A SEARCH FOR ARCHITECTONIC SPATIAL CONNECTIONS AND FUNCTIONAL RELATIONS IN NARRATIVE FILM: CASE STUDY OF “SHORT CUTS”

From film to architecture: an extended cinematic approach to architectural space design (Part 2)

物語映画における建築的な空間結合と機能関係の分析:「ショートカット」によるケーススタディ
映画から建築へ: 建築空間デザインへの映画記号論的アプローチ (その2)

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In this paper, the definitions of film syntagmas and segments are reintroduced, and the notions of narrative Existents and Events are introduced based on Seymour Chatman's theories as they are central elements in the analytical process used here. After extracting the segmental structure of the case study film *Short Cuts*, a 30mins section is considered for in-depth analysis where 5 types of Inter-Segmental Connections and 3 types of Intra-Segmental Relations are retrieved. The relevance of these Connections and Relations to the Existents and Events further develops the film to architecture analogies and further completes the contents of their corresponding Table elaborated in earlier works.

Keywords: *architecture, narrative film, film segmentation, spatial connections, functional relations, analogy*

建築, 物語映画, 映画の分節, 空間結合, 機能関係, アナロジー

1. Introduction

Constant self-referentiality in a discipline such as architecture may push it towards its demise or the very least towards bland and over-used repetitions. Therefore throughout the ages, architects have searched for new hunting grounds for inspiration on the aesthetic, conceptual, philosophical, technical, etc. levels in as many other disciplines and phenomena as possible^{*1)}.

In our general research, looking to use narrative film as a reference for architectural design, we focus on its syntactic and semantic relations and structures using structuralist semio-linguistics as a general method of film analysis.

This paper is then a follow-up to 2 previous ones^{1), 2)} laying down most of the initial theoretical background used here, therefore allowing us to focus more on the analytical process of our work rather than the theoretical. However, since we will extensively use the notions of syntagma and specifically segments in this paper, we reintroduce their definitions and importance in structuralist film analysis; then, since film segmentation in general, and in our case study of *Short Cuts* in particular, is firmly dependent on Narrative theories, we introduce here for the first time the notions of narrative Existents and Events that are central elements in our analysis.

Having chosen *Short Cuts* for its highly segmented narrative and diegetic structures, we proceed with our analytical phase looking to apprehend how the inter and intra-segmental connections and relations are manifested in it.

Finally, after extracting the above connections and relations, our objective becomes the revision and update of the “Film to Architecture Analogy Table” where we add in the additional information of film/architecture analogies based on the analytical conclusions we have reached in this paper and on our previous works, thus coming one step closer to a more thorough “Analogy Table”.

2. A Structuralist Approach to Narrative Film

2.1. Syntagmas and Segments In Narrative Film

In structuralist semio-linguistic approaches Narrative Film is considered to be structured in a comparable way to spoken/written language³⁾; meaning that, on the most basic level, narrative film is “built” with minimal elementary units of (non)significance that come together to form larger units and sets of greater syntactic and semantic complexity.

The smallest unit of the filmic chain in most mainstream narrative films (the category of films our study focuses on) is the **Shot**, a continuous flow of images uninterrupted by editing and without any specific duration. The shot is only limited and defined by the

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beginning and ending of the capturing process of the camera (photographic or digital), and at least one shot is required to make a film, or part of it (e.g. *Russian Ark*, the first true single-shot film in history).

The most common model of film syntax is the combination of multiple shots put together with editing processes (or optical devices) to form meaningful **Syntagmas**. Thus, syntagmas are groupings of one or more shots with/without optical devices, with/without camera movements. Their limits are simultaneously linked to and independent of the general narrative and diegetic structures of the film: they are linked because some of the syntagmatic configurations that constitute the narrative film are only found in relation to the story and more generally in relation to the actions taking place in the world of the told story (i.e. in relation to the Diegesis¹⁾); different because these constructions don't have the level of abstraction of general narrative constructions. The latter constructions are completely independent from the signifiers (the sensible, material, acoustic or visual signals which trigger a mental concept) that convey them, while the syntagmatic ones are founded on represented (figurative) elements that are visible on screen.

As for **Segments**, they are blocks of syntagmas that are joined together containing information relevant to the understanding of the narrative of the film in total. In most narrative films, these segments are articulated with optical devices and/or non-narrative segments (themselves constituted of syntagmas with no narrative significance). The delimitation of segments is not always easy since their limits follow more the filmmaker's way of using/arranging the basic film elements than a clear general rule: for example, a fade-in/fade-out is sometimes used to simulate the view from an opening/shutting eye and not to delimit a segment. Moreover the limits of a segment are also relative to the way every viewer/analyst reads the film and what they are looking to extract from it: in the case of our study for example, since we are architects addressing to architects, our process of film segmentation in general, and of *Short Cuts* in particular, is quite different from one performed by, say a sociologist looking to investigate some contextual/periodic social issues; where we are more interested in the film's structural, organizational and spatial levels, i.e. its syntactic levels, the latter would be more interested in the semantic levels, segmenting and analyzing the film in ways that respond better to their study.

