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Things Made Strange: On the Concept of “Estrangement” in Science Fiction Theory

The concept of estrangement has been significant for sf criticism ever since Darko Suvin defined sf as the “genre of cognitive estrangement” in his *Metamorphoses of Science Fiction* (1979). Although everyone seems to agree that sf renders the content of its stories somehow “strange,” there are upon closer inspection considerable differences in the way sf scholars make use of Suvin’s concept. This is partly due to inconsistencies within Suvin’s own definition, which are themselves a consequence of the vagueness of the concept of “estrangement” before it was introduced into sf criticism. The idea of estrangement occupies a prominent position in several aesthetic theories of the twentieth century. It was, for example, central for Russian Formalism, as well as for Surrealism and for various postmodern writers. The concept has been continually extended, so that today estrangement is often regarded simply as a general artistic principle. In this paper, I intend to restrict the meaning of estrangement, as far as sf is concerned, by referring back to two of its significant theoreticians, Shklovsky and Brecht, before re-evaluating Suvin’s definition. Since I am a scholar of film studies, I will focus my analysis on sf movies; nonetheless, my insights should hold equally for written sf.

Shklovsky and Brecht—*Ostranenie* and *V-Effekt.* In German, my native language, “estrangement” is commonly translated as *Verfremdung.* *Verfremdung* in turn can be translated into English in several ways, the three most popular being “estrangement,” “defamiliarization,” and “alienation.” Each of these variant translations has had consequences, as we shall see, since Suvin, who speaks German fluently, draws heavily from such German authors as Bertolt Brecht and Ernst Bloch. In German-speaking discourse, the term *Verfremdung* is used by two different theoretical traditions: for the concept of *ostranenie* as developed by the Russian Formalist Viktor Shklovsky, and for Brecht’s concept of the estranging effect, the so-called *V-Effekt.* Although these theoretical approaches share similarities, they are by no means identical. Shklovsky in his 1917 essay *Art as Technique* defines *ostranenie* as the breaking up of established habits of reception. In daily life, we often perceive things only superficially—i.e., we do not really *see* them the way they are. To *truly see* things again we must overcome our “blind” perception, and this is only possible when they are made strange again. This process of making things to appear strange is, according to Shklovsky, the essential task of any kind of art.

It is difficult to pin down the term *ostranenie,* however, because Shklovsky’s definition is not very systematic. In fact, he describes several processes at different levels. Firstly, he uses *ostranenie* to differentiate art from non-art. From this perspective, *ostranenie* seems to be part of the perception process. Yet at the
same time ostranenie is used to describe specific formal operations, such as stylistic devices located at the level of the text, as for example the presence of unusual narrative strategies. At a third level, ostranenie describes a process in the history of art. In the course of time, a style once thought to be revolutionary will become “normal” and thereby will be canonized. Subsequently things in turn are made strange again, but only by a process of conscious departure from established norms. According to Shklovsky, the history of art is a steady succession of canonization and de-automatization.

At first glance, Brecht’s definition of Verfremdung seems almost identical to Shklovsky’s ostranenie: “A representation which estranges is one which allows us to recognize its subject, but at the same time makes it seem unfamiliar” (qtd in *Metamorphoses* (6)). Yet for Brecht, Verfremdung also has a strong didactic and political meaning, and clearly is part of the audience’s perception. The V-Effekt blocks empathy. In Brecht’s Epic Theater the spectator is not allowed to “delve” into the play and is obstructed from regarding it as “natural.” Quite the contrary, the action on stage—and by analogy the social order— should be rendered visible as something artificial and man-made. In the logic of dialectical materialism, V-Effekt should make an audience aware of sociopolitical processes (Jameson 58).

In contrast to Shklovsky, Brecht’s Verfremdung is not so much a general principle of art as a specific didactic effect (Brooker 90). For Brecht, there are analogies between estrangement and the scientific process; both are based on a naive, fresh look at the world, both take nothing for granted, and both ask why the current situation is the way it is (Rülicke-Weiler 303). Brecht’s plea for a “theater of the scientific age” has to be understood in this context.

When it comes to the question of what kind of response estrangement does or should provoke in the reader, Shklovsky and Brecht differ fundamentally. For Brecht, it is essential that estrangement leads to the realization that things do not have to be the way they are, that any current state of things is not a natural given but a product of historical processes, which can change and will be changed. Shklovsky’s project, by contrast, is ultimately a conservative one. For him, the task of art is not to reveal things as results of a historical process but as eternal:

Things are as they are, and art seems to be called upon to reveal through estrangement their genuine character—not to change them or the social settings in which they occur. Any successful act of estrangement thus rests on a paradox: The end product is meant as a piece of innovation—arrived at through various artistic devices—that serves, however, to revive and make more palpable the old (and constant) substance of things. To conduct the procedure of estrangement properly and to the desired end means to bring the old to the fore in and through the new, thus reaffirming what is presumed to be the object’s timeless substance. (Tihanov 686)

Despite their different goals, both Shklovsky and Brecht see and use estrangement mainly as a stylistic device that describes how fiction is being communicated. Shklovsky specifically mentions unusual verbal imagery, while Brecht names concrete operations, such as a distanced kind of acting or placing banners above the stage—two exemplary strategies for breaking the illusion of realism.
Suvin refers explicitly to Shklovsky and Brecht, but without distinguishing properly between these two theoretical traditions. Instead, he introduces the term estrangement in a completely new realm when using it to designate a genre: “In sf the attitude of estrangement … has grown into the formal framework of the genre” (Metamorphoses 7; emphasis in original).  

