: the design process is based on strategic communication decisions, which aim for effectiveness. A meticulous fine-tuning of rhetorical means is essential in order to create a design object. What it should communicate and where and when, the target public and the importance of the contents are all factors that must be taken into consideration. The implicit rules are often only noticed when they are violated: the Bennetton campaign's conspicuous inappropriateness, which used pictures of a man on his deathbed surrounded by his family to advertise fashion, generated its impact by means of a calculated contravention of the rules. And again, this is a rhetorical device.

Bennetton campaign motive: ‹AIDS› by David Kirby, 1992

5   ANALYSIS AND PRODUCTION

In order to elucidate the intention of effectiveness in rhetoric communication, as a basic model, we have selected a model which considers the communicating *rhetor*, the medium and the audience/public as a sequence of effect-related processes. This model, dissociated from a particular media and disengaged from speech, forms a loop, in which the production level [*rhetor* – medium – audience] forms a circuit with the reception or analysis level [audience – medium – *rhetor*]; [cf. Joost/Scheuermann 2006]. This model can be illustrated in the light of the Bennetton motive: On the production level, the *rhetor* creates a medium by using his/her devices which generate an effect on his/her audience. In our example: the emotionally charged photograph of a dying man surrounded by his family. The designer and team probably expected to make a certain impact on a specific target group, and more than likely a reaction of indignation or shock. The *rhetor* only has access to this special effect through the methods he/she uses – the actual effectiveness itself is beyond his/her control, so in a sense detracted. That means that he/she cannot not exactly determine how this advertising will be received – will it really arouse indignation and horror among the public? Or will it be seen as a social campaign which alludes to the role AIDS plays in our society, and whose purpose is to arouse sympathy for those afflicted? The designer must put him/herself into the place of the public in

order to improve the performance of his/her methods and analyse the media impact from that point of view. Are there similar products from which the acceptance and effect can be inferred? What effect have other ‹scandal-campaigns› in advertising had? But in this way, the analysis from the public perspective – medium – *rhetor*, the designer still only has a limited amount of control. The analyser can only reach a supposition about the methods applied and has some idea about the objective which the methods were intended to achieve through the medium. When the public actually comes face to face with the product, then you can trace the effect back to the methods and judge whether the photograph of the sick man attempted to achieve too intense an emotional effect. The breaking of a taboo was calculated, and from this example one can learn for future advertising campaigns what effect that can have on the brand image. This principle, however, is not restricted to advertising, it is fundamental to all design processes in which strategic communication decisions have to be made, in order to move, inform or stir up the public, a client or a user. The clear structure of graphics or the pleasant colours on a website are, therefore, just as much a rhetorical intention of effectiveness as a the successful composition of shape and material in a product or the use of Grotesk and Antiqua typefaces.

6   RULE TRANSFER

Against the backdrop of this model, it becomes clear how analysis and production can only be understood in connection with one another in rhetoric: *rhetores* analyse speech, in order to become better speakers – and they [also] deliver speeches, in order to test their newly gained knowledge and the techniques derived from it. Equally, it can be generally said: designers analyse design products in order to become better designers and then create design objects, [also] to extend their understanding of design. The fundamental concept of this transfer is ‹rule transfer›: If it has worked once [raising the voice, the ornamental band on ceramics, the sweet childlike face on objects, the scandalous photograph in advertising] it is imitated and repeated. Successful rules are accepted whereas less successful ones are not – even if their dominance only lasts for a certain length of time. Thus, design rules, derived from design products and analysis of these products, add to the rhetoric of design. At the same time, rhetorical rules and techniques are applied – implicitly or explicitly – in product design. Thus, rhetoric is not a discreet system whose existence is unaffected by time, it lives from further developments and is permanently in flux. Its basic association mechanisms – e.g. regarding emotional arousal – remain the same, but the choice of methods and the knowledge about maximum impact are changeable. For instance, scenes which shocked a film audience fifty years ago, may not even cause a stir today, and the trend colour for bathroom fittings ten years ago is no longer featured in the catalogue.

7   RHETORICAL METHODS IN THEORY AND IN PRACTICE

Based on the above description about the connection between analysis and production, we can state that in terms of design: a design theory must be linked to design practice, just as the practice is linked with theory in its turn. In this duo, theory is not responsible for explaining *why* something works – rather more, it provides the description of *what* works *when*. In turn, practice does not create the design object in a vacuum, rather more it serves to evaluate the theoretical forecast. Classical rhetoric offers information based on experience about this very special relationship between theory and practice – know-how which, in our opinion, is of immediate use to design research.

Because only from this perspective – the connection of theory and practice – does it [once again] make sense to examine individual rhetorical devices or concepts in design objects. Rhetorical devices do not merely serve the hermeneutical analysis of design, but are used to optimise it and other forms. That means: the results of such analysis are no longer isolated from the examined design, they are passed back to design practice – e.g. via the study of the subject matter.