2.2. Existents and Events in Narrative Film

As we will further demonstrate and expand below, *Short Cuts* is one of many mainstream, almost omnipresent, character-centric films, where the characters inhabiting the fictional world of the film, or the Diegesis are the perpetual focus of the story as it follows their actions and consequences, as well as the effect of external factors on them. These characters in addition to the elements that constitute the diegetic environment they inhabit are designated by Seymour Chatman as **Existents**⁴⁾.

Fig. 1 Seymour Chatman's Elements of Narrative Text

In narrative film, Existents need not always be directly seen or heard in order to exist in the diegetic world: it is enough that one or more on-screen Existents mention or refer to another never seen or heard of on screen, in order for him/her/it to be understood by the viewer to exist in that world. This brings forth our distinction between 2 Existents: the **Implied Existents** and the **Explicit Existents**. The former are the ones whose existence the viewers have to fully imagine as they are implied by the latter which are audio-visually and explicitly manifested on/off-screen. In consequence, the Diegetic World itself becomes distinguished into an **Implied Diegesis** and an **Explicit Diegesis**, each composed of their respectively corresponding type of Existents.

As mentioned above, the Existents are either generating actions or are the objects of happenings external to them; Chatman sums up these 2 into a single concept referred to as **Events**⁴⁾: the causal actions and happenings that place, put into relation, affect the Existents and/or are generated or caused by them (Figure 1).

In most "classical" narrative films, the temporal manifestations of Events²⁾ are sequential since a cause is always followed by its consequence. Russian Formalists refer to this "absolute eventuality" of untamed chronological cause and effect as **Fabula**, and to the arrangement of the Events as **Plot** or Syuzhet (we will also refer to it as Narrative Structure/Organization as it sounds more familiar to architects). However, there also exist many narrative films with apparent non-chronological succession of Events; in this case the Plot can be imagined in terms of form and organization as it rearranges the Events with artistic narrative techniques such as parallel plots, ellipsis, retardation, reverse chronology, etc.¹⁾

3. About *Short Cuts*

Short Cuts (or SC as it will further be referred to) is a 1993 drama directed by Robert Altman. Its screenplay, written by Altman and Frank Barhydt, is inspired by 9 independent short stories and a poem written originally by Raymond Carver. The actions take place in and around the city of Los Angeles, following the daily lives of 9 different couples/families, in 9 corresponding and intermixed stories. The general themes of the latter revolve around the subjects of infidelity, death, parent/child disgruntlement, and intra-couple frustrations.

The distinction between these 9 stories is primarily accomplished by the focus of each of them on specific, central and recurring Existents/characters (hence the character-centricity of SC): this distinction starts directly from the opening credits sequence of the film where it is actually composed of the main introductory segments to the Existents/characters central to each story.

Moreover, the 9 stories with their proper Existents seem to be largely independent from each other and have autonomous Events^{*3)}, which makes us consider them as 9 **Narrative Entities** or **NE**²⁾ that when brought together by cinematic means define one single larger Narrative which is the narrative of SC (the Existents/characters of its 9 families and couples are specified in Table 1 along with their corresponding NE designations). This hypothesis is not however completely true in the case of SC^{*4)} because at multiple instances of the film's running time, the 9 NE intersect and overlap as their central Existents/characters appear and/or interact with each other in the same segment; these spatio-temporal occurrences/reactions lead us (the viewers) to assume that 1) the Events in the NE of SC unfold in simultaneous narrative times (over a period of roughly one week), 2) the corresponding intra-diegetic geographic Existents/settings of their actions are most likely in relatively close vicinities, and 3) the 9 NE although having a considerable degree of autonomy, are on certain levels (either semantic or syntactic) dependent of and in relation with each other as we will demonstrate further below.