This central point of Suvin’s poetics is full of contradictions, and it is worth analyzing it in detail to disentangle the different aspects of Suvin’s concept. For all their differing attitudes regarding the question of what task estrangement should serve, for both Shklovsky and Brecht estrangement has been primarily a stylistic device that can be located at specific points inside “realistic” texts. Suvin, however, suddenly calls it the formal framework of estranged genres, which are comprised of sf, the fairy tale, and myth, and which he opposes to naturalistic ones.

This is not only a completely new usage of the term “estrangement,” but a problematic one. One of the elementary insights of Russian Formalism has been that so-called “realistic” texts also regularly make use of estranging effects (Parrinder 37). From a formalist’s point of view, Suvin’s opposition between estranged and naturalistic fiction is quite questionable, to say the least.

The opposition between Suvin’s theory and the formalist’s ostranenie arises because in his concept of estrangement Suvin intermingles different aspects. He fuses the ontology of the fictional world with the formal devices a text employs to present its world. For Suvin, estrangement has to be applied to both fictional and formal aspects. Although he writes of the “formal framework” of a genre and, moreover, quotes Brecht’s definition of Verfremdung, estrangement clearly is not a purely formal device for Suvin. If he were truly following Brecht (“A representation which estranges is one which allows us to recognize its subject, but at the same time makes it seem unfamiliar” [32]), this would mean that sf and fantasy are constantly making their marvelous elements appear strange. This is, of course, not true. Although “unrealistic” characters populate fairy tales, they are not “strange” in the sense of Shklovsky or Brecht. They are not constructed to surprise—on the contrary, witches and fairies and the like are expected—and hence they do not serve to de-automatize or to make strange whatever is happening in the story. Ostranenie and Verfremdung are both based on the idea of turning the common into the unfamiliar, but fairies or talking animals are not at all common. They do not have referents in empirical reality. Moreover, the fairy tale is, in Shklovsky’s sense, one of the most canonized genres. Although ostranenie and Verfremdung are ambiguous concepts, both primarily designate rhetorical strategies. Suvin, however, uses estrangement to characterize the relation between the fictional and empirical worlds—in this sense, an estranged fictional world is a world containing marvelous elements, elements which are not (yet) part of the world we live in.

In sf, all kinds of marvelous things may happen. People can travel in time, exceed the speed of light, and do many other things that, according to our present knowledge, we will never achieve in the real world. Contrary to Suvin’s definition, these marvelous acts are not presented in an estranged way; rather they are rationalized and made plausible. In a fairy tale, an evil witch can wave her
magic wand and make people disappear. Judging by our empirical world this is no more realistic than the idea of teleportation as we know it thanks to Star Trek. Still, we have no problem at all identifying which “magical” disappearance belongs to the world of the fairy tale and which to sf. This is because sf employs an aesthetics of technology and tries to naturalize its nova. A witch is unquestionably part of the fairy tale iconography, while such machines and devices as in Star Trek, for example, look technical; they are visual extrapolations of tools we use in everyday life. It is not so much the technical possibility of “beaming” that identifies Star Trek as sf—since “beaming” is technically impossible (so far)—but rather its techno-scientific look. The formal framework of sf is not estrangement, but exactly its opposite, naturalization. On a formal level, sf does not estrange the familiar, but rather makes the strange familiar.

According to Patrick Parrinder, “[f]or Suvin … estrangement in fiction is first and foremost a matter of choosing a plot that is non-realistic in the sense that it is determined by the novum” (39). Parrinder’s interpretation does not really make sense, either, because what the novum shapes primarily is the world of the story. It follows that the plot is also influenced by the novum; however, what gets estranged in sf—in Suvin’s sense—is not the plot (or the story), but the fictional universe. In other words: story and plot can only be “non-realistic” because they unfold in a marvelous universe that differs from the one we live in. Suvin’s (and also Parrinder’s) problem is that the classical narratological triad of plot, story, and style does not actually describe the world a story takes place in. Somehow, the fictional world has to be part of it implicitly, because the story cannot take place in a vacuum; but, ultimately, the fictional world is not something formalistic that narratology truly cares about. Formalism, as well as structuralism, both have a blind spot when it comes to fictional worlds; they do not provide proper tools to describe the ontology of a fictional universe. This is a major source of confusion in Suvin’s theory, because he constantly speaks of the formal framework and he continuously employs formal categories to describe what is clearly an aspect of the ontology of the fictional world.

It becomes obvious that Suvin uses estrangement differently from his predecessors when we look at his comparison of Brecht’s work with sf: “In sf, the attitude of estrangement—used by Brecht in a different way, within a still predominantly ‘realistic’ context—has grown into the formal framework of the genre” (Metamorphoses 7; emphasis in original). This enigmatic sentence shows Suvin’s difficulties in fusing Brecht and sf. Brecht does not fit into the naturalistic/estranged opposition Suvin established, and so Suvin is forced to introduce the term “realistic,” which he will not use later, and whose exact meaning remains unclear. Obviously, Brecht’s plays employ modes of estrangement; but they neither belong to sf nor to a related genre; they are part of a “realistic context.” This means that when it comes to Brecht, “estranged” probably does not describe the characteristics of the fictional world, since there are no marvelous elements in his plays. In absolute opposition to what Suvin claims, it is actually in Brecht’s works that estrangement functions as a formal framework.
Cognition, Cognition Effect, and Naturalization. So far, I have not mentioned Suvin’s concept of “cognition,” which in his view is also essential for defining sf. It is precisely the combination of estrangement and cognition that sets sf off from other estranged genres. As with estrangement, Suvin applies cognition to rather different things. In the preface of *Metamorphoses*, he writes that sf must be “perceived as not impossible with the cognitive (cosmological and anthropological) norms of the author’s epoch” (*Metamorphoses* viii). In the same paragraph, he also asserts that sf is “a realistic irreality, with humanized nonhumans, this-worldly Other Worlds and so forth” (*Metamorphoses* viii). Here cognition seems to mean that the novum, despite its marvelous character, is rendered as possible—“this-worldly.” The emphasis lies on appearance and perception; the novum must appear as cognitive. In other words, cognition here seems to be identical with what I call naturalization. This is also in line with the approach of Carl Freedman, who speaks of a “cognition effect” rather than of “cognition” as such: “The crucial issue for generic discrimination is not any epistemological judgment external to the text itself on the rationality or irrationality of the latter’s imaginings, but rather ... the attitude of the text itself to the kind of estrangements being performed” (18).