Exemplary very descriptive figure lists, have already been developed for the advertising graphics branch. Proposals made by Bonsiepe [1965], Eco's ‹Untersuchung zur Rhetorik der Werbung› [1972], Barthes' ‹Rhetorik des Bildes› [1990], as well as analyses by Ehses [1984, 1988, 1989] and Poggenpohl [1998] are of special importance. Unger presented a persuasive elucidation for music rhetoric, applying rhetorical forms, as early as in 1941, which can be referred to in connection with design for creative works in the auditory field. In the world of the cinema, authors present themselves in short films. In the area of interface design, pattern and figures have been the subject of discussion for a short time. Works by van Welie 1999, Borchers 2001 and Tidwell 2006, however, do not refer to the study of rhetoric and, therefore, the devices are not arranged into a subordinate communication context, but refer to Christopher Alexander's architectural theory terminology of ‹patterns› as solutions for architectural tasks.

All this information shows that exact knowledge of recurring design methods and definition of their competencies is an important step towards being able to optimise design in a very practical sense. The system of rhetorical figures reveals which design solutions are available to the designer, and organises these solutions according to their function, e.g. ellipsis, apposition, inversion, contrast or conjunction. So the designer can create a systematic overview of the available methods and test which of them prove to be appropriate for the design task in question.

The following examples from design research aim to illustrate the individual aspects of this concept: The projects include film analyses – in other words, begin with a complex mixed form of design practice – and, based on this, make generalisations about design practice. And: they are characterised by applying knowledge, gained recently from research, to practice and picking up impulses for their research processes from their practical work.

8   EXAMPLE: PROJECT PAT PRESENTATIONAL AFFECT TECHNIQUES
IN DESIGN AS BASIS FOR ANALYSIS OF DESIGN SPECIFIC AFFECT
METHODS   Arne Scheuermann

Rhetoric always wants to achieve an effect. One of the devices which rhetoric uses is emotion, in order to pursue its aim of intentional effectiveness: emotions which touch the rhetor during the speech, but also emotions which aim to move the audience. The ‹PAT – Presentational Affect Techniques› project stems from a distinction which can be made in rhetoric, precisely in this communication of emotions: between presentation and representation. In brief: design methods always generate their emotion on two levels, which may be more or less strongly marked and may stand in different relation to each other. In every communication, both levels are active, nevertheless they can be observed separately. On the representational level the medium communicates some third issue – a story, a message, an announcement, symbolic content – thus, something which only exists when communicated by the medium. A road sign, indicating danger from falling rocks, can serve as an example from graphic design: The rocks falling down the mountain side are clearly depicted and draw attention to the danger of being hit by boulders, a vivid colour emphasises the visibility of the sign and, additionally, indicate the importance of the warning. Nevertheless, in reality there are no stones falling at the time – the fear [and with it caution in the face of danger] are only aroused by a pictogram. The term representational affect technique can be used in this case.

On the presentational level, on the other hand, creative means have an actual physical effect: a white screen really does dazzle your eyes, the ultra-large atrium confuses its visitors' physical perception of size and shock photographs [like for example affect pictures] literally ‹turn your stomach›. Here the triggering effects are, you might say, physical, present and impart a direct, not a representational effect. Such presentational affect techniques – that means techniques which intentionally play on this second level - can be particularly clearly featured in films. They are, nonetheless, equally effective in product design, communication design, information design etc. A well-known, everyday example of this is the haptic feedback of an old tumbler switch: sound, movement and action are in harmony. Overcoming the resistance in the switch itself is the action.

A comprehensive analysis of action-adventure films in the project led to the first classification of presentational affect techniques in films. Action-adventure films arouse, to a great extent, feelings in their spectators by such techniques such as subwoofer bass tones, lightning flashes or shaking camera movements. XYZ such PAT could be defined for action-adventure sequences alone. Most presentational affect techniques are not specific to film but can appear in different media forms: so for example the effect of colours, the alteration in spatial awareness, the ‹rhythmisation› of perception patterns. They all create emotion by their mere existence. A design catalogue can be derived, in which every affect technique is linked to its effect, and where the most varied examples are represented. It is obvious that such a catalogue of measures for design practice, once again, becomes a tool.

9   EXAMPLE 2: ‹VISUALISATION OF RHETORICAL STRUCTURES IN FILM AS A RESEARCH METHOD›   Gesche Joost

In the project ‹Visualisation of rhetorical structures in film as a research method› a new method of analysing films was compiled, in which film-relevant information was visualised in a notation system. Thus, the rhetoric structure of film sequences becomes visible and can be analysed. At the same time, the system can be applied for the planning of film sequences i.e., for a sequence's rhetorical composition.