Finally, we have chosen to analyze SC as a follow-up to our previous work on *Russian Ark*¹⁾ for the following reasons:

Table 1 Designations and correspondences of the 9 Narrative Entities of *Short Cuts*

Designation	Family/Couple
NE _B	Honey and Bill BUSH
NE _F	Ann, Howard, Casey and Paul FINNIGAN
NE _{Kn}	Claire and Stuart KANE
NE _{Ke}	Lois, Jerry, Joe and Josette KAISER
NE _P	Doreen and Earl PIGGOT
NE _S	Sherri, Gene, Sandy, Will and Austin SHEPARD
NE _T	Tess and Zoe TRAINER
NE _{We}	Betty, Stormy and Chad WEATHERS
NE _{Wy}	Marian and Ralph WYMAN

- 1- SC and *Russian Ark* have comparable yet different narrative and diegetic organizational structures: the former has fragmented narrative and diegetic structures and the latter a continuous diegesis but a fragmented narrative structure; and while the latter depends on actual architectonic elements to structure its narrative and diegesis, the former does so by depending solely on filmic elements;
- 2- SC is one of the best executed examples^{*5)} of a multiple narrative film (omnibus narrative) as Altman successfully grouped and joined together (on all layers of narrative, diegesis, film semantics and syntax, etc.) the 9 Raymond Carver stories that were originally completely unrelated to each other;
- 3- Our interest in the subtle yet powerful means that Altman uses to connect disparate narrative segments and 9 NE, which we believe can offer important insight for using comparable means when connecting functionally and/or spatially differential spaces in architectural design.

4. Analysis of *Short Cuts*

4.1. Segmentation of *Short Cuts*

In SC, the syntagmatic structure is relatively easy to apprehend: the 9 short stories or NE, revolving around their corresponding Existents/characters, are broken down into smaller **Narrative Segments (NS**^{*6)}, and then shuffled and intermixed together; the limits of NS are recognized by the abrupt editing cuts (clear-cuts) that lead to another NS and NE, which is directly recognized by its central Existents/characters and the corresponding Events revolving around them. Thus, the Existents and Events in SC are pivotal to the perception of the NS limits: at some points of the film many types of syntagmas (with changing camera angles and Existent/settings) come into play together, rendering the syntactic limitation of a NS quite blurred if not for the unity of action of the Event depicted in them (the syntagmas) and/or the continuous audio/visual presence of the corresponding Existents.

Yet the delimitation and structuring of the NE by their NS is more obvious in terms of on-screen time than space: we illustrate this in the **Segmental Time-Track**, or **STT** (Figure 2) by assigning a hatch pattern to each NE and positioning their corresponding NS on the time-track based on their on-screen appearances; the segmental discontinuity (hence the narrative and diegetic discontinuities) of each NE is also made obvious in the **Layered Segmental Time-Track**, or **LSTT** (Fig. 3) by the voids separating their corresponding NS.

Since SC is more than 3 hours long (including roughly 144 NS), too long and too dense to be analyzed fully and in detail, we extract a shorter section to focus on. The extracted section is 30mins 21sec long, starts at 00:48:17 and ends at 01:18:38 of the film's time-track, and is composed of 22 NS containing all 9 NE. We have chosen this specific 30min section because 1) it is quite a manageable time length for an in-depth analysis, 2) it is neither in the introductory section nor in the concluding section of the general narrative of the film, meaning that all the important elements of all the NE have already been established and set in their places at this point, 3) based on the STT, it is the densest section of the film in terms of NE/time ratio^{*7)}, where the largest number of NE intersections is also located, thus

leading to a higher concentration and diversity of inter and intra-segmental connections and relations, and finally 4) structurally, the section is a representative sample of the film's narrative and segmental structures (as can be seen in Fig. 2), eliminating the need to analyze the entirety of the film.

Fig. 2 Segmental Time-Track (STT) of *Short Cuts*

Each column represents a NS. Each hatch pattern represents a NE. The bottom line represents the running time of the film from the opening credits to the closing credits, totaling 3hours 8 minutes.

The columns with more than 1 hatch pattern represent the NS that contain more than 1 NE Existents, in other words they are the NS where the corresponding NE intersect.

The dotted rectangular region is the 30mins 21sec section of SC on which we focus our in-depth analysis.

Fig. 3 Layered Segmental Time-Track (LSTT) of *Short Cuts*

Each NE from the STT from Fig. 2 is put on a different layer without changing its original position/temporal coordinates.

The fragmentation of the NE is thus emphasized in this Figure by exposing the actual time gaps between each appearance of a NS containing Existents of the same NE.

4.2. Sequential Inter-Segmental Connections

The 3 hour long shuffling of 9 different NE along with their composing 144 NS, the use of the clear-cut editing technique to individually and sequentially connect them together, and the unexpected change in Existents and Events depicted in the NS, would be somewhat “violent” and disorienting for viewers, breaking their concentration in trying to understand and follow the contents of the viewed NS, and in consequence, resulting in the eventual loss of interest in the film. Thus, Altman, as we discuss here, uses intra-diegetic audio-visual elements as an additional connection process complementing the clear-cut editing; these **Inter-Segmental Connections**, or **ISC** (Fig. 4), as well as being connectors of consecutive segments, play the role of buffers alleviating the impact of the abrupt segmental/NE alteration by echoing elements perceived in one NS into its successor in the segmental chain.