Up to this point, cognition seems to be mainly a formal category, but for Suvin, there is more at stake. Since sf appears as this-worldly, it implies—contrary to fantasy or the fairy tale—a connection with the empirical reality of the reader. It follows from this that “sf sees the norms of any age, including emphatically its own, as unique, changeable” (*Metamorphoses* 7); in other words, sf is constantly historicizing its worlds—it is the materialist genre par excellence—which explains why the declared Marxist Suvin is so attracted to it. In this sense, cognition is even more a part of the perceptual process; it actually becomes an activity of the reader. Suvin, again, does not properly distinguish between the properties of a text and their (desired) effect(s). For him, the elicited cognitive effect in a reader and the formal means by which this is achieved seem to be identical (at least, they both fall under the term of “cognition”).

Suvin’s use of cognition is also somewhat tautological. As I noted above, for Brecht the goal of estrangement is to let things appear as historically produced and changeable—and any properly estranged work of art should achieve this cognitive effect (see also Parrinder 40). Aside from that, Suvin’s and Brecht’s concepts almost match at this point (they both aim at historicizing and de-naturalizing the present), but they try to achieve their goals by different, if not quite opposite, means. Brecht’s plays estrange the normal, while sf naturalizes the strange.

In the first chapter of *Metamorphoses*, cognition seems to include formal and receptive aspects, and Suvin says explicitly that cognition should not be confused with “scientific vulgarization or even technological prognostication” (*Metamorphoses* 9). Clearly, this is targeted at the more fannish approaches that try to define sf by its allegedly inherent scientific quality. Later in the book, Suvin seems to alter his position. Suddenly, he demands that the “novum is postulated and validated by the post-Cartesian and post-Baconian scientific method” (*Metamorphoses* 64-65; emphasis in original). In my understanding, this stands
in direct contradiction to his earlier definition of cognition and, moreover, manifests a kind of relapse into a naïve fan position. Although Suvin is quick to add that this “does not mean that the novelty is primarily a matter of scientific facts” (Metamorphoses 65), the question remains as to what else it could mean. Of course, Suvin is aware that sf can be completely unscientific and he even quotes Kingsley Amis, who states that the novum is based “in science or technology, or pseudo-science or pseudo-technology” (Metamorphoses 65). Nevertheless, a pseudoscientific look alone is not enough for Suvin; sf also needs to indicate “the presence of scientific cognition as the sign of or correlative of a method (way, approach, atmosphere, sensibility) identical to that of a modern philosophy of science” (Metamorphoses 65).

Gregory Renault rightly complains that “[t]he tough-sounding references to ‘validation’ by the ‘scientific method’ are never explained, much less documented” (119). It is not clear at all what Suvin means by “presence of scientific cognition.” Is it a quality of the fictional world or does it describe the inner workings of the novum? Does Suvin here only want to say that because sf naturalizes the novum it also implies a scientific-technological world-view, and therefore is connected to the empirical world? If only the latter is intended, then his rhetoric seems quite overblown.

In his definition, Suvin short-circuits different kinds of estrangement in sf. There are probably several reasons for this. One must not forget that Suvin was in fact one of the first academics to take sf seriously and therefore needed to legitimize the object of his research. This may well be the reason why he resorts to Shklovsky, although the concept of ostranenie does not fit Suvin’s project at all. Also, he is hindered by the fact that formalism does not provide a proper framework to describe fictional worlds. Thus, the references to Brecht serve to bring sf into the realms of “high literature.” Suvin and Brecht also have similar goals. They both are interested in estrangement as a means of critical—i.e., socialist—examination of the present. The fact that Brecht sees estrangement as a quasi-scientific procedure is an additional bonus.

Another point in Suvin’s agenda is directed more at the sf community: Suvin wants to delimit “real” sf to a small set of texts with critical impetus. His definition is also meant as a “proof” that most books sold under the sf label do not count as part of the genre. Suvin tries to ban myths, fairy tales, and pulp sf from cognitive literature, but at the same time he tries to include such early utopian novels and satires as Gulliver’s Travels (see Renault 131). This is probably the reason for his ambiguous use of cognition. On the one hand, sf only has to appear as cognitive (otherwise there would not be any room for, e.g., H.G. Wells), but at the same time it has to be validated by the “Post-Baconian method,” or else even the most ludicrous space opera would fit into the genre.

Diegetic Estrangement. So far, I have demonstrated that estrangement is not the primary formal directive of sf. Nevertheless, estrangement is not entirely alien to the genre. Sf frequently produces an effect that is at least analogous to it. Whether there are creatures (human or of other species) traveling in time or to unknown planets, or new inventions that change the face of the earth, or hideous monsters
on a rampage—whenever a marvelous element is introduced into a seemingly realistic world, a collision occurs between two systems of reality, producing an estranging effect. The familiar appears in new surroundings and is thereby re-contextualized.

