Among all the movements of the avant-garde of the first half of the twentieth century, it is certainly in Futurism that the most profound and most studied relationships between painting and photography are to be found. Starting from their own Neo-Impressionist concept of representation, the Futurists coherently tried to assimilate into their painting suggestions made by the conquests of the camera’s mechanical eye. At the same time, thanks to the progress in technology, photography had begun an evolution of its own, becoming a means for formalizing images of active motion. Many photographers abandoned the direct visual yield—a banally naturalistic concept—in favor of the investigation of the infrasensorial and the meta-perception which the Futurists wanted to introduce into their painting. As a working approach they turned to both scientific and spiritualistic experiments then very much in vogue, for which photographic evidence was adopted by the Italians, however, either in Dunoyer de Segonzac in France; Civitese and Nicz-Borowiak in Poland; Balla, Russolo, and Carrà in Italy. The iconographic code of Marey was adopted by the Italians, however, either in a playful and ironic dimension, as in the case of Dynamism of a Dog on a Leash by Balla, or for research into movement in a spirit of lyrical subjectivism. For them the formal marks in Marey’s images served to convey not realism but psychic values. Thus, in Carrà’s Funeral of the Anarchist Galli, the repeated indications of the demonstrators’ clubs do not so much represent motion as they express the violence of the blows exchanged. Thus the semiosis of Marey’s movement was adopted by Carrà for an emotive function.

The Futurists also used other formal suggestions of contemporary photographic techniques. Sorbonne in Paris to record and analyze “photographs of invisible beings.” The volumes of photographs published by this committee, which numbered among its members men of science like Charles-Robert Richet, comprised a collection of material of great imaginative force: the doubling of the Ego, apparitions of ghosts, weightless bodies, the evanescence of matter, etc. It was possible to draw from them a general concept of the anti-naturalistic content of an image—an idea which the Futurists were then ready to adopt. Russolo, for example, was to paint a Self-Portrait with Ethereal Double.

From this dialogue between picture-making and photographic imagery, a creative hypothesis for Futurist photography developed, demonstrating the multi-disciplinary vocation of Italian Futurism in its attempts to renew almost all fields of human expression.

The history of Futurist photography is embraced by two major occurrences: the invention of photodynamics at the beginning of the 1910s; and the group exhibitions of avant-garde photography which were held at the beginning of the 1930s. The protagonist of the first was Anton Giulio Bragaglia who, after he became familiar with Marey’s works (already used by Balla) began a study of the photography of movement which was based on the “synthesis” of the trajectory of the change in position of the body in space, and not on Marey’s positivistic analysis of movement. Anton Giulio Bragaglia’s research, with the technical assistance of his brothers Arturo and Carlo Ludovico, led to the publication in Rome in 1912 of the volume Fotodinamismo futurista. This was the first essay on photographic theory and aesthetics to be produced by the avant-garde of the twentieth century.

Bragaglia’s photodynamic research at first had Marinetti’s financial backing, together with the spiritual backing of Boccioni who aspired to the role of theoretical guide for the Futuristic
painters. In particular Boccioni saw in Bragaglia's experiments a means of surpassing Balla's more obviously cinematic motion studies. The backers of photodynamics felt a need to surpass Marey, and regarded Balla's analytic kineticisms useless as a basic canon for Futurist painting. At the beginning of 1913, Bragaglia's convictions led him to assume the role of official spokesman for the Futurist aesthetic, a stand which soon provoked Boccioni's resentment. Moreover, at the same time, the development of Cubism and the consequent assimilation by the Futurists of its procedures for the decomposition of the object had profoundly modified the theoretical and creative orientation of their painting. As a result, in September 1913, the situation had become strained and the Futurist painters officially disowned Bragaglia's photodynamics. This confrontation resulted in an interruption in the research of the Bragaglia brothers. After this date the Futurists' interest in photography does not disappear but becomes more fragmentary, remaining secondary to other concerns in their painting. Nevertheless, toward the end of the 1920s photography returned to take a leading role in Futurist creation, at first through photo-collage and photo-montage, and then through research into other innovative techniques. This return of interest in photography coincided with a similar fascination for the medium throughout the European avant-garde which took place toward the end of the 1920s when the first portable photographic equipment became widely available.