These ISC are repeated throughout the film in different forms, and in our extracted 30min section we distinguish 4 well-defined types of ISC, and 1 ill-defined:

Fig. 4 Inter-Segmental Connections (ISC) and Intra-Segmental Relations (ISR) Chart

The 22 NS portrayed here are those of the extracted 30mins section (the NS in the dotted rectangle from Figures 2 & 3). Each column/NS is therefore numbered accordingly from 1 to 22.

The ISC are represented by hatched arrows since the segmental movement in SC (and any narrative film in general) is sequential and unidirectional.

The 3 other types of vertical lines represent the ISR.

In the cases where there are more than 1 NE in a single NS, the ISC arrows are assigned from one particular NE to another because during the inter-segmental passage the last and first images seen in the NS belong to those NE.

1- Auditory Connections: an auditory sign continues and lingers on from one NS to the following thus creating an Auditory connection between them. These connections are found connecting NS₁/NS₂, NS₁₀/NS₁₁, NS₁₂/NS₁₃/NS₁₄/NS₁₅ and NS₁₇/NS₁₈, where in the case of NS₁₂ to NS₁₅, for example, a song sung by an Existent/character of NE_T begins in NS₁₂ and continues to be overheard (extradiegetically*) by the viewers all the way to NS₁₅, thus forming an Auditory connection between all the corresponding NS.

2- Iconic Connections: at the beginning of a NS, an iconic sign (image sign, whatever its nature) directly refers back to an image (of different nature than the first) that had just appeared at the end of the previous NS, thus in many ways than not, the final image of NS₆, NS₇, NS₁₁, NS₁₅ and NS₂₀ is echoed (respectively) in the first image of NS₇, NS₈, NS₁₂, NS₁₆ and NS₂₁ (Screenshots 1).

3- Thematic Connections: these connections are a little subtle to recognize as they distinguish types of transitions that are made by repeating a common theme from the end of one NS into the beginning of the following NS. These connections are present between NS₄/NS₅, NS₈/NS₉/NS₁₀ and NS₁₆/NS₁₇. We emphasize on considering these themes exclusively of visual nature (Screenshots 2).

4- Verbal Connections: these connections are manifested by speech, as some words are pronounced, or subjects are verbally mentioned at the end of one NS, a direct or indirect representation of that word/subject is visually manifested at the beginning of the following NS (Screenshots 3). These connections occur between

Screenshots 1 Example of an Iconic Inter-Segmental Connection (ISC)

The screenshot on the left is the last image from NS₆ where Sherri Shepard from NE_S is seen laughing, and the screenshot on the right is the first image from NS₇ where we see a painting of a laughing woman from NE_{Wy}.

Screenshots extracted from Short Cuts, Fine Line Features, 1993

Screenshots 2 Example of Thematic Inter-Segmental Connection (ISC)

The screenshot on the left is one of the last images from NS₈ where Existents from NE_{Kn} are seen sitting around a table discussing about an important decision to be made; and the screenshot on the right is one the first images from NS₉ where Existents from NE_P, NE_{We} and NE_S are in a diner planning their schedules for the coming days. The common theme connecting the consecutive NS here could be interpreted as "Dinning table as a decision making location".

Screenshots extracted from Short Cuts, Fine Line Features, 1993

NS₃/NS₄ and NS₁₈/NS₁₉.

5- Non-Identified: when we were not able to clearly identify and classify the connection between 2 NS, we designated the connection as “Non-Identified”. This type of connections seems to be an exclusive use of film grammar, as the connection between the NS is done only on the syntactic level of film (via the clear-cut editing) without resorting to its semantic levels.

4.3. Intra-Segmental Relations

As mentioned earlier above in Section 3 there are instances in SC where Existents/characters from different NE interact with one another on different levels in the same NS. These interactions between Existents generate **Intra-Segmental Relations** or **ISR** between their corresponding NE; where the relations between the latter were manifested sequentially on the semantic and syntactic levels in the case of the ISC, the NE's ISR are manifested almost simultaneously and on the semantic level, meaning that they occur purely in the diegetic realm of SC. Thus, since the diegetic world of the latter is extremely realistic and similar to our own real world, and since the Existents/characters are humans in nature, their interactions are therefore similar to the way we interact with each other, leading us to identify 3 types of ISR in our extracted 30min section:

1- Auditory Relations: these are instances where characters of different NE, physically present in 2 different Existents/settings are diegetically connected to each other via a telephone conversation just like in NS₁, NS₄ and NS₂₂. In these segments we have one of the best examples of “alternating syntagmas”³⁾ where the shots go back and forth between 2 conversing characters at the end of each telephone line; although there are clear-cuts between each shot with a complete change of Existents (character, location, etc.) and the NE they represent, we can still consider that the entirety of the conversation belongs to a one and same NS since it is a simultaneous phenomenon almost literally linking both characters with a phone line, leading them to share a concurring Event (Screenshots 4).