As an example, I will analyze a scene from Richard Fleischer’s *Soylent Green* (1973). In the year 2022 overpopulation has become the main problem of New York City. The city is utterly overcrowded and natural food is so rare that people must eat synthetic food. In this setting, the main protagonist Thorn is investigating a case of homicide in a luxury apartment. With almost ecstatic joy, he opens the faucet, runs the water over his hands, and smells the soap: “[H]e is so entranced with the taken-for-granted sensual pleasures of a middle class bathroom that it is impossible to look at the bathroom in the film as a familiar place” (Sobchack 132). Thus, a quite prosaic and totally common room is transformed by estrangement into a place of pure joy; the audience realizes their (unconscious) daily luxury.

It is this kind of “making strange” that Suvin probably has in mind in the term “estrangement,” yet it is based on a principle different from Shklovsky’s and Brecht’s concepts. The bathroom in *Soylent Green* is not estranged formally. There is no surprising editing, there are no unusual camera angles. The whole scene is filmed in one shot; the camera work is quite unobtrusive and functional. It is essentially Thorn’s behavior that creates the effect of estrangement. Without his exuberant joy, the scene would hardly appear strange. The effect of estrangement in *Soylent Green* derives from the character’s behavior and is therefore part of the diegesis, the fictional world; it arises because Thorn acts unusually in what appears to be a realistic world.

When Suvin writes about estrangement, he usually does not mean *ostranenie*, but *diegetic estrangement*, the collision of contradicting elements on the level of the story. Such incidents of collision may be produced via unexpected character reactions (such as Thorn’s in *Soylent Green*), or by the introduction of “impossible images,” such as, for example, ships stranded in a desert in *Close Encounters of the Third Kind* (1977). In the second example, again estrangement does not arise from a formal operation, but from the fact that these ships are *where they cannot be*—a fact that is illustrated realistically.

The concept of estrangement is *not* the formal framework of sf—and Suvin actually says so himself when he states that “[t]he effect of such factual reporting of fictions is one of confronting a set normative system … with a point of view implying a new set of norms” (*Metamorphoses* 6; emphasis added). “Factual reporting of fictions” is merely another way of saying “naturalizing the marvelous,” and when Suvin speaks of “a new set of norms” he obviously is not referring to formal aspects (how the story is told), but to fictional ones (the rules governing a fictional world). Therefore, in sf, the effect of estrangement does not arise only from making things strange, but from the naturalization of the marvelous.

Suvin extends Shklovsky’s already broad concept of estrangement to include all aspects that are, in his opinion, central to sf: fictional, stylistic-formal, and generic ones. Thus, for him, estrangement denominates the following six aspects:
• The nature of the fictional world, first in terms of its relationship to our empirical reality, and then
deriving from that, the genre of the respective film/text; then, further,
a formal process justifying the novum, the naturalization of the marvelous, and
the opposite process: making the familiar strange, and,
an analogous process on the fictional level, making things strange on the level of the story, while
both processes serve the same goal, which is the de-automatization of perception, the seeing of the familiar anew.

It is essential to restrict Suvin’s ambiguous notion of estrangement and to distinguish its different aspects. Firstly, we have to get rid of Suvin’s estranged genres; here, “estranged” can easily be replaced with “marvelous.” Suvin’s use is prone to cause misunderstandings and hence does not carry any advantage. Next, we must differentiate between the formal and the fictional processes that can be employed in creating an estranging effect. The process of normalizing the alien I call naturalization, while the formal-rhetorical act of making the familiar strange (in Shklovsky’s sense) will be named defamiliarization. For estrangement on the level of the story, I introduce the term of diegetic estrangement, and for the receptive aspect (that is, the effect on the audience) just estrangement. Consequently, in sf, estrangement can be achieved in two ways, by means of defamiliarization or by diegetic estrangement.

Suvin’s definition does not distinguish between fictional, stylistic-formal, and receptive aspects, but until we differentiate these levels, we cannot answer the question whether and how sf estranges its content. It is not enough to, for example, define estrangement simply as “a rhetorical effect created by the use of specific stylistic devices,” as Philippe Mather does (187). This should be obvious when examining Mather’s own examples: the deserted cities in Omega Man (1961) or On the Beach (1959) seem strange and creepy not because its inhabitants have been made invisible by “specific stylistic devices,” but because the sites have been actually abandoned.

Diegetic Estrangement and Defamiliarization. The distinctions among naturalization, defamiliarization, and diegetic estrangement lies at the very heart of sf. In the following passages, I will concentrate on the relationship between naturalization and defamiliarization, sketching briefly how they interact. Naturalization is the basic formal process noticeable in sf. Like defamiliarization, it is located on a formal level (in contrast to diegetic estrangement, which is a fictional phenomenon on the level of the story). Still, diegetic estrangement and naturalization are closely linked; the novum must have been naturalized before diegetic estrangement can take place. Cognitively, diegetic estrangement comes into play at a later stage than naturalization (and defamiliarization). First, sf depicts the novum as compatible with our world; then, an estranging effect can only follow when the viewer becomes aware of some recontextualization. Defamiliarization, on the other hand, is a purely formal phenomenon.
I will illustrate the interaction between these mechanisms with an example of the popular motif of a change in scale. In *The Incredible Shrinking Man* (1957) the body of the protagonist shrinks after radioactive contamination. The drastic change in size lets familiar objects of our daily life appear in a completely different light. To the “Tom Thumb”-like protagonist, an ordinary house becomes a dangerous trap. First a cat and later a spider are suddenly threatening menaces, and a doll’s house seems to be the only safe place.

