USO: The Unidentified Sound Object
By Barbara Flueckiger

The discovery of the USO, the unidentified sound object, derives from the close analysis of a group of 94 films selected from all periods of sound film history, with particular emphasis on Hollywood mainstream productions. The results of the analysis contrast sharply with the generally accepted assumption that the mainstream film – and its soundtrack in particular – tends to exclude any elements which do not contribute directly to the construction of meaning (see for instance Altman 1992, Gorbman 1980, Winkler 1992). These results also contradict the view that one of the most important functions of a sound effect is to refer to a source – a conviction whose best-known proponents were Kracauer and Balázs. In fact, a chief characteristic of the USO is that it has been severed from any connection to a source. In the case of the USO the source is neither visible on screen, nor may it be inferred from the context. In addition, spectators are denied any recognition cues, so that in general the level of ambiguity is not reduced.

The preservation of ambiguity is in fact an unspoken goal of the deliberate inclusion of USOs. As early as 1939, the Brazilian filmmaker Alberto Cavalcanti had already argued for the use of USOs in order to create suspense: Have you ever heard a noise in the night – nonsync – i. e., without having any notion of what caused it? Of course. And you left your bed and went down to find out what caused the bang, or the thump. While working on a production, he had suggested linking images of a sinking ship with a horrible metallic screeching that sounded as if the ship were bursting apart diagonally and uttering terrible screams in the process. This idea was inspired by an experience he had while watching a silent film:

An airplane was flying toward us. The music director „cut“ the orchestra, and a strange, frightsome sound began, and got louder and louder. It was nothing like an airplane, but very frightening. [...] It was a noise I had known all my life – an open cymbal beaten with two soft-headed drumsticks. [...] it had lost its identity and retained only its dramatic quality, used in conjunction with the picture. (Cavalcanti 1939: 37)
Cavalcanti considered the fundamental differences between seeing and hearing to be responsible for the suggestive, emotional character of the unidentified sound object, which triggers instinctive reflexes that may already be observed in infants. Cavalcanti’s idea was far ahead of its time. In classical Hollywood films up to the end of the 1950s the use of unidentified sound objects was extremely rare, as the accompanying diagram makes clear. During this period, only two productions made significant use of them: Charlie Chaplin’s *Modern Times* and Orson Welles’ *Citizen Kane*. Both films rejected the Hollywood conventions of the time. *Modern Times* explicitly returns to the pantomime- and gesture-based form of expression of the silent film: Chaplin completely avoids speaking, and the sound effects are inserted very sparingly and are for the most part abstract.

*Citizen Kane* was Orson Welles’ first film. His celebrated affinity for sound vocabulary could be traced back to his experiences directing radio plays, where he enjoyed great success, not least with the highly suggestive pseudo-documentary *War of the Worlds*. It is highly significant that the USO plays such an important role in *Citizen Kane*, where mystery and ambiguity are key concepts not only for the narrative structure but also for the theme of the film. The mystery surrounding “Rosebud,” Kane’s last word, functions as a motor for the action in the film and as a link between the memories of the various characters, while the ambiguous protagonist Kane remains a fascinating enigma to the end. Chion (1990:114) is correct in observing that, although Welles’ films create the impression of extravagant richness and variety, this impression does not stand up to close examination. In fact, the number of sound objects in *Citizen Kane* is in the low-to-average range. According to Chion, it is the accelerated visual and linguistic rhythms, which are responsible for the blurring of memory. However, this interpretation does not apply to *Citizen Kane*, where neither an exceptional speed nor a pronounced visual rhythm is to be found. The impression of acoustic complexity is rather the result of the careful variation of the sound objects and the tonal distinctions of the dialog. And, also importantly, this impression results from the use of USOs, whose tonality seems complex specifically because of the
absence of visual anchors: the spectator’s imagination is directly addressed, thus triggering an inner complexity.