2- Spatial Relations: these relations manifested in NS₉, NS₁₁, NS₁₂, NS₁₄ and NS₂₁, occur when characters from different NE happen to be present in the same Existent/location at the same time. Whether the existence of one is on-screen or off-screen (when only the voice is heard) is irrelevant, since they are simultaneously sharing the same space (Screenshot 5).

3- Visual Relations: these relations depict characters of different NE's more or less in different Diegetic Spaces watching/looking at each other. We consider this relation directional since a character could be watching/looking at the other without the other being aware of it, just like the manifestation in NS₁ where the character from NE_{Ks} is discretely watching the character from NE_T through the fence (Screenshot 6).

4.4. Synthesis

We summarize Sections 4.2 and 4.3 in diagrammatic form in Fig. 5, and interpret them as follows:

- While jumping from one NS to another consecutive one, intra-diegetic elements are used in both in order to curb the disorienting impact of this sudden break in the narrative and diegetic flows, and bridge the cut between them (ISC, Fig. 5, top);
- The diversity of these ISC (5 types in total) reflects and follows the diversity of the content and form of SC that contains 9 different individual stories with dozens of corresponding Existents (characters and settings) and Events related to them.

Screenshots 3 Example of a Verbal Inter-Segmental Connection (ISC)
The screenshot on the left is one of the last images from NS₃ where Existents from NE_F are talking about making phone calls, with one of the last uttered words being “telephone”; and the screenshot on the right is the first image from NS₄ where an Existent from NE_S is having a conversation on the telephone.

Screenshots extracted from Short Cuts, Fine Line Features, 1993

Screenshots 4 Example of an Auditory Intra-Segmental Relation (ISR)
Jerry Kaiser, an Existent/character from NE_{Ks} (left screenshot) having a telephone conversation with Bill Bush, an Existent/character from NE_B (right screenshot).

Although both Existents are located in different diegetic settings and there are cuts every time the camera moves from one to another, they are both still considered part of the same NS (NS₁) since they are talking to each other and thus generating their proper common Event.

Screenshots extracted from Short Cuts, Fine Line Features, 1993

Screenshot 5 Example of a Spatial Intra-Segmental Relation (ISR)
Existents/characters from NE_P, NE_S and NE_{We} are present on-screen in the same shot and diegetic space.

Screenshot extracted from Short Cuts, Fine Line Features, 1993

Screenshot 6 Example of a Visual Intra-Segmental Relation (ISR)
Jerry Kaiser from NE_{Ks} is seen here discretely watching Zoe Trainer fan Existent/character from NE_r.

Screenshot extracted from Short Cuts, Fine Line Features, 1993

- Inside a single NS, multiple Existents derived from different NE can be co-present (on-screen or off-screen) either in the same syntagmas, thus more immediate ISR being generated between them (Fig. 5, bottom right), or in different syntagmas where their ISR would be punctuated with syntactic cuts (Fig. 5, bottom left);
- Without the ISR, we conclude, there cannot be any overlapping of NE in SC or even in any narrative film with multiple narratives since it is inconceivable to apprehend the presence of different Existents or NE in a NS without audio-visual, intra-diegetic elements.

SC is thus a highly complex and fine-detailed filmic experience that stimulates its viewers on many levels of significance making full use of available syntactic and semantic tools.

5. Architectural Interpretations

The synthesis of our previous works^{1), 2)} was a preliminary “Film to Architecture Analogy Table”^{*9), 2)} where we placed the multiple elements that constitute narrative film facing their analogous architectural counterparts^{*10)}. We still consider this Table as “preliminary” because it has not yet been completed at this stage; thus with this current paper we add to it the additional information that we have gained and the conclusions we have reached after our structuralist analysis of SC.