During this period some official manifestations took place under the banner of "fotografia futurista." The first systematic cataloguing of this research came about thanks to the Sala Futurista ("Futurist Salon") organized by Marinetti and Tato on the occasion of the First National Photographic Competition which was held in Rome in September 1930. For this exhibition Marinetti and Tato also launched a Manifesto della Fotografia Futurista, the text of which stated the principal aesthetic proposals which inspired the Futurists' photographic research. The manifesto stressed the dramatic, other-worldly, immaterial, and interior characterization of figures and objects possible through the creative use of photographic techniques (Fig. 1).

The first of the major exhibitions took place
in September 1931 in Turin, a city which from
the beginning of the century had always been
in the avant-garde of Italian photographic re-
search. It was called the Experimental Exhibi-
tion of Futurist Photography and included the
works of twenty-two exhibitors. With some
modifications, and with the addition of several
photographers who had only recently adopted
Futurism, the exhibition was presented in Milan,
on the occasion of the Triennial, and then in
Trieste. In December 1932, the Futurists par-
ticipated in the First International Biennial of
Photographic Art organized in Rome by Fascist
cultural institutions. Some foreign avant-garde
photographers were included in the Futurist
section of this exhibition: the Germans, Kesting,
Ernst, Kulley, Karkoska, Halke; the American,
Antonelli; the Belgian, Stone; and the Swede,
Winquist. Lastly, a gallery was dedicated to
photography at the Grand National Futurist
Exhibition which was held in Rome in October
1933. After this date Futurist photographic
research continued less actively in terms both
of exhibitions and of the publication of critical
texts and aesthetic theory. It is necessary to
turn to these Futurist exhibitions of the early
1930s, however, in order to understand the
most significant aspects of avant-garde pho-
tography in Italy during those years. The abstract
photographs of Luigi Veronesi and the photo-
grams of Bruno Munari, for example, could
not have come into being without the historical
antecedents of earlier Futurist photography
and its creative experiments.

The expressive directions of Futurist pho-
tography can be summarized under simplified
categories divided according to their main
formal characteristics as follows:

Photodynamics (La fotodinamica). This is
the name given by Anton Giulio Bragaglia to the
photographs of movement which he carried out
between 1911 and 1913 (Figs. 2 and 3), with
the assistance of his brothers Arturo and Carlo
Ludovico. These photographs were presented
in one-man exhibitions during the same period.

Photodynamics must be distinguished from
Marey's "chronophotography" in that it aims
to render in the synthesis of the trajectory of a
moving form the psychic impression of its
gesture. For the segmented images of Marey,
based on the repetition of parts of a moving
body, photodynamics substituted a luminous
fluidifying of forms, suggesting an epiphany of
the vital energy inherent in matter. Fixing on
the plate the kinetic expression of a body
moving in space in a single trajectory, Braga-
glia wanted to record reality "unrealistically"
through "evoking the dynamic sensation which
the transcendental aspect of a gesture produces
on the retina, on the senses, on the spirit."1

Research in photodynamics was taken up
again in the 1920s by Arturo Bragaglia who
later participated in the collective exhibition of
Futurist photography organized by Marinetti in
1915 Depero continued in the same direction
(Fig. 4), giving visual form to the coup de
poing celebrated by Marinetti in his founding
manifesto of the Futurist movement. Tato2 exe-
cuted extravagant self-portraits, using grotesque
costumes and effects, and alluding with irony
to his role as avant-garde artist.

The Anti-naturalistic Portrait (Il ritratto
antinaturalista). Attacking the naturalistic
vision of reality, Marey's chronophotographs
had given reality a new formalization based on
repetition, but it was nevertheless limited to
elements understood through the perceptive
capacities of the human eye. Bragaglia's photo-
dynamics, instead, added a fantastic and allusive
dimension to the retinal image, thus seeming
to objectify the latent contents, psychical or

Wanda Wultz carried out research in photo-
dynamics in other ways, trying in particular
to correct the tendency toward the total disap-
pearance of objective imagery which was
threatened in the first experiments of the
Bragaglia brothers.