What *The Incredible Shrinking Man* demonstrates has, at first glance, nothing to do with defamiliarization. The altered dimensions are not a formal device in Shklovsky’s sense, a rhetorical procedure that renders the familiar strange. When Tolstoy describes a Napoleonic battle in an unusual way (to cite one of Shklovsky’s examples), he does not change the object of his description. A battle remains a battle even if it is delineated in an unconventional way. The tiny protagonist in *The Incredible Shrinking Man*, on the other hand, is no longer a “normal” man shown in an unusual way. In this movie, estrangement takes place on the level of the story, and the special formal trick is that this shrinking is presented “realistically.”

Although sf is primarily based on naturalizing the marvelous, however, defamiliarization is not unknown to the genre. Many familiar objects are rendered strange in *The Incredible Shrinking Man*. Furniture appears enormous, a cat appears suddenly as a gigantic monster, and a nail is employed as a lance to battle a spider. At first sight, these examples may appear as paradigmatic of defamiliarization, but there is one crucial difference from Shklovsky’s examples. *In The Incredible Shrinking Man*, objects only appear strange because the movie adopts the perspective of its protagonist; it focalizes on his point of view. The audience shares the main character’s perspective and not that of a (more or less) neutral narrator or a non-marvelous character. We would not see any gigantic furniture, nor a “monster”-cat, if it were not for the film’s point of focalization, which is the shrunken person. If, for example, we were to share the point of view of his (not radioactively contaminated) fiancée, we would merely see a tiny man in familiar domestic surroundings.

The unusual point of view is possible because the film has completed its naturalization, and hence the audience has accepted the novum. The movie focalizes on and/or through the naturalized novum. This focalization can be understood as a part of sf’s rhetorical strategy. The film “behaves as if” its novum were normal and plausible, and it does so not only on the “superficial” level of its technological aesthetics, but also on the narrative level. The narration accepts the novum as well and takes its point of view, thereby performing a narrative naturalization.

The result of this narrative naturalization could be called a second-degree defamiliarization, which only comes into effect after a successful naturalization has taken place. This kind of defamiliarization that follows from diegetic estrangement is far more frequent in sf than “normal,” primary defamiliarization. This is also true for Sobchack’s example of *Soylent Green*. If an apple, a piece of meat, or fresh water from the tap are rendered strange by the camera’s unusual lingering, this is again an example of second-degree defamiliarization. The
narration is focalized on the protagonist, and together, they marvel at the various miracles.

The interaction between naturalization and defamiliarization can result in different forms. The most extreme instance of naturalization is achieved when a film shows the subjective point of view of an alien being. Mather lists several exemplary movies: *Westworld* (1973), *RoboCop* (1987), and *Predator* (1987); there are other examples, such as *The Terminator* (1984), *Alien3* (1992), and, of course, *2001: A Space Odyssey* (1968), in which we regularly “see” the action from HAL’s point of view. A variant is the view through an insect’s compound eye, as in *The Fly* (1958) and *Phase IV* (1974). In all these examples, the narration is completely focalized through the novum; we literally see with strange eyes.

First-degree defamiliarization, which is not based on a naturalized novum, is far rarer in sf; it even contradicts the genre in certain ways. If the novum is not naturalized, but made strange, sf’s central device—rendering the marvelous possible—is made obsolete. This is, in my opinion, the reason why sf generally prefers a non-experimental mode of narration,12 what David Bordwell calls classical narration. Most non-classical modes of narration try to defamiliarize the story, and this conflicts with sf’s tendency to naturalize—the result would be a “defamiliarized estrangement.”

Most of the time, first-degree defamiliarization does not appear in pure form, but is used to support diegetic estrangement. *Letters From a Dead Man* (1986), for example, shows a somber post-doomsday world where people vegetate in contaminated ruins. The film features many examples of diegetic estrangement, among them the puny Christmas tree towards the end—arid branches decorated with wire and candle stumps. This does not count as a formally defamiliarized image of an ordinary Christmas tree, but as its poor imitation. Yet besides those moments of diegetic estrangement, *Letters from a Dead Man* also employs defamiliarization. The whole movie is tinted a dirty brown-yellow, which in interior scenes is sometimes interchanged with a sickly blue hue. This clearly is an example of defamiliarization: the picture is formally made strange, but the hue is not meant to indicate that the world of the movie is actually monochrome. Rather, it underscores the morbid and degenerated character of the deserted city on a formal level (the same operation is used in Lars von Trier’s *The Element of Crime* [1984]). *The Angry Red Planet* (1959) uses the same technique (the scenes on Mars are tinted red), but for a different result. Although the red color also provokes an estranging effect, this time it is an instance of diegetic estrangement. The red hue is meant to visualize the light on the Red Planet, therefore the color is diegetic. In *Phase IV* we meet a third variant. Here, the landscape is covered with a yellow insecticide. Although all three examples exhibit the coloring of a scene, each one is different. In *Phase IV*, the color is part of the profilmic reality, the landscape is painted yellow, while in the two other movies the film stock was colorized later.