The system is based on a set of icons in a notation frame, which is simply constructed for convenience. Using this basis, rhetorical structures in time-based media can be read and marked, which, once again, allows us to come to some conclusions about the design techniques in use. The film scene reports show, at first sight, which production decisions were made and at which point: where the climax occurred or which recurring patterns were used. Based on this visual structure, it is possible to draw probable conclusions about the *rhetor's* intention of effectiveness. It is possible to show efficiently how a sequence ‹functions› rhetorically by implementing this analysis, and rules and techniques for film creation can be derived from it. If the strategies used in the analysed product prove successful, then they can be reused and extended further for film design. The notation system's aim is to be able to understand how a product is made and then to infer a rule from it.

On the whole, this project presents a method intrinsic to design, accentuating the role of design in the research process. The visualisation of complex data is one important competence of [information] design and this competence plays an important role in rhetoric design. We see from this example that the methods have altered considerably in comparison with classical rhetorical theory. They adapt to the object analysed and take into account that we are dealing with time-based audio-visual media which require an adequate method of analysis. This approach, a ‹visual explanation› in line with Edward Tuftes, accentuates at the same time the use of pictures as perception stimulating heuristic.

Figure2] Analysis of a Sony television commercial using the notation system. Student assignment at the KISD, 2004 by Raphael Ratsch, Manuel Götzke and Krystian Majewski

The first example features the sequence report about a Sony advertisement dealing with the introduction of a new display technology. The analysis clearly and rapidly shows, by means of visual processing, that the principle of effectiveness is based on a contrast between man and machine. A comparison is made on a rhetorical level: the loudspeaker is like a human ear, the eye is like a switch, the cable like a drinking straw through which a young woman sips a drink. The noises, dominant at the beginning of the clip, are superimposed by others in the last quarter, and this can be as easily distinguished in the report as the regularity of the cuts.
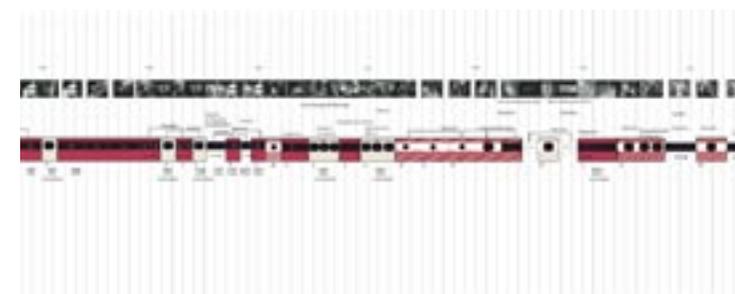

Figure3] Analysis of a silent film sequence ‹The General Line› by Sergei Eisenstein.

In this case, the presentation of dialogue and noise is replaced by focussing on the montage figures, which are of particular importance for the effect of the scene. In the upper section, there are stills from the film sequence as reference. Underneath the notation icons can be seen representing the cutting frequency and frame size. The coloured marking shows the varying principal motives. Here we can see a rhetorical mise-en-scène par excellence: the rhythm of the cutting has been increased to a maximum within about six minutes. That means that at the end approximately 5 cuts can be observed per second. The dynamic force and tension is effectively heightened by this method, and this is further consolidated by regularly recurring motives and the use of pictorial symbols. Good rhetoric film making techniques in regard to intensifying excitement, rhythmic montage and contrast can be derived from this analysis.

Figure4] Analysis of a trailer for ‹Casino› by Martin Scorsese with a pattern-based visualisation. Student assignment by Juan Arroyo and Oliver Hochscheid

In the third example, a trailer for ‹Casino›, chromatic patterns are examined. With the help of a report, the frame's dominant chromatic climate was determined in order to gain an insight into the dramaturgic application of colours. The trailer's impact results from the use of a great deal of bright colours paired with a intense dynamic force within the picture. Once again this can be used as a successful example for current film design.

To summarize: the visual notation system for the rhetorical analysis of films presented here reveals patterns and methods which are not perceived by conventional analytical methods. At the same time, the condensed visual exposition of complex patterns provides a tool for planning rhetorically written film sequences and picture sequences.

10   OUTLOOK

As we have shown, we believe that rhetoric is a fundamentally enriching perspective of design theory and practice. We have described a first possible framework for this relationship in this project. We believe that in the near future work must be carried out on fundamental issues, especially the further theoretical consolidation of the special theory-practice relationship in rhetoric as well as a catalogue of visual rhetorical patterns for varying media forms. Furthermore, in the mid and long term, the rhetorical knowledge which can be systemised must be complemented by careful and exact empirical rule collation for new media. Rhetorical methods in, for example, game design and application design of digital interfaces present a challenge to rhetoric as model for design. We are sure that the basic concept of these media forms can be explained, understood and practically enriched from the perspective of a 2000 year old science.

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