

POETICS OF SERIALITY: SOCIALIST ARCHITECTURE IN EASTERN EUROPEAN ANIMATION

JANA ROGOFF*

* Universität zu Berlin (Germany)

Jana Rogoff is a film theorist and historian. She is currently working on her postdoctoral project *Between Inner Exile and Outer Space: Narrative Spaces in Czechoslovak, Polish, and Soviet Animated Film, 1965–1990* at the Humboldt University in Berlin. She is a member of the Society for Animation Studies and the scientific network Animation and Contemporary Media Culture.

Corresponding author

Jana Rogoff

janarogoff@gmail.com

Institut für Slawistik

Humboldt Universität zu Berlin

Dorotheenstr.65

10117 Berlin

Acknowledgements

The research for this article has been made possible by the DFG grant (RO 5559/1-1) for my project on *Eastern European Animated Film Between Art and Politics, 1965-1990*.

Paper submitted: 9th April 2021

Accepted for Publication: 7th October 2021

Published online: 17th December 2021

Abstract

This article reflects on the ways in which animation critically engages with the transformation of city spaces and hence with politics of space more generally. Works of Polish and Czechoslovak animators, namely Hieronim Neumann, Zbigniew Rybczyński, Jiří Barta, and Zdeněk Smetana, serve as examples of animated films that address the phenomenon of urban development in the former Eastern Bloc. Through these examples, I examine how the dominant model of architecture between 1950 and 1990—the prefabricated concrete housing project—figured in cinematic narratives of the pre-digital era. Animation engaged with the transformation of city spaces on multiple levels: in terms of aesthetics (designs, interiors, surfaces), production modes (seriality, compression, simultaneity), and sociopolitical issues. Understanding what we might today call “serial aesthetics” alongside the social concerns that these works of animation raised provides us with a valuable historical perspective on the medium as a platform for negotiating the boundaries and overlaps between public, personal, and political spaces.

Keywords: Animated Space, Eastern European Animation, Socialist Architecture, Serial Aesthetic, Architectural Animation.

Poetics of Seriality: Socialist Architecture in Eastern European Animation

The depiction of oppressive urban environments is central to Eastern European animation of the second half of the 20th century, it is a trope traditionally associated with a range of environmental, techno-skeptical, and sociopolitical apprehensions. This article focuses on four animated films made in the late 1970s and early 1980s that responded both critically and creatively to the proliferation of mass housing projects in cities across the Eastern Bloc.¹ My analysis highlights three recurring subjects and motifs related to the urban development theme in animation of this period, specifically: “temporal compression,” “spatial economy,” and “simultaneity of action.” These subjects emerged with urgency across different national and cultural contexts. Animators engaged with them not only on a philosophical and existential level but also as innovative aesthetic and technological strategies that anticipated future digital modes.

In recent years, engagement with urban politics has been growing across a range of media. As Joel McKim points out, many artists, designers, and architects turn to digital animation techniques today in their re-politicizing of urban pasts and futures (McKim, 2017). By examining the concepts of architectural animation from the late 1970s and 1980s, which were developed in the highly politicized context of communist Eastern Europe, we can understand and embed the current trend in a broader media-historical perspective and, at the same time, identify patterns of spatial representation that traverse analog and digital animation technologies.

Architectural and urban planning during the communist era veered toward uniformity. The prefabricated housing projects



Fig. 1 Jižní město, a prefabricated housing development located in the southeast of Prague (1980 - 82). Courtesy of Jaromír Čejka.

(*panelák, blokowisko, khrushchevka*²) were essentially the only form of housing development in the socialist Bloc in the second half of the 20th century (Fig. 1) (Lehkoživová, Skřivánková, and Švácha 2018). This type of architecture embraced seriality both in aesthetics and in its mode of production, spreading rapidly in the 1970s and 1980s. The communist states advocated the social-transformative role of architecture and its potential to foster the collective. In this context, the British anthropologist Caroline Humphrey (2005) makes an important, universally relevant point: “Ideology does not just exist in linguistic form, it also appears in material structures.” In the specific case of Eastern European socialist housing projects, she argues, “the material structure did not generate the socialist values quite as intended” (pp. 39 - 40). In other words, the transformation of consciousness and of social practices of communal living—and hence the anticipated creation of a new society—failed to take place. The new environments nevertheless stimulated cinematic, literary, and other artistic imagination that deflected the underlying ideas in defiant ways. The imaginaries that emerged from the experience of

1 By the term “Eastern Bloc” or, alternatively, “socialist Bloc,” I am referring to a group of countries in Central and Eastern Europe where communist regimes were established in the late 1940s under the control of the Soviet Union. The term applies to the Cold War era, from 1947 until 1989, when the collapse of communism in Eastern Europe led to the disintegration of the Bloc.