In *Letters from a Dead Man*, defamiliarization is employed to support diegetic estrangement, while in *Phase IV* defamiliarization is used to create diegetic estrangement in the first place. As this is rather rare, I will analyze this example
in more detail. In the only feature film by Saul Bass, the story is about mutated intelligent ants that try to take over the world. In contrast with other sf movies populated with mutated insects (including Tarantula [1954], Them! [1955], The Beginning of the End [1957], or The Deadly Mantis [1957]), the ants in Phase IV appear unchanged. They are still tiny insects, which distinguish themselves from the “normal” type only by their unusual intelligence. Since ants cannot be trained, and as artificial ants would not have been a convincing substitute in the mid-1970s, the filmmakers had to film common ants following more or less their normal routines. In the film, many scenes are shot with extreme macro lenses as we know them from educational movies. Unlike in most documentaries, the ants of Phase IV are deliberately being staged like human beings. An uncanny score and unnatural, almost expressionistic, lighting suggest that these little creatures are up to something. Early in the movie, members of different ant species meet and “discuss” their strategy. At this point, the film cuts between close-ups of the various heads (in the shot/reverse-shot-tradition of a “conventional” dialogue scene), and thereby suggests that these insects actually are communicating. We do not hear their “talk,” of course, except for some chirping noises, but still, the editing of the scene and the “gesticulating” tentacles of the ants render the impression that a lively discussion is taking place. Overall, the ants in Phase IV rarely behave in an unusual way: they just do the things ants normally would do. Still, Phase IV manages—by applying such formal devices as close-ups, lighting, music, and editing to produce a specific effect—to leave the impression that they are far from normal. This is a paradigmatic example of defamiliarization, which, in this case, does not make us see the ants anew, but rather seems to be changing them. In Bass’s movie, defamiliarization does not result in the de-automatization of our perception, but rather in creating a deception.

Diegetic estrangement and defamiliarization can also coexist without much interference. In John Frankenheimer’s Seconds (1960), Arthur, a well-situated man in his fifties, gets the chance to exchange his absolutely average existence with a life of his choice. A mysterious organization offers him the opportunity to lead a new life with a new identity and a changed physical appearance. Everything seems to work out perfectly; still, Arthur—who is now called Tony and looks now “like” Rock Hudson—cannot get used to this new life. He understands that all his new friends belong to the organization, too. He is part of a big charade and still no closer to fulfilling his “true self.”

The title sequence of Seconds shows Tony in close-ups; he is being filmed with extreme wide-angle lenses and thus appears grotesquely distorted, nonhuman, and strange. This intro is a case of defamiliarization in its purest form. One of the most familiar objects, the human face, suddenly seems scary and strange—indeed, we do see this face anew. Apart from the opening sequence, Seconds is (for the most part) filmed in a sober, rather flat black and white. There are no spectacular special effects; the novum is completely naturalized. The radical change in the protagonist’s appearance is depicted as a large but normal medical operation—although at the end, when Tony realizes what will happen to him, again extreme wide-angle shots are used. These moments remain exceptions, however. Normality rules, and it is precisely this normality from which the
movie’s effect stems. An audience—and, after a while, Tony, too—understands that here nothing is truly “normal.” In this movie, nothing is as it appears; even Tony’s best friends and his lover are part of an immense setup. Finally, Tony is totally estranged from himself. He understands that he does not know who he actually is, that he does not have any idea of what he wants, and that all his decisions have been controlled by unknown forces.

In *Seconds*, defamiliarization and diegetic estrangement alternate and complement each other. In the title sequence, the human body is portrayed as strangely as possible. Yet, since the titles are not really part of the diegesis, this does not interfere with the fictional world but rather acts as a commentary on a meta level. This is the film itself speaking, so to say, and there is no danger of a collision between defamiliarization and naturalization, since the film has not yet established its fictional world. The underlying message in this beginning, though, is clear enough: man is estranged from himself. The story of the film further illustrates this. Man is not only estranged from his body, but also from his social existence. His wishes and hopes turn out to be poor delusions. *Seconds* is an example of how a merely formal defamiliarization can be continued on the fictional level.

**Defamiliarized Estrangement.** In *Phase IV* and *Angry Red Planet*, defamiliarization serves to create diegetic estrangement, while in *Seconds* these two processes are kept apart. The combination of first-degree defamiliarization and diegetic estrangement in the same scene, on the other hand, is rare, since sf depends on naturalization. A defamiliarized estrangement would put the genre’s realistic illusion in jeopardy. While there are some movies with isolated scenes that combine both devices, there are almost no examples where this is maintained throughout a whole movie. A film that mixes the processes from time to time is George Lucas’s first feature film, *THX 1138* (1971). Here, we encounter a sequence in a kind of prison, which is a seemingly endless room without walls, floor, or ceiling. Everything is white; even the characters are dressed in white and their heads are shaved.

There are other sf movies that feature rooms kept completely white, for example *Mission to Mars* (2000) and *The Matrix* (1999). Compared with these two later movies, *THX 1138* is more radical, since it deliberately violates Hollywood’s rules regarding frame composition and “invisible” editing. Some shots seem almost “empty,” with characters only partly visible at the edge of the frame. In other shots, the people in the foreground are photographed out of focus with the speaking character concealed. It is already quite difficult to keep a sense of orientation in such borderless rooms, but on top of this, the editing adds to the instability: the film jumps from shot to shot, frequently breaking the rules of the 180° line and of continuity editing. Such “arbitrary” editing, in combination with the white frames, is highly disorienting and disturbing. The audience has almost no point of reference and soon feels completely lost. Only a few scenes of *THX 1138* are staged this way, however. This is no surprise, since such a highly disorienting style makes it difficult to tell a story. Hence, when it is important that
the (quite conventional) plot should be understood, the film’s narration returns to a “normal”—that is, conventional—style.