Emblematic Photography (La fotografia
emblematica). The conceptual use of photo-
graphy goes back to the period bridging the two
centuries. Toulouse-Lautrec, for example, posed
in front of the lens with the intention of creating
a highly charged iconic document through the
image of his distorted posture. The Futurists
developed this kind of research in a very
incisive way. Balla had portraits made of him-
self in gestural poses which were dramatiza-
tions of the Futurist revolutionary program. In

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to objectify the latent contents, psychical or
metasensorial, which accompany the action of the object seen (Fig. 5). The phantasmic evocation of a gesture or movement thus suggested the revelation of its second being with its second layer of internal meaning. Some of Bragaglia’s photographs attempted not the recording of a kinetic event, but a varied and differentiated recapturing of a subject almost as if it were possible to render the faceting of the Ego rather than the physiological chrysalis within which it lives. From this approach a new genre was born—the Futurist portrait (Fig. 6)—which, with the intention of giving a total suggestion of all aspects of the subject represented, variously assumed allegorical, narrative, psychological, or characterological dimensions, even crossing the boundary into “spiritualistic portraits.” Such effects were practiced by Tato (Fig. 7). The techniques used were inventive: surrealist superimpositions; fantastic kineticisms; repetitions with differentiated content; expressive deformations and alterations; partial fluidifications of the image; analogical couplings; remembered images; etc. From the 1910s, with the Bragaglia brothers and Nicola De Aldisio (and continued in the 1920s with Giuseppe Guarnieri, Civis, Giulio Parisio, Mario Castagneri, Luigi Vaghi, Ivos Pacetti and others), Futurist photography proposed numerous variations of the anti-naturalistic portrait, anticipating the Vorticist research of A.L. Coburn and influencing the Russian avant-garde (for example, Lissitzky). The inheritance of this research is to be found in the 1930s in the work of Man Ray and Germaine Krull, as well as the German photographic avant-garde. More recently, the celebrated portrait of Duchamp of 1953 by Victor Obetz without a doubt represents an unconscious re-use of the Futurist approach.

Abstract Photography (Lafotografia astratta). As a revolutionary movement of art/life/action, Italian Futurism felt an ethical tension which impeded the full development of abstraction in visual art. Marinetti had assumed an explicit position in this respect, claiming for art the role of an immediate revolutionary instrument. This is the main reason why abstract photography remained of secondary importance as an aim for the Futurists, even though abstraction had been approached in the evanescent photodynamics of the Bragaglia brothers. Creative experiments were carried out in this direction around 1930, however. Raffaele Baldi made extemporaneous photographic impressions without a lens. Tato and Guarnieri produced prints by direct contact without registering any iconic reference to the object. Among the very first examples of abstract photography in Italy were the “light weavings” (tessiture di luce) by the Futurist Giuseppe Albergamo (Fig. 8), which constituted a culmination of his earlier experimental research.

The Disguising of Objects (Il camuffamento di oggetti). Under this formula Tato launched a new genre. The use of extremely studied effects of light and shadow in disguising objects was to suggest a reality which was different from the reality represented. The best-known exemplar of this approach is a photograph by Tato entitled The Perfect Bourgeois (Il Perfetto borghese) in which the illusory effect of a man seated at a table is suggested by a jacket hung on a crutch (Fig. 9). The realistic data in the composition, like the hands in the foreground, charge the image with surreal humor. The disguising of objects aims at effects of surprise which are often supplied by giving the material used anthropomorphic or mimetic connotations (Fig. 10). Such semantic re-definition of objects also inspires their reassemblage on a structural level. In this sense the genre can be vaguely associated with the principles of the ready-made or the Surrealist ghost-object, different as they are. The disguising of objects also was practiced by Guarnieri, Riccardo Ricas, and finally, in a clearly Dadaist form, by Farfa (pseudonym for Vittorio Tommasini). One of his variants of this mode is his “spectralization of objects,” an approach to which Bellusi also applied himself extensively. By means of shadows, eccentric viewpoints, and irregular enlargements, the photographic images were
semantically alienated from each other, giving them a fantastic aura, or halo of mystery, which cancelled their objective datum without the introduction of a new "semanticizing" (ordering principle).