2 The Czech, Polish, and Russian designation for this type of housing.

living in the newly constructed spaces manifest great conceptual freedom against the backdrop of repressive materiality, subverting the Marxist premise that “matter determines consciousness,” which was central to the communist project.

The medium of animation articulated and visualized the ideology contained in and implied by this type of architecture in profoundly critical ways.³ Skeptical, satirical, and introspective animated narratives from the late 1970s and early 1980s stand in sharp contrast to the ideologized visual representations of socialist cities at the time, in which photographs and film footage of mass housing projects (as well as modern means of city transportation) featured as the ultimate evidence of progress. This bipolarity is reconciled in Kimberly E. Zarecor’s urban-historical essay (2020), in which she introduces the term “serial architecture” and stresses the role of the grid in shaping the visual culture of the era: “These prefabricated buildings helped to define communist visual culture by creating a universalizing built environment in which serial grids and repetition became the backdrop for socialist everyday life and the emergence of a new socialist subject” (p. 45). Although Zarecor correctly argues that the pervasive presence of mass housing projects translated into a powerful visual symbol in official communist narratives, the very same imagery was often employed in anti-communist narratives as a symbol of completely opposite values. This can be seen in the examples of animation addressed here, which critique de-individualization and anonymity, the damage done to traditional communities and family structures, and the lack of space and privacy afforded by socialist mass housing. At the same time, for these animators, “serial grids and repetition” become the source of new

visuality and an impetus for new forms of spatially oriented artistic experimentation.

In my examination of the metaphorical twists on socialist architecture in animated films by Hieronim Neumann, Zbigniew Rybczyński, Jiří Barta, and Zdeněk Smetana, I want to foreground an opposition that has emerged relatively recently in the theory of animated space. This opposition, which could be described as “space as an event” versus “supportive space,” highlights the specifics of spatial representation in the medium of animation and enables us to apply a more differentiated approach to studying the cinematic representation of space. Animation scholars such as Aylish Wood (2006), Jay Telotte (2010), and Pedro Serrazina (2018) propose a distinction between animated space as a discrete level of expression, a narrative device that in itself can carry and produce meaning, and space as mere background to character-centered action. Wood (2006), for instance, distinguishes what she terms “supportive space” from “reverberating space” in animation, understanding the latter as an “entity in itself ... an event in itself, where the actions of characters are set aside, rather than the other way around” (pp. 133 - 137). Serrazina (2018) expands on Wood’s analysis by connecting the subordination of space to character action with Hollywood’s classical cinema paradigm. He proposes “morph” (metamorphosis between frames, a transition tool) as the crucial element that sets animated film expression apart from live-action cinema and allows for a unique, medium-specific narrativization of space (pp. 72 - 106).

3 Films that went in the other direction and promoted the new type of housing were also being made, but mostly in live-action format or in the genre of educational and documentary short films. One example is Jiří Menzel’s directorial debut, the 1959 documentary *Prefabricated Houses (Domy z panelů)*. This ideological piece stands in contrast to Menzel’s subsequent work. A few years later, he became one of the main representatives of Czechoslovak New Wave known mainly for his Oscar-winning film *Closely Observed Trains (Ostře sledované vlaky)* (1966) and the anti-totalitarian *The Larks on a String (Skřivánci na niti)* (1969). The latter was banned by the Czechoslovak government and not released until 1990. Another example is the iconic Soviet musical *Cherry Town (Cheremushki)* (1962), an adaptation of Dmitri Shostakovich’s operetta directed by Herbert Rappaport, which stands somewhere between an ode to and a satire on Soviet-style housing projects.



Fig. 2 A still from Rybczyński's *Tango* (1980).

The representations of socialist architecture in the films I discuss below demonstrate diverse ways of conceptualizing “space as an event”—where spatial configurations are what frames, grounds, and propels the film narrative.

The first example, Zbigniew Rybczyński's *Tango* (1980), is a well-known classic of Polish experimental animation.