What is considered conventional—or what David Bordwell calls classical—narrative is not a static entity, however. Many of the formal and narrational gimmicks common in today’s blockbusters would have been regarded as impossible in the Hollywood of the 1940s or 1950s. This also holds true for sf film, although sf is quite conservative compared to the Hollywood mainstream. *Event Horizon* (1997) and *Fantastic Four* (2005), for example, both use the combination of zoom with reverse traveling known as *Vertigo effect*. This effect results in a highly visible change in the frame’s geometry and is an example of defamiliarization. In both movies, the vertigo effect is used to depict processes of the psyche—there is no direct conflict with the naturalization of a novum. Something analogous would have been impossible in an sf movie of the 1950s.

There is a tendency in today’s sf movies towards a defamiliarization that has no diegetic motivation. An exemplary film is *The Matrix* (1999), probably the most influential sf movie of the last decade. For the main part of the movie, defamiliarizing special effects serve to depict the fictional world in a nevertheless plausible way. Early on, a kind of electronic insect is surgically removed from the main protagonist’s—Neo’s—belly button. Soon afterwards, he touches a mirror, which then turns liquid. This is a standard use of special effects; they supply a setting that would have been impossible to create otherwise.

One of *The Matrix’s* most spectacular special effects is the so-called *bullet time effect*. Here, a scene is slowed down or even brought to halt, so that we can view motions and actions that are too fast to notice under normal circumstances, as for example a flying bullet (hence the name). At the same time, although time is on hold, the camera stays in motion and moves inside the frozen scenery. *The Matrix* uses this effect in different ways. The scene in which Neo dodges flying bullets is “classical.” Here, a highly defamiliarizing effect is used to depict a fact possible only inside the fictional world—Neo possesses superpowers that enable him to evade bullets. Completely different is a scene at the film’s beginning, when Trinity “freezes” during a fight with a cop. The action stops, Trinity “floats” in mid-air without moving, while the camera turns a half circle around her. Although both scenes make use of the same effect, there is a considerable difference. In the bullet-dodging scene, Neo is still moving; the slowing down of the action is only needed to show how fast his movements have become. In the Trinity scene, neither she nor the cop are moving; everything has come to a stop, and only the camera moves. If this were meant to be a diegetic effect, it would mean that time had stopped in the scene—which would not make sense in the story. Here, the *bullet time effect* has no diegetic motivation; it is employed to baffle the audience and to display the level of technical expertise used in the film.

Defamiliarization and diegetic estrangement begin to blend in *The Matrix*. What the film does is “against the rules”—to use the same effect for diegetic estrangement and defamiliarization. What at first appears to be an identical device—time stops—are in fact two different things in this fictional world. I am not suggesting that *The Matrix* is the first movie to do this, but the film’s immense box-office success has definitely helped to soften the “unspoken” law
that previously forbade the mixing of defamiliarization and diegetic estrangement. *Slipstream* (2005), for example, shows similar tendencies. The film’s protagonist owns a kind of time machine that enables him to rewind actions as with a VCR’s remote control. To illustrate this, the film uses various effects: whole shots or parts of a scene freeze, and some scenes are rewound in fast motion. Besides those diegetically-motivated manipulations of time, *Slipstream* also employs techniques of defamiliarization that have no real diegetic motivation. During a shoot-out, for example, the camera starts to spin and shows the combatants, who, together with the background, gradually start to blur. In the end, all we can see is the background changing behind static characters. From the perspective of the story, this makes no sense, since none of the protagonists are moving during the shooting. In a later scene, the two main characters are having a conversation, which is depicted in an unusual parallel montage. The film jumps between two locations—the inside of a car and a few steps in front of it—while the dialogue goes on without any interruption. Here, a conversation is taking place at two locations at two different times. This scene could be taken as a marker that time has come out of joint inside the diegetic world. If that were the case, however, it would only be visible for the audience and not for the protagonists. Consequently, the film uses defamiliarization, but is not depicting a diegetic fact with it. At the end, this is brought to the extreme when the credits are first shown in fast motion, then rewound and shown again at normal speed.

**Conclusion.** I have shown that terms that seem commonly accepted, upon closer inspection often display quite a broad variety of meanings. This holds especially true for the term “estrangement.” Shklovsky, Brecht, Bloch, and Suvin all write about estrangement, yet they all mean different things by it. While Shklovsky’s *ostranenie* is primarily a formal operation, Suvin’s estrangement denotes a phenomenon on the level of the story—although he himself does not seem to fully realize that. The aim of this article is to show that such distinctions are not signs of pure academical finickiness, but, on the contrary, point to the very core of sf. The interactions among naturalization, defamiliarization, and diegetic estrangement are vital for the way sf works and how it affects an audience, and I believe my distinctions can aid a better understanding of the genre.13

**NOTES**

This paper presents a condensed version of a chapter of my PhD thesis on science fiction film, which is available as *Die Konstitution des Wunderbaren. Zu einer Poetik des Science-Fiction-Films*. I am grateful to Daniela Casanova for her help with the translation.

1. Personally, I prefer to speak of sf not as a genre but as a *fictional-aesthetic mode*. While a genre is an historic entity, a term used at a specific time by certain actors to delineate a related cluster of films and texts, a mode is an abstract and at least partly ahistorical concept, which traverses times, countries, styles, and media. For the sake of simplicity, however, I will employ the term “genre” in this paper.

2. It is even more complicated since Brecht, in his early writings, uses the term *Entfremdung*, and only later changes to *Verfremdung* (Rülicke-Weiler 307). *Entfremdung*—commonly translated as “alienation”—is an important term in Marxist theory. Marx, following Hegel, argues that in capitalist society, the worker is alienated from his
work—and, ultimately, also from his fellow human beings, and even from himself—because he no longer produces for himself but is reduced to a replaceable link in the chain of production.

