

Background to Performance of “Ballet Mécanique: A Spread-Spectrum Ecstasy” from John Matthias

In November of 2000 I happened to read the obituary of Hedy Lamarr, the famous screen siren of the Golden Age at MGM. I remember seeing her in *Tortilla Flats* when I was very young, and a little later in De Mille's *Samson and Delilah*. She was in fact a remarkable woman. Having created a sensation in 1933 with a nude swimming scene and, for its period, a very convincing episode of lovemaking with her co-star, she made the Czech movie *Ecstasy* a famous episode in the history of cinematic candor. In that same year, however, she married Friedrich Mandl, the Viennese arms manufacturer who became friends with Hitler, Goebbels, and Goering during the rise of the Nazi regime. Eventually, he was a major producer, on the scale of Krupp and Hertenberger, of armaments during the war. Mandl was extremely jealous and quite horrified at the famous nudity and lovemaking in *Ecstasy*. He bought up all the copies of the film he could lay hands on and more or less imprisoned Lamarr in his castle. Before she escaped in 1937 disguised as one of her maids, she had sat through many technical discussions between Mandl, Nazi officials, and other industrialists. Lamarr was a smart and mathematically-literate woman, and she understood everything that was said. By the time she escaped, first to Paris and then to the United States, she intended to put her knowledge to use.

I learned from the obituary that once Lamarr was settled in Hollywood and had reignited her acting career with the help of Louis Mayer, she asked around about making contact with someone who understood synchronization. She was put in touch with George Antheil, the avant-garde composer and friend of Pound and Joyce, who was now also in Hollywood writing music for the movies. Antheil was mainly known, and is still mainly known, for his score for the movie *Ballet Mécanique*, which eventually became a stand-alone concert piece for percussion and sixteen synchronized player pianos. Lamarr asked him if he could help her design a radio-directed torpedo according to the principals that we now call spread-spectrum technology. It turned out that he could, although he had to work almost entirely with the number 88 since all of his previous experience with synchronization had to do with that number of piano keys. In fact the two collaborators did eventually design such a scheme, got it patented, and tried to convince the War Department that the contraption would actually work. The patent gathered dust until Sylvania began developing transistor technology in the 1950s. The patent in fact is the prototype of designs used for cell phones, wireless Internet, and today's so called smart weapons. Only at the end of her life did Hedy Lamarr obtain any credit at all for one of the most important inventions of the twentieth century.

I began at once to write a poem that deals with the Lamarr-Antheil collaboration in the context of many other things happening in the lives both of the two principal characters and the lives around them. Of great importance in following the text is the association of scenes from a number of films from the period, especially *Ballet Mécanique* itself, which is almost entirely abstract or cubist, and *L'Inhumaine*, about an “inhuman” singer whose cold and calculating life leads to her being shouted down by a large audience in the famous Théâtre des Champs Elysées in Paris. The connection with Antheil in the second film has to do with a performance of several piano pieces at the Theatre des

Champs Elysées that did indeed start a riot that was filmed, and in fact anticipated, by the director of *L'Inhumaine*, Marcel L'Herbier. The actress Georgette Leblanc was superimposed on Antheil in the film so that it looks like the audience is directing their ire at her character, Claire Lescot, rather than at Antheil. But the riot itself appears to be entirely authentic because it was. In fact we see people like Pound, Joyce, Duchamp and others who attended the Antheil concert shouting down the rioters on behalf of the person who appears to be Claire Lescot in the film, but who was actually George Antheil.

There are many other historical characters and references in the poem. Some years after having published it on the Internet, in a magazine, and in my book called *Working Progress/Working Title*, I had the thought that it might make an interesting theatre piece if we could add a lot of documentary material in sound and image. Chris Jara has taken on this task with great enthusiasm and skill. Hedy Lamarr does not speak in the poem, but she is much spoken about. The main voices are Claire Lescot, who steps out of *L'Inhumaine* as the kind of mechanical figure she was portrayed to be in the film, but who in the course of the text morphs into a fully mature contemporary robot inhabiting a robotics lab at MIT. Her voice is read by Joyelle McSweeney. General background and commentary is filled in several times by the voice of an over-enthusiastic 1940s radio-journalist type. One might think of Walter Winchell, if anyone remembers that name. Steve Fredman reads that part, as well as the brief intrusion of Salvador Dalí's voice in the course of a dialogue in California with Cecil De Mille about surrealism and the *Un Chien Andalou*. I will read the text of various links and connections, as well as one voice in the two dialogue sections with Joyelle-Claire Lescot. The title of this, by the way, is "Automystifical Plaice," and Plaice is spelled with an i. A few other references to keep in mind:

Auteuil, often referenced with regard to Antheil and his circle: A French race course.

Boski: George Antheil's wife

Aribert Mog: the co-star with Hedy Lamarr in *Ecstasy*

Picabia: The artist whose painting of *Le Ballet Mécanique* appears behind me.

Daumier's Washer Woman: Looped and rhymed in the *Ballet Mécanique* film

Café du Dôme: Popular Parisian hangout during the pre-WW II period.

Un Chien Andalou: Surrealist film by Dalí and Luis Buñuel

MIDI: A computerized device used by contemporary composers

RUR: *Russell's Universal Robots*, a play by Karel Čapek, in which the word Robot first entered literature.

The Plainsman: a De Mille film with Gary Cooper

Neils Barricelli: a Princeton mathematician and thinker.