With *Tango*, Rybczyński made a historic breakthrough, becoming the first Polish artist to win an Academy Award. In this 8-minute live-action animation, he brings 26 characters, who represent various ages and occupations, into a single room. Starting with a young boy, a nursing mother, and a thief, Rybczyński gradually adds different characters, placing each of them in a repetitive loop, creating a form of polyphonic movement. The actions of the characters unfold and repeat in a carefully choreographed simultaneity. Each character interacts with the same space in their own way, but they do not interact with each other—their paths never cross, as if each of them inhabits a different temporal dimension. This multitude of actions is what creates the heterogeneity and the complexity of the otherwise static and banal space of an apartment in a prefabricated housing project.

Tango has been read as a social commentary from various perspectives: as an allusion to the urban housing shortage in Poland under communist rule, a metaphor of the neo-Stalinist stagnation in Poland, or an expression of the sense of isolation in an overcrowded urban environment. The animation historian Marcin Giżycki calls *Tango* a “Polish panopticon,” finding both critical and positive social features in its narrative: “Everything is boiling over in some kind of passageway room, that symbol of Polish housing troubles but also of the democratization of society. ... A gallery of average Poles passes through this room. These characters represent the full range of life functions performed in the apartment—from copulation to dying” (quoted in Sitkiewicz, 2011, p. 393). Rybczyński, however, denies any such intended commentary on the social and political situation in Poland. He explains his main creative interests in *Tango* as follows:

I wanted to solve a problem, that was my motivation. How can different times be compressed within a setting in which the location remains the same? I have found a simple and perhaps primitive solution for this. There is no philosophy behind it. I did not have the intention to communicate anything to anybody. It was just about myself, the technology, and an idea. And about the question: How can this be done, is it even possible? I had to do it with the tools I knew at the time. We can only ever express ourselves with the respective technological means. The history of civilization is the history of knowledge. (quoted in Kremski, 2005, pp. 130 - 132)

As this quote suggests, Rybczyński approached the production of the film as an essentially formal problem, with the focus on technology—namely, the possibilities of the camera, which he studies in depth and with which he experiments. The storyboard drawn on graph paper (Fig. 3) documents the process of filmmaking as a sum of mathematical calculations: the movement of each character was planned to prevent interruptions in the motion sequences.

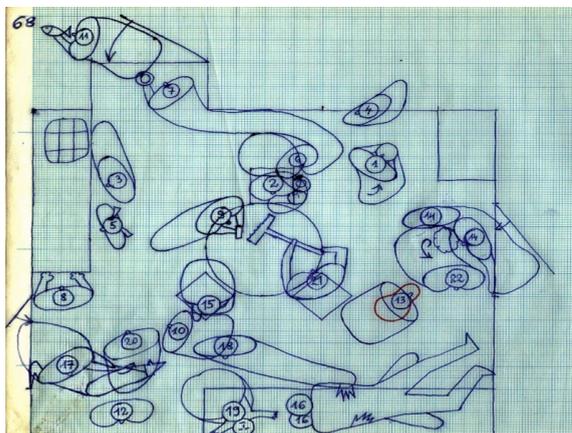


Fig. 3 The storyboard for Zbigniew Rybczyński's *Tango* (1980).

The cinematography technique that Rybczyński used in the film involved photographing each character separately and then assembling a finished animation sequence from the photos. He worked with an optical printer and extreme multiple exposure. During the production process, several hundred thousand pictures were taken and assembled in multiple overlapping exposures, which required immense precision. His team of six people took over seven months to produce the film. From today's point of view, the result, created entirely in the analog mode, is strongly suggestive of future digital modes involving loops, automation, and modularity (De Bruyn, 2020). As Rybczyński stated, the technique he developed for the film opened the door for his later work in computer science and programming (Kremski, 2005, p. 133). In the films and music videos he produced in the 1980s and 1990s, he employed and developed new, emerging media and acquired several patents for innovative electronic imaging technologies. As Dirk De Bruyn aptly puts it, "*Tango* sits at a historic fulcrum in the shift from analog to digital media." De Bruyn flags Rybczyński's film as an example of what Vilém Flusser described as "technical images," which contain concepts that gesture towards future phenomena (De Bruyn 2020).