Aerophotography (L'aerofotografia). Aerial photography was practiced in the Futurist circle during the second half of the 1920s especially by Fedele Azari. A painter and aviator, Azari provided the principal inspiration for the Manifesto dell'Aeropittura launched in 1929 by the Futurist movement. Starting in 1930 from the theoretical principles stated in this manifesto, Filippo Masoero developed fotografia aerea in a very personal way. Masoero adopted the basic technique of photodynamics—that is, the continued opening of the shutter—to make aerial photographs during acrobatic flights and parachute jumps. In this case, however, it was the camera which moved rather than the objects being photographed. His aerophotographs, with their immediate registration of the vital act in thread-like marks, represent a sort of photographic "action painting" on which is recorded the Futurist participation in the cosmic dynamism of Heraclitus. From these experiments were born the cryptohobic and phantasmic kineticisms of Piero Boccardi (Fig. 11) and Masoero who anticipated similar works by Bury by some decades.

Photo-collage (Ilfotocollaggio). This is an expressive technique which makes use of the reciprocal interaction between drawing and photographic cuttings. Historically, it preceded photo-montage, which is based instead on the syntactic articulation of different photographic images. The aesthetic characteristic of photo-collage arises from the dialectic between the photographic "fragments of reality" and the imaginative manual signs of the hand of the artist (Fig. 12). The first Futurist example in this mode is a work by Carra made to serve as one of the illustrations in his Guerra pittrice of 1915: French Officer Observes the Moves of the Enemy (Ufficiale francese che osserva le mosse del nemico). Toward the end of the 1920s photo-collage was widely used by Nicola Drialgheroff, Elia Voltore, Bruno Aschieri, and Augusto Cernigoi who made use of it both as a political instrument and for didactic or propaganda ends within the Futurist program of the celebration of technological civilization. A very original application of the photo-collage principle (in a Dadaist form) was Ivo Pannaggi's "postal collages" in which post office workers collaborated unknowingly by adding their official stamps.4

Paper Composition (La composizione di carta). At the first exhibition of Futurist photography held in Rome in 1930, Luigi Pirroni presented some images realized by means of a mosaic of colored paper cuttings. When these creations were photographed, a bas-relief effect was produced through the widely spread range of greys. Pirroni later developed his "paper painting" (cartopittura), which he claimed as his own invention to the point of carrying on a polemical argument with Matisse.5 Parisio and Guarnieri later executed three-dimensional "paper compositions" (composizioni di carta) similar to small models for theater sets (Fig. 13). These were constructed of thin paper which created diaphanous and very suggestive photographic images based on the most delicate shadows and transparencies. A variant of this approach can be seen in Boccardi’s compositions of glass elements also created in the early 1930s.

Photo-montage (Il fotomontaggio). The Futurists adopted the technique of photo-montage from foreign avant-garde groups, Dada and Surrealism in particular. The direct procedures of cutting to create photo-montage had appealed to them less than techniques...
which allowed for the partial super-imposition of images and the resulting more unconstrained and more cinematic syntactic articulation. Tato had established the “transparency of opaque bodies” as a Futurist photographic principle creating a montage of super-imposed images similar to the “dissolve” on a movie screen which punctuates the passage from one cinematic sequence to another. In Italy photomontage did not take hold until the end of the 1920s, and then largely through the work of Vinicio Paladini who was aligned with left-wing politics and in contact with the Russian Futurists. In opposition to Marinetti’s Futurist movement, which adhered to Fascism, Paladini founded L’Immaginismo (“Imaginism”) in 1927, launching a new aesthetic in which the manipulation of the materials used in photomontage played a leading role (Fig. 14). A further variant of photo-montage was the “photo-scene” (fotoscena) created by Thayaht (pseudonym for Ernesto Michaelles) and announced by a manifesto of the same name in the middle of the 1930s. His method was not to articulate the photographic cuttings on a flat plane, but to arrange them like the stage set of a small theater in an optical box. The juxtaposition of the fragments created the illusion of perspective variations, while tiny beams of colored lights were projected from hidden sources to produce kaleidoscopic effects.