And so, based on the contents of the above Analogy Table we interpret the results of SC’s analysis as follows:

- 1- **Segment** is analogous to **Space**
Narrative is analogous to **Primary Function**,
Thus **Narrative Segment (NS)** is analogous to **Functional Space (FSp)**;
- 2- **NS** are connected to consecutive **NS** via **ISC (Inter-Segmental Connections)**;
Thus **FSp** are connected to consecutive **FSp** via consecutive **Inter-Spatial Connections (ISpC)**.
- 3- **Existents** are elements “populating” a Diegetic World, contained in **NS**, and affected by and/or generating **Events**;
Thus, **Existents** are analogous to **Architectonic Functional Elements**^{*11)} “populating” a Spatial Organization, contained in **FSp**, and generating, or are the consequence of, architectural **Events, Happenings** or **Program**^{*12)}.
- 4- **Narrative Entities (NE)** are relatively autonomous sections of a larger single **Narrative**, i.e. subsets of a Narrative set;

Thus **NE** are analogous to Functional/Programmatic subsets that complete a larger Architectural **Primary Function/Program**;

- 5- Different **Existents** representing different **NE**, and located in the same **NS**, enter in specific **Intra-Segmental Relations (ISR)** with each other;

Thus by analogy, differential **Architectonic Functional Elements** belonging to different Programmatic categories and located in the same **FSp** enter in specific **Intra-Spatial Relations (ISpR)** with each other.

- 6- Finally, since **ISC** and **ISR** are respectively analogous to **ISpC** and **ISpR**, then their corresponding natures and types are also analogous, i.e. when an **ISC** is a Thematic Connection between 2 **NS**, then its analogous **ISpC** in Architecture also becomes a Thematic one^{*13)}.

Following the above interpretations we add the results to the Analogy Table, thus having an updated Table 2 (the updates added to the Table are marked in **bold** letters).

Fig. 5 Generalized diagrammatic forms of Inter-Segmental Connections ISC (top) and Intra-Segmental Relations, ISR (bottom)

Top: intra-diegetic elements (illustrated here by a black triangle) in a random NS_x are repeated or echoed in one form or another in a NS_y thus bridging the clear-cut.

Bottom Left: Existents belonging to random NE_o and NE_p , and situated in different syntagmas (Σ_o and Σ_p) but the same NS_z , are in ISR with each other.

Bottom Right: Existents belonging to random NE_i , NE_m and NE_n and situated in a single random NS_u are in direct ISR with each other.

6. Conclusion and Future Tasks

In Section 2.3 of this paper we have introduced the notions of narrative Existents and Events central to the general narrative of films, and in particular to SC. Then, making use of these notions we proceeded to the segmentation of our case study film and uncovered 5 particular types of Inter-Segmental Connections (ISC), Auditory Connections, Iconic Connections, Thematic Connections, Verbal Connections, and Non-Identified Connections, that other than playing the role of buffers for viewers, bridge syntactic film cuts and diegetically connect the multiple differential segments of the SC. We also uncovered 3 Intra-Segmental Relations (ISR), Auditory Relations, Spatial Relations, and Visual Relations, that link multiple Existents belonging to different NE to each other on different levels.

Finally, proceeding with the same analogical process as our previous works, we have further developed the film/architecture analogies and charted them in an updated version of our “Film to Architecture Analogy Table”.

From this point on, the next step of our research will take us to a more experimental stage where we start trying out the usability of the different analogical elements in Table 2 as we organize a design workshop for architecture students who will try out the feasibility of our works’ results. The outcome of the students’ works in this workshop will be the focus of the next steps of our study.

Table 2 Film to Architecture Analogy Table

Film	Architecture
Optical Devices	Architectonic elements of spatial and/or visual separation and/or connection
Syntagma	Spatial Unit
Segment	Space: Grouping of spatial units (based on adjacency and/or common programmatic features)
Narrative Segment	Functional Space
Inter-Segmental Connection (ISC)	Inter-Spatial Connection (ISpC)
Intra-Segmental Relation (ISR)	Intra-Spatial Relation (ISpR)
Diegetic Spatial Structure	Spatial Structure/Organization
Narrative: - Fabula - Plot/ Syuzhet	Primary Function: - Programmatic content - Programmatic organization
Narrative Existent	Architectonic/Built Environment Functional Element
Narrative Event	Architectural Event, Happening or Program