Along with a scientifically precise process of film construction that anticipated future digital modes ("I am not an Impressionist, I am a Constructivist" [Kremski, 2005, p. 133]), Rybczyński reveals the complex art-philosophical concept of "time compression" behind his work:

To be honest, I draw my ideas in *Tango* more or less consciously from the past. In Botticelli's paintings, for example, or in pictorial representations of the Gothic period, one finds within the framework of a single picture a depiction of the entire life story of Jesus Christ—from the birth in Bethlehem to the flight into Egypt to the crucifixion. Time compression has been a theme for a thousand years. In *Tango* I'm just dealing with things that people have been dealing with for many centuries, only I'm doing it with different tools, different technology, and on film. You can see similar things on the murals of Egyptian tombs or on Greek and Roman tympana and frescoes. When we think about something, it always happens in such categories. When we imagine something, when we analyze a problem or even when we dream, it always happens in compressed time. That is how the thought process works. (quoted in Kremski, 2005, pp. 133 - 134)

For Rybczyński, time compression is, above all, a realistic method of artistic representation that stems from his understanding of film: not as a medium of story-telling but of time-capturing. This translates also into his use of cinematic space. The one-room universe he creates in *Tango* becomes the container for all stages of life happening simultaneously. *Tango* is not a story of what happens to the characters who pass through the room but rather of the space itself, its memory, its past and future, and its capacity to take on different meanings according to different lived temporal dimensions.

Simultaneity of action and compression of time are subjects that also come up in Hieronim Neumann's treatment of the socialist architecture theme, in a 1982 film titled simply *Block of Flats* (*Blok*). Neumann, like Rybczyński, belongs to a group of experimental Polish animators whose work depended on actors' performances. Using after-shot photography, they pushed the boundaries of what was defined as animation in the 1970s and 1980s. At the same time, through their techniques based on flickering images, they were deliberately re-connecting with the prehistory of film technology.

Neumann's *Block of Flats* portrays the life of the inhabitants of a modern housing project in which all the flats are alike. The camera looks into successive apartments, shown in cross section. The tenants are engaged in their everyday activities: washing, cleaning, watching TV, arguing, taking care of their children, renovating. Every action of an individual is connected to someone else's action, but in what seems more like a voyeuristic and intrusive spirit than a communal one. The series of vignettes—the microplots that take place in different apartments—amount to a parade of mundanity and human weaknesses: an angry wife is packing her suitcase and leaving her husband; a woman, upset that a falling flower pot landed on her windowsill, forgets to turn off her iron and starts a fire; the drain hose of an unattended washing machine slips out of a bucket and floods the apartment below; another woman places her ear to the door, listening to the noises outside her apartment; a boy peeps through a keyhole, watching a young couple, who are about to have sex, undress as they push their wheelchair-bound grandmother into the kitchen; a small boy leans out the window, lowering a bucket on a rope in order to bang on the window of his blind neighbor two floors below; the husband abandoned by his wife hangs himself in the apartment. These episodes, arranged in short chains of reaction, highlight the involuntary interconnectedness of the randomly formed communities that mass housing projects created.

The element of simultaneity, the fact that both ordinary and extraordinary events take place at the same time, has a



Fig. 4 A still from Hieronim Neumann's *Block of Flats* (1982).

distancing effect, making the viewer feel disengaged from the individual episodes. All these events are put on par, made to look equally in/significant in the eye of the camera. The indifference with which the camera moves—gliding through the stories of the house and from one unit to another, and peering through open windows and the incomplete wall structures—underscores the lack of privacy and the urban coarseness engendered by this type of housing.

The synchronization of many elements and the precise arrangement of the set required technological mastery, which Neumann, like Rybczyński, achieved without the use of computers. In a number of his other films made between the 1970s and 2000s, such as *5/4* (1979), *The Event* (*Zdarzenie*) (1987), and *Remote Control* (2001), various aspects of life in a communist housing project were present as his pivotal themes.

The themes of homogenization and spatial economy emerge in the 1981 animated short *The Design* (*Projekt*) by Jiří Barta. The film addresses the mass relocation of people of different backgrounds and social and cultural identities who suddenly found themselves in close proximity to each other and in a uniform, compact environment. For many, especially those who were transitioning from a rural to an urban environment, relocation entailed the dismantling of long-standing communities as well as a significant reduction in living space. Barta's



Fig. 5 Jiří Barta working on *The Design*. Courtesy of Jiří Barta.

film, more so than Neumann's *Block of Flats*, foregrounds the randomness of the demographic character of housing-project inhabitants.