3. For my assessment of Shklovsky’s *ostranenie* I draw heavily from essays by Renate Lachmann (1970) and Frank Kessler (1996), both of which are available only in German. Although Shklovsky is generally regarded as a representative of Russian formalism, he stands in many ways outside the formalist project. He was not actually interested in literature as a system, and his concept of *ostranenie* was never fully adopted by theorists such as Iurii Tynianov or Roman Jakobson (Lachmann 237–44; Tihanov 667-68).

4. Some authors believe that Brecht was directly influenced by Shklovsky during his travel to Russia in 1935, but this claim seems to be largely unfounded (Lachmann 246–48; Tihanov 687–88, note 42).

5. Suvin follows Ernst Bloch in his understanding of *Verfremdung*. For Bloch, “the real function of estrangement is—and must be—the provision of a shocking and distancing mirror above the only too familiar reality; the purpose of the mirroring is to arouse both amazement and concern” (125). Bloch is closer to Brecht than to Shklovsky, since estrangement for him also can lead to a critical insight, but he conceptualizes it as a general principle that is not limited to formal aspects. Furthermore, Bloch distinguishes between “estrangement” (understood as a general effect) and “alienation” (understood as Marxist *Entfremdung*). For our purposes, such a distinction is not helpful, since Bloch does not differentiate between formal and diegetic “estrangement,” but describes it in a most general way.

6. I adopt Tzvetan Todorov’s nomenclature, which he developed in his study *The Fantastic* (1975). Todorov distinguishes between three types of genre, the uncanny, the fantastic, and the marvelous, the latter designating fictional worlds that are not compatible with our empirical world. Like Suvin, Todorov is not always clear in his definitions, because he understands these genres as formal categories, although they primarily designate the ontology of the fictional world: these categories point out not so much how a story is narrated, but rather the way a fictional world is being organized and how it relates to the world we experience in our daily life. So, in this paper, “marvelous” is used to designate the nature of the diegetic world in contrast to the world we live in.

7. Freedman also states his difficulties with this passage, and objects that “Brecht is in no sense a literary realist, not even allowing for the quotation marks” (19). Freedman seems to understand “realistic” as either a denomination for a historical period or as a certain style, but neither reading applies to Brecht. This probably is a misunderstanding on Freedman’s part, since I believe that Suvin is referring to the fact that Brecht’s plays lack marvelous elements and therefore do not belong to what Suvin calls estranged genres.

8. In recent articles, Suvin not only accepts the idea of emotional, non-rational cognition (“Cognitive Emotions”), but he also re-evaluates fantasy and comes to an unexpected conclusion: “Let me therefore revoke, probably to general regret, my blanket rejection of fantastic fiction. The divide between cognitive (pleasantly useful) and non-cognitive (useless) does not run between sf and fantastic fiction but inside each—though in rather different ways and in different proportions, for there are more obstacles to liberating cognition in the latter” (“Considering” 211). The admission that fantasy and other fantastic genres can be cognitive as well comes as quite a surprise and poses serious problems. Ultimately, it renders Suvin’s definition useless, because if both sf and fantastic fiction are estranged and can be cognitive, there is no way to tell them apart. The problem here, is, once more, the blending of a proper definition with the desired effect elicited in a reader and a value judgment. I do not think that what Suvin here wants to say is that fantasy can appear as this-worldly, or that it naturalizes its marvelous elements (and if so,
then I have to state that I do not agree with this notion: in most cases, sf and fantasy can easily be told apart by their mere appearance. In this quotation, “cognition” seems to mean only the critical reaction a text can provoke in a reader, and Suvin seems to be acknowledging (at least implicitly) that this has little to do with the definition of a genre per se.

9. By “naturalization” I denote a formal process and not the ideological-critical concept coined by Roland Barthes in Mythologies (1972).

10. Suvin faults the translation of ostranenie as “defamiliarization” as “somewhat clumsy” (Metamorphoses 6), but he does not explain why he thinks so. In my opinion, it is essential to differentiate clearly between Shklovsky’s concept and diegetic estrangement. Since the German language offers only the term Verfremdung, in my doctoral thesis I distinguish between diegetischer Verfremdung and ostranenie. However, as English here has a richer vocabulary, it would be wasteful not to make use of it.

11. See Genette, Narrative Discourse and Narrative Discourse Revisited.

12. This holds especially true for filmic sf, where non-classical narration is rare. In written sf, there is much more stylistic variation. Although Golden Age sf is also generally told in a classical way, with the development of the New Wave a greater stylistic variety has been introduced into written sf.

13. In this paper, I could only scratch the surface of what I consider to be the essential mechanism of sf. Much work still needs to be done (parts of which I have done in my doctoral thesis). Here, I have restricted myself to film, a medium that, for various reasons, is more conservative than literature. It would be interesting to test whether my considerations are also valid for movements such as the New Wave or cyberpunk, which both attempted renewals on a formal level.

WORKS CITED

The concept of “estrangement” has been central to sf criticism ever since Darko Suvin defined the genre as creating the effect of “cognitive estrangement.” By going back to the theories of Viktor Shklovsky and Bertolt Brecht, I will show how Suvin, in his approach, intermingles formal, fictional, generic, and receptive aspects of estrangement. Contrary to Suvin’s assessment, it is not sf’s primary formal operation to render familiar things strange, but to make the alien look ordinary, a process I call naturalization. In sf, estrangement mainly happens on a diegetic level, when a marvelous element is introduced into an apparently realistic world.