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Notes

- *1) Some examples would be DeStijl, Futurism, Art Deco, Deconstructivism, Parametric Architecture, to name but a few.
- *2) Existents belong to the spatial dimension of the story/film whereas Events belong to the temporal dimension (Chatman 1980).
- *3) With the exception of NE_{Kn} and NE_{Wy} that are in direct relations with each other from their very first appearances.
- *4) There are however many films constituted of Narrative Entities that have a much higher degree of independence and autonomy from each as the only thing joining them is mainly the common film title they are being shown under (e.g. *Tokyo!*, 2008, consisting of 3 different narratively independent short films shot on location in Tokyo by 3 different filmmakers: Joon-ho Bong, Leos Carax and Michel Gondry), and/or the same filmmaker who filmed them (e.g. *Dreams*, 1990, 8 separate short films shot by Akira Kurosawa), and/or a common general theme (e.g. *Night on Earth*, 1991, by Jim Jarmusch where 5 different short films revolve around 5 taxicabs and their drivers).
- *5) Robert Altman was nominated for the 1994 Academy Award for Best Director and shared a nomination for the 1994 Golden Globe Award for Best Screenplay with Frank Barhydt; the cast won a Special Golden Globe Award for their ensemble performance. *Short Cuts* was also nominated for the 1995 Best Foreign Film at the French Cesar Awards, and won the Golden Lion and the Volpi Cup for Best Ensemble Cast at the 1993 Venice Film Festival. A complete and thorough nominations and awards list for *Short Cuts* is available on the following link: <http://www.imdb.com/title/tt0108122/awards>
- *6) In our previous works we had referred to Narrative Segments with the designation “Σ”, and Narrative Syntagmas with the designation “NS”; however starting from this paper on and due to the more extensive use of Narrative Segments in our research and to facilitate reading and cross-referencing, we designate “NS” as the abbreviation for Narrative Segments, and “Σ” for Narrative Syntagmas.
- *7) The introductory opening sequence of the film which lasts for about 15mins, its first 30mins are actually the densest of the film in terms of segment/NE/ time ratio, but it is interrupted by the opening credits and the narratives are not yet established, which might render the in-depth analysis less consistent.
- *8) Without affecting the progression of the story or the narrative Existents and Events.
- *9) “Film to Architecture Analogy Table”

Film	Architecture
Optical Devices	Architectonic elements of spatial and/or visual separation and/or connection
Syntagma	Spatial unit
Segment	Space: Grouping of spatial units (based on adjacency and/or common programmatic features)
Diegetic Spatial Structure	Spatial Structure/Organization
Narrative: - Fabula - Plot/ Syuzhet	Primary Function: - Programmatic content - Programmatic organization

- *10) The “Film to Architecture Analogy Table” not to be taken as a strict and closed “conversion table” where film elements are equal to architectural ones, they should rather be considered as being more of general and open interpretation guidelines.
- *11) We consider “Architectonic Element” any object belonging to the built environment.
- *12) As the Bernard Tschumi definition of function goes (Tschumi 1996).
- *13) When we say that an ISpC is Thematic (or otherwise), it doesn’t mean that there isn’t a Physical Connection between 2 spaces (a user being able to physically move between 2 consecutive FSp), but rather these 2 connected spaces in addition to their Physical Connection have a Thematic Connection (or more). This condition is also analogous to the filmic condition where although 2 consecutive NS have Thematic ISC, the camera, the discourse (the expression by which the narrative is being told) and the viewers continue to move from one NS to its successor.

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Glossary

Diegesis: “the film’s *represented* instance, that is to say, the sum of a film’s denotation: the narration itself, but also the fictional space and time dimensions implied in and by the narrative, and consequently the characters, the landscapes, the events, and other narrative elements, in so far as they are considered in their denoted aspect” Christian Metz.

FSp: Functional Space (in Architecture)

ISC: Inter-Segmental Connection(s)

ISpC: Inter-Spatial Connection(s)

ISR: Intra-Segmental Relation(s)

ISpR: Intra-Spatial Relation(s)

Narrative: the recounting of two or more events (or a situation or an event) that are logically connected, occur over time, and are linked by a consistent subject into a whole.

NE: Narrative Entity or Entities

NS: Narrative Segment(s)

Events: the causal actions and happenings that place, put into relation, affect the Existents and/or are generated or caused by them.

Existents: the characters in addition to every element that constitutes the setting (the diegetic environment) they inhabit.

和文要約

1. 序

本論文では、構造主義的な映画分析で重要な役割を果たす「シンタグマ」(syntagmas)と「セグメント」(segments)を導入する。次に、物語理論に基づいて映画を分割し、各分割において「存在物」(Existents)と「出来事」(Events)を導入する。これらの分割を基に、セグメント間とセグメント内の結合と関係を分析する。

2. 物語映画への構造主義的アプローチ

2.1 物語映画におけるシンタグマとセグメント

映画の連鎖における最小の単位は、編集によってカットされたイメージの連続的な流れとしての「ショット」(shot)である。

映画の構文論における次の単位は、意味のまとまりを持つ「シンタグマ」であるが、それは複数のショットの組合せである。したがって、シンタグマは、光学的デバイスの有無、カメラの動きの有無によらず、ショットのグループである。