Working with a combination of paper cutout animation and pixilation, Barta shows the hands of an architect speedily and pedantically drawing the plan for a prefab housing project. The viewer sees the repetitive process of drawing the identical units and, at the same time, already hears the noises of a construction site. When the technical plan is finished, the hands start opening a neat stack of white envelopes and placing little cutout furniture and inhabitants in the units. Each envelope contains a different family, a different cultural "set," ranging from avant-garde artists to rustic villagers. The hands attempt to fit in large antique wardrobes, but they must be cut with scissors to match the dimensions of the apartment. Similarly, the scissors transform a goat into a small white dog, and a grandmother is cut off from a tile stove and transplanted to a modern kitchen. Every "set" of inhabitants is accompanied by a stylistically appropriate musical score: socialist brass music, modern electronic, traditional folk, and

classical. These tracks are gradually layered on top of each other to create an all-absorbing hum.⁴ (The composer Petr Skoumal wrote the music for the film and arranged the prominent soundtrack in collaboration with the sound engineer Ivo Špalj and the film director Barta.) Once all units are inhabited, the hands cover the building with a unifying facade that muffles the cacophony of music pouring from the individual units. They press down on the facade with a roller to literally flatten out the (cultural) differences, and when finished, only identical, colorless household arrangements can be seen.

Barta's animated parable describes what Henri Lefebvre theorized as "homogenizing space," which "subsumes and unites scattered fragments or elements by force" (Lefebvre, 1991, p. 308). Socialist architecture is postulated as an insidious form of social control. The film challenges the notion that under communist rule, people were able to retain and express their individuality at least in the privacy of their homes. Architectural design and planning are metaphors for the imposition of "prefabricated" thinking, "a manufacture of dehumanization," as Barta formulated it (Barta and Rogoff, 2018).

The film was initially received by the authorities as simply a critique of architecture. Within a few months, however, it became clear that it also worked as a critique of the state ideology. *The Design* won multiple awards, including the Golden Dove in Leipzig, an architects' award in Bordeaux, and awards at the Chicago and Lausanne film festivals. According to Barta, these international awards prevented the political authorities from banning the film, but not from sweeping it under the rug. Despite the fact that the film was supposedly allowed to be shown in Czechoslovak cinemas, according to the conventional distribution scheme (consisting of newsreel, short film, and main feature), Barta does not recall ever having seen it in cinemas: "After the film was screened and awarded at the

4 This superimposition represents the effacement of different lifestyles, but it also hints at the infamously low quality of acoustic insulation in socialist housing projects. To reduce cost, the apartment floors were laid directly on the ceiling construction of the apartment below. They were known as "zero floors," and the acoustic effect of this type of construction was disastrous (Vorlíček and Vodsedálek, 2016).

Slovak film festival in Piestany, they may have realized something, or perhaps it was some comment of mine, and the film quickly disappeared” (Barta and Rogoff, 2018).

Barta’s critique of the repetitive, serial character of the prefabricated housing design and production became a spatial parable that implicitly targeted the communist ideal of a society based on the elimination of social differences and on the institution of full social equality.⁵ The space-saving quality of the design is presented not as a pragmatic urban housing strategy but rather as a pseudo-rational tool for social homogenization.

From a different perspective, spatial economy is the subject of the animated satire *The End of the Cube* (*Konec krychle*) by Zdeněk Smetana from 1979. Smetana is known as “the moralist” in his early animated works for adult audiences: for example, he is the creator of an anti-smoking educational film *The Only Joy* (*Jediná radost*) (1962) and the anti-alcohol animated morality tale *The Bottle and the World* (*Láhev a svět*) (1964).

In *The End of the Cube* (1979), the main character is an architect in the process of designing a standardized apartment for a housing project. He attempts to maximize the space-saving and the utilitarian character of the apartment to an absurd level, while he himself, as we learn at the end, resides in a luxuriously spacious home. At the farcical climax of the film, the architect arrives at a “revolutionary idea” (forecast by the film’s title) of an even greater economization of housing: instead of a cubic space, he comes up with a triangular design.