In the context of stylized Hollywood film, *Citizen Kane* still seems as out of place as ever. The rule “see a dog – hear a dog” stands for the then-current belief that sound effects are understandable only when accompanied by the corresponding images. In fact, on a worn-out mono optical soundtrack from the 1940s, applause is hardly distinguishable from rain. Vagueness and indeterminacy can function as stylistic devices only when they are not understood as errors. Thus, a technical prerequisite for such use of sound is high resolution with precise tonal definition. As long as a sound object is generally considered unidentifiable when its source is not clearly demonstrated by a corresponding image, every USO remains a disturbance. An unwanted disturbance, however, suddenly exposes the technical apparatus, unmasks the film as an artifact, breaks the illusion. The sound editor Mott, an experienced practitioner of the old school, has adopted this convention as his own: *Unidentified sounds, especially if present over a long period of time, draw attention to themselves and very quickly become bothersome. Sounds should support and emphasize a scene, not divert and confuse the listener’s attention* (Mott 1989: 160). This explains at least partially why indeterminable sound effects generally were not used before the 1970s. The refinement of sound resolution was accompanied by an aesthetic shift. In contemporary science-fiction and action films, USOs comprise about 20 percent of all perceivable sound elements. Since the 1960s filmmakers have increasingly depended on the fantasy-stimulating power of the unidentifiable sound object to introduce mysterious creatures or virtual objects. As the sample analysis of the opening scene from *Jurassic Park* (USA 1993) reveals, Steven Spielberg is a master in the suggestive deployment of USOs. We imagine some kind of creature, certainly a violent one – the noises and the composition of its cage testify to that. The USO can be understood as an open, undetermined sign whose vagueness triggers both vulnerability and tense curiosity. As an empty space in the text, it functions like a screen upon which the viewer’s individual, subjective creation of
meaning may be projected. The ambiguous sound object poses a question, which the viewer will attempt to solve through interpretation. The longer the ambiguity – and the information deficit that accompanies it – persists, the stronger the emotions that are triggered. Wuss (1993: 321) suggests that this uncertainty has an emotional component because it is experienced as a loss of control. From this point of view, the USO is an instrument for deliberately frustrating the spectator by producing a feeling of powerlessness and fear. In the case of the USO, such feelings of fear are doubled, as they are also triggered on the instinctive level. Since the origins of humankind, dangers in nature have been brought to our attention through noises: reacting quickly and appropriately to noises that signal danger can be crucial. The most threatening, however, are the noises which cannot be attributed to a known source within a reasonable amount of time. This is supported by the findings of my analysis: science-fiction, horror and disaster films use the highest number of USOs (see accompanying diagram). Steven Spielberg’s *Jaws* (USA 1975), in many ways a forerunner of later developments, is a prototypical example of the use of USOs. *Jaws* is a fable for the working-through of an irrational fear that borders on hysteria. Its success is based on this direct emotional appeal. The feeling of powerlessness of Chief Brody, who is anxious and afraid of water, directly reflects the emotions of a majority of Americans at the time of the Vietnam debacle and the oil crisis.

The emergence of the USO in the 1960s can be placed in a further social and cultural context. The ambiguous vagueness of the USO, which allows for multiple interpretations, stands in direct contrast with the restricted meaning of the stylized sound effect typical of classic Hollywood cinema. This transformation is based not only on changes in technology, but also on a changed conception of the spectator. Today the spectator is seen as a competent partner who possesses a developed sense of media literacy and is certainly capable of forming hypotheses independently and handling unusual stimuli. Thus the USO stands in opposition to those stereotyped signs which, coded through cultural practice, permit just one single interpretation.
and offer the spectator only passive consumption. While the redundancy of the standard sound object – which is linked with an on-screen source and thus is based on the doubling of information – forces the spectator into an unambiguous perspective dictated by the filmic text, the USO demands an active mental role. In this way it may be situated within the tradition of the “open work”: the term for ambiguous structures introduced in Umberto Eco’s Opera Aperta (1962). The open work, which is structured on a principle of contradiction and a certain irrationality in the arrangement of the story materials, seems more authentic and true to life than hermetic narrative forms.

In this respect, however, the USO also embodies a contradiction. Within the classical, closed narrative forms of the mainstream film with its obligatory happy ending, the USO represents an artistic device that does not correspond with genre conventions. The pleasurable experience of fear and the temporary loss of control are underscored by this affirmative context, which continually reminds spectators on several levels that they are experiencing an artificial world distinct from lived reality.

Detached from conceptual meaning, the USO offers us a portion of the kind of intellectual freedom typical of lyrical or abstract compositions. Freed from the compulsion to mean something definite, it is a piece of pure music which expresses itself in an openness for associative links on an abstract sound level – an aspect that I have discussed in all its facets in my book on sound design under the headings Musicalization of Sound Effects and Variations (Flückiger 2001). In addition, the unidentified sound object symbolizes to an extreme degree the liberation of the soundtrack from its subservience to the image, which is one of the principal themes of my work.

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Literature:
Cavalcanti, Alberto (1939):
Chion, Michel (1990):
Mott, Robert L. (1989):
Wuss, Peter (1993):

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