「セグメント」は、映画の物語全体の理解に関連する情報を含むシンタグマのブロックである。セグメントの限界は、明快な一般的規則よりも、映画の要素を操作する制作者の方法により大きく依存しており、観客や分析者の鑑賞の方法や内容にも関連している。

2.2 物語映画における存在物と出来事

映画の虚構世界(物語世界)を構成するすべての事物に加えて、登場人物は、Seymour Chatmanによって次のような存在物として記述されている。潜在的な存在物と顕在的な存在物がそれである。物語世界も潜在的な物語世界と顕在的な物語世界に分類される。

ロシア・フォルマリストは、出来事の時間的に秩序づけられた進行を「ファエブラ」(fabula)と呼び、出来事の構造的な組織を「プロット」(plot)と呼んで区別している。

3. 『ショートカット』について

Robert Altman 監督が1993年に制作した『ショートカット』(SC)は、9つの異なるカップル/家族の日常生活、9つの対応する相互に関連するストーリーからなる映画である。ストーリーの区別は、存在物に焦点を結ぶことによって可能となる。

我々は固有の存在物と出来事を有する9つのストーリーを擬似的に独立した「物語の実体」(NE: Narrative Entities)とみなす。NEは、SCという単一のより大きな物語を構成する。

4. ショートカットの分析

4.1 ショートカットのセグメント

SCでは、シンタグマティックな構造の把握は容易である。9つのNEは「物語セグメント」(NS: Narrative Segments)に分割され、相互に混ぜ合わされる。NSの限界は、別のNSや中心的な存在物/登場人物/出来事によって直接的に認識されるNEとの間に生じるカットによって認識される。

本稿では、セグメントのタイムトラック(STT: Segmental Time-Track)におけるシンタグマティックな構造を、各々のNEに一つのパターンを割り当て、タイムトラック上にNSを表記することによって図示した。各NEのセグメントの不連続性は、NSを分離する空

白によって、層別のセグメントのタイムトラック(LSTT: Layered Segmental Time-Track)に明示されている。我々は、9つのNEを含む22のNSからなる30分間の映画について分析を行った。

4.2 セグメント間の連続的な結合

Altmanは、カットを補完する結合として、物語世界の視聴覚的要素を利用している。セグメント間の結合(ISC: Inter-Segmental Connections)は、連続的なセグメントのコネクターとして機能するだけでなく、NS内部で知覚された要素を用いて、セグメント/NEの変更の影響を軽減する役割を果たしている。聴覚的、類似的、主題的、言語的、未特定という、5つのタイプのISCが区別される。

4.3 セグメント内部の関係

存在物間の関係は、NE間のセグメント内部の関係(ISR: Intra-Segmental Relations)を生成する。聴覚的、空間的、視覚的という3つのタイプのISRが区別される。

4.4 まとめ

- 物語世界内の要素は、連続的なNSにおいて、突然の断絶を軽減しカットを架橋するために使用される。
- ISCの多様性は、SCの内容と形式の多様性を写し出している。
- 異なるNEから派生した存在物は、単一のNS内に共存できる。
- ISRがなければ、SCにおけるNEの重複はあり得ないし、いかなる複数の物語を含む映画も存在し得ない。

5. 建築的解釈

過去のアナロジー表から、SCの分析結果を次のように解釈する。

- ① 物語セグメント(NS)は機能空間(FS: Functional Space)と類同的である。
- ② NSはセグメント間の結合(ISC: Inter-Segmental Connections)を通して連続的なNSに結びつけられる。FSは空間の間の結合(ISpC: Inter-Spatial Connections)を通して連続的なFSに結びつけられる。
- ③ 存在物は、FSに含まれる建築的機能要素と類同的であり、建築的出来事やプログラムを生成するか、それらの結果である。
- ④ 物語の実体(NE)は、より大きな物語の自律な部分である。したがって、NEはより大きな建築的機能を可能にする機能/プログラムの部分集合と類同的である。
- ⑤ 異なる存在物は、同じNSに含まれる異なるNEを表現し、相互に特定のセグメント間関係(ISR: Intra-Segmental Relations)にある。同様に、異なる建築的機能要素は、同じFSに含まれる異なるプログラムを表現し、相互に特定の空間内の関係(ISpR: Intra-Spatial Relations)にある。
- ⑥ ISCとISRはそれぞれISpCとISpRと類同的である。

6. 結論と今後の課題

本論文では、物語の存在物と出来事概念を導入し、具体的な映画の分割を行い、5つのセグメント間結合(ISC)と3つのセグメント内関係(ISR)が存在することを明らかにし、「映画から建築へのアナロジー表」をアップデートした。

次の段階では、建築デザインワークショップを行い、このアナロジー表の利用可能性について報告する予定である。

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