Unlike Neumann and Barta, who address the intrinsic ideology, the social impact, and the flawed design of socialist architecture, Smetana targets professional hypocrisy as a social problem. With this film (which won an award at the Cannes festival in 1980), he achieves a sophisticated level of political ambiguity: his character can be read as a mockery of a

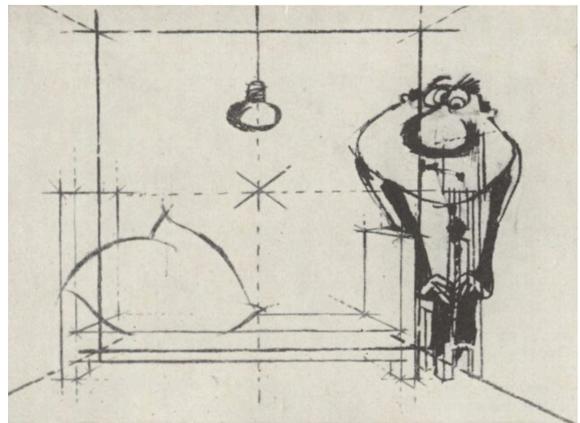


Fig. 6 A still from Zdeněk Smetana’s *The End of the Cube* (1979).

profit-oriented capitalist, but at the same time, he can be likened to communist functionaries who championed simplicity and communality in state-run mass housing programs while they themselves often lived in lavish residences.

Smetana’s work precedes and overlaps with Barta’s *The Design* in terms of its thematic focus. Both films satirize the process of architectural planning and play with the hypothetical space of an architectural drawing. In both, the two-dimensional technical sketches of architectural spaces become inhabited already at the planning stage—an ironic twist on the fact that during the notoriously ill-coordinated process of construction of the socialist housing projects of the 1970s and 80s, tenants often moved into apartments and neighborhoods that were not yet finished and, for years, lived in what was essentially a construction site (this is also one of the central themes in Herbert Rappaport’s *The Cherry Town* from 1962). In Smetana’s humorous take, the architect’s decisive planning followed by the excitement of the arriving tenants is ironically accompanied by Beethoven’s *Ode to Joy*.

Economy is also what characterizes Smetana’s style of animation, which relies on conceptual and visual shortcuts.

5 As formulated for example in the *Program of the Communist Party of the Soviet Union, 27th Congress* (CPSU, 1998).

In *The End of the Cube*, he uses a simple combination of black pencil line on a plain white background. His style is defined by an uneven and discontinuous line; the characters are based on caricature, condensed expressive gestures, and reduced movement. These are principles opposite to those Smetana had learned at the beginning of his career in the 1960s,⁶ when he collaborated with Rembrandt Films on the production of *Tom and Jerry*, *Popeye the Sailor*, and *Krazy Kat*⁷ and acquired the know-how of American-style animation (Smetana and Vebrová, 1990, p. 7). Although his personal style developed in a very different direction, the influence of the American school can be observed especially in his frequent use and his timing of the animated gag. In *The End of the Cube*, the gags draw mainly on spatial facets, such as (dis)proportions, the contrast of austere symmetry with rotundity, lack of space, and the pared-down processes of design and construction.

Conclusion

In the films discussed here—and to return to the category of “space as an event”—spaces are not primarily intended to depict naturalistic environments or to serve a supportive role to character action. Instead, they perform multiple other functions: a (metaphorical) extension of the character’s psychology; an allegorical representation; a construction of parallel reality; a medium-reflexive gesture; ambiguity through distortions of space and dimensional manipulation; and formal experimentation inspired by the grid and serial aesthetic.

The production modes that defined socialist architecture include the prefabrication of concrete segments, the

assembly-like nature of construction, and the serial arrangement of units, buildings, and entire neighborhoods. Mass production and spatial economy were among the core prerequisites. These modes engendered a new visual culture, “socialist modernity” (as Zarecor proposes), and new forms of everyday materiality, while also profoundly transforming the practices of familial and communal life.

The animated films I have analyzed here all feature principles of seriality, compression, and simultaneity that are inherent in this model of architecture, but they grant these principles different types of agency within their narratives. In the selected examples, we can observe a heterogeneity of rather realistic apartments, apartment buildings, and architectural designs, with their symbolic, metaphorical, allegorical, and parabolic dimensions of meaning. Some of these films explicitly reference the topographies that formed within the Eastern Bloc and the ways they affected its inhabitants to address the perils of mass production, uniformity, and anonymity (Jiří Barta and Hieronim Neumann), while others use the spaces of communist housing projects as a conduit to communicate less context-specific philosophical, ethical, and technological issues (Zbygniew Rybczyński and Zdeněk Smetana). Literal and figurative thinking about space intertwine in these films, and the animated commentaries carry a mixed and multilevel message open to a variety of readings. They reanimate our very thinking about space, our notions of the inside and outside, of neighborhood and community, and they reassert the sociopolitical agency of both architecture and animation.