Photo-plastics (il fotoplastico). The Futurists widely used didactic propaganda panels realized in a photo-mosaic technique, with some of the images organized and constructed in relief. This approach was not new, having been developed at the end of the nineteenth century, the earlier use undoubtedly being the source for the Futurists’ use of extra-photographic materials and the creation of “photo-plastics.” For the Futurists the term had a meaning which differed from that used by Moholy-Nagy and other avant-garde photogra-
phers of the 1920s. A self-portrait by Wanda Wultz (see Fig. 6) and a composition by Renato Fazioli entitled Stairs (Fig. 15) are two of the most significant realizations of the Futurist photo-plastic method. In Wultz’s self-portrait the image of a female face appears cut out against a black ground. The face was painted yellow with an anti-naturalistic aim and two pieces of green glass served as the pupils of the eyes. The image thus created presents ironic allusions to the blond hair and to the expressive force of the eyes, giving a “plastic,” rather than photographic, synthesis of female beauty. By contrast, the basis of Fazioli’s composition was a photograph of a stairway under an arch. In general terms, the image suggests a closed space weighted with a vague sensation of mystery and claustrophobia. Fazioli uses extra-photographic signs to enhance these effects. A “lettrista” collage (collage composed of letters) repeats the rhythmical motif of the stairs: a silver thread runs along the composition suggesting the continuity and “uniformity” of the space closed between the stairs and the archway. Finally, the frame of the composition itself takes up the motif of the stairs with its stepped moldings. The claustrophobic sensation is thus “solidified” (to borrow a term from Futurist painting), that is to say, structured and rendered materially perceptible. This was perhaps the most original means by which Futurist photography sought to translate the vital intensity of the material world beyond its natural resemblances to include as well the psychic reactions which accompany all human perception of reality.

Giovanni Lista is an Italian writer working in Paris. He has published a series of important works on Futurist art and theory and edited Futurist documents. This article summarizes some of the material to be found in bis Futurismo e fotografia, Milan 1979.

Notes
This article is intended as a brief introduction to the subject of Futurist photography, its theory and practitioners. For a fuller discussion see Giovanni Lista, Futurismo e fotografia (Milan: Edizioni Multiplia, 1979).

1 See Anton Giulio Bragaglia, Fotodinamica futurista (Turin: Edizioni Einaudi, 1970).
2 Guglielmo Sansoni (who worked under the pseudonym Tato) was the leading protagonist of Futurist photographic research in the decade of the 1930s. See his volume of memoirs, Tato raccontato da Tato (Milan: Edizioni Oberdan Zucchi, 1941).
3 See Marinetti, Le Futurisme (Lausanne: L’Age d’Homme, 1979).
5 Matisse exhibited his collages of colored papers for the first time in June 1950. As soon as there was news of them, Pirrone wrote to him in order to claim possession of “his invention.” But he was certainly wrong, and Matisse answered him refusing to argue the point. In reality, colored paper collage was much used by theater designers for sketches of costumes. The Russian Futurists were already using the technique in 1915. On the occasion of the stay in Rome of Diaghilev’s Ballet Russe, both Depero and Prampolini executed models for sets and costumes in colored paper collage. Luigi Pirrone attempted instead to realize genuine and individual “mosaics” of scraps of colored paper rather than freely inventive collages.
6 For an evaluation of the political factions of Italian Futurism, see Marinetti e le futurisme (Lausanne: L’Age d’Homme, 1977). Concerning the political and creative life of Paladini, see Giovanni Lista, Vinicio Paladini, dal futurismo all’immaginismo (Milan: Edizioni Multiplia, 1980).
7 Moholy-Nagy used the word “fotoplastico” for the first time in his book Malerei Photographie Film (Monaco: Langen, 1925). With this term the artist indicated a composition in which cut-up photographs were structured together with graphic elements and linear rhythms. One thus obtains, according to Moholy-Nagy, a concise organization of space which makes the “photo-plastic” better than the chaotic photo-montage of the Dadaists.