6 Smetana had already worked in Jiří Trnka’s studio starting in the late 1940s and throughout the 1950s, where, according to his account, he got the chance to learn the foundations of drawn animation. For more on this, see: Interview with Zdeněk Smetana conducted by Eva Strusková, Národní filmový archiv (NFA) Prague, N0226, Oral History Collection.

7 The production of *Tom and Jerry* (1961–1962), *Popeye the Sailor* (1960–1963), and *Krazy Kat* (1962–1964) was outsourced by American studios such as MGM and King Features Syndicate to the Czechoslovak production company Rembrandt Films, which was founded by William L. Snyder in 1933. Snyder collaborated with the Prague-based American illustrator and animator Gene Deitch, who became the director of these three animated series in the early 1960s.

References

- Barta, Jiří, and Jana Rogoff. (2018, June 18). Interview. Discussing the 1980s Animation Production in Krátký Film.
- De Bruyn, Dirk. (2020). Dancing into Acoustic Space. *Animation Studies Journal* 15. <https://journal.animationstudies.org/dirk-de-bruyn-dancing-into-acoustic-space/>
- Humphrey, Caroline. (2005). Ideology in infrastructure: Architecture and Soviet imagination. *The Journal of the Royal Anthropological Institute* 11(1), pp. 39 - 58.
- Kremski, Peter. (2005). *Überraschende Begegnungen der kurzen Art. Gespräche über den Kurzfilm*. Köln: Schnitt Verlag.
- Lefebvre, Henri. 1991 [1974]. *The Production of Space*. Oxford UK and Cambridge US: Blackwell.
- Lehkoživová, Irena, Lucie Skřivánková and Rostislav Švácha, eds. (2018). *The Paneláks: Twenty-Five Housing Estates in the Czech Republic*. Praha: Uměleckoprůmyslové muzeum.
- McKim, Joel. (2017). Speculative animation: Digital projections of urban past and future. *Animation: an interdisciplinary journal* 12(3), pp. 287 - 305. DOI:10.1177/1746847717729581
- Serrazina, Pedro. (2018). *Animated Space: Thoughts on reclaiming the territory. The construction and use of hand-drawn animated space as a tool to perceive individual, social and cultural ownership* [Doctoral dissertation, Universidade Lusófona de Humanidades e Tecnologias, Lisbon].
- Sitkiewicz, Paweł. (2011). *Polska szkoła animacji*. Gdańsk: Słowo/obraz terytoria.
- Smetana, Zdeněk. (2001). Interview with Smetana conducted by Eva Strusková. Národní filmový archiv (NFA) Prague, N0226, Oral History Collection.
- Smetana, Zdeněk, and Hana Vebrová. (1990). Chvála pohybu. *Záběr: časopis filmového diváka* 23(17), 7.
- Telotte, Jay. (2010). *Animating Space: From Mickey to WALL-E*. Lexington, Kentucky: University Press of Kentucky.
- Vorlíček, Janni, and Petr Vodseďálek. (2016, April 17). Soukromí na sídlišti je mnohdy věcí veřejnou. *Ústecký deník*. <https://ustecky.denik.cz/z-regionu/soukromi-na-sidlisti-je-mnohdy-veci-verejnou-20160417.html>
- Wood, Aylish. (2006). Re-animating space. *Animation: An Interdisciplinary Journal* 1(2), 133–152.
- Zarecor, Kimberley E. (2020). Architecture in series. In A. Skrodzka, X. Lu, and K. Marciniak (Eds.), *The Oxford Handbook of Communist Visual Cultures* (pp. 44 - 65). New York: Oxford University Press.
- CPSU. (1998). *Program of the Communist Party of the Soviet Union, 27th Congress: Part 2. The CPSU's Tasks in Perfecting Socialism and Making a Gradual Transition to Communism, 1986*. Amsterdam: Eurodos, 1998. <https://eurodos.home.xs4all.nl/docu/cpsu-texts/cpsu86-21.htm#CPSUTasks>