## futurist photodynamism by anton giulio bragaglia

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To begin with, Photodynamism cannot be interpreted as an innovation applicable to photography in the way that chronophotography was. Photodynamism is a creation that aims to achieve ideals that are quite contrary to the objectives of *all* the representational means of today. If it can be associated at all with photography, cinematography and chronophotography, this is only by virtue of the fact that, like them, it has its origins in the wide field of photographic science, the technical means forming common ground. All are based on the physical properties of the camera.

We are certainly not concerned with the aims and characteristics of cinematography and chronophotography. We are not interested in the precise reconstruction of movement, which has already been broken up and analysed. We are involved only in the area of movement which produces sensation, the memory of which still palpitates in our awareness.

We despise the precise, mechanical, glacial reproduction of reality, and take the utmost care to avoid it. For us this is a harmful and negative element, whereas for cinematography and chronophotography it is the very essence. They in their turn overlook the trajectory, which for us is the essential value.

The question of cinematography in relation to us is absolutely idiotic, and can only be raised by a superficial and imbecilic mentality motivated by the most crass ignorance of our argument.

Cinematography does not trace the shape of movement. It subdivides it, without rules, with mechanical arbitrariness, disintegrating and shattering it without any kind of aesthetic concern for rhythm. It is not within its coldly mechanical power to satisfy such concerns.

Besides which, cinematography never analyses movement. It shatters it in the frames of the film strip, quite unlike the action of Photodynamism, which analyses movement precisely in its details. And cinematography never synthesises movement, either. It merely reconstructs fragments of reality, already coldly broken up, in the same way as the hand of a chronometer deals with time even though this flows in a continuous and constant stream.

Photography too is a quite distinct area; useful in the perfect anatomical reproduction of reality; necessary and precious therefore for aims that are absolutely contrary to ours, which are artistic *in themselves*, scientific in their researches, but nevertheless always directed towards art.

And so both photography and Photodynamism possess their own singular qualities, clearly divided, and are very different in their importance, their usefulness and their aims.

Marey's chronophotography, too, being a form of cinematography carried out on a single plate or on a continuous strip of film, even if it does not use frames to divide movement which is already scanned and broken up into instantaneous shots, still shatters the action. The instantaneous images are even further apart, fewer and more autonomous than those of cinematography, so that this too cannot be called analysis.

In actual fact, Marey's system is used, for example, in the teaching of gymnastics. And out of the hundred images that trace a man's jump the few that are registered are just sufficient to describe and to teach to the young the principal stages of a jump.

But although this may be all very well for the old Marey system, for gymnastics and other such applications, it is not enough for us. With about five extremely rigid instantaneous shots we cannot obtain even the *reconstruction* of movement, let alone the *sensation*. Given that chronophotography certainly does not reconstruct movement, or give the sensation of it, any further discussion of the subject would be idle, except that the point is worth stressing, as there are those who, with a certain degree of elegant malice, would identify Photodynamism with chronophotography, just as others insisted on confusing it with cinematography.

Marey's system, then, seizes and freezes the action in its principal stages, those which best serve its purpose. It thus describes a theory that could be equally deduced from a series of instantaneous photographs. They could similarly be said to belong to different subjects, since, if a fraction of a stage is removed, no link unites and unifies the various images. Thev are photographic, contemporaneous, and appear to belong to more than one subject. To put it crudely, chronophotography could be compared with a clock on the face of which only the quarter-hours are marked, cinematography to one on which the minutes too are indicated, and Photodynamism to a third on which are marked not only the seconds, but also the *intermovemental* fractions existing in the passages between seconds. This becomes an almost infinitesimal calculation of movement.

In fact it is only through our researches that it is possible to obtain a vision that is proportionate, in terms of the strength of the images, to the very tempo of their existence, and to the speed with which they have lived in a space and in us.

The greater the speed of an action, the less intense and broad win be its trace when registered with Photodynamism. It follows that the slower it moves, the less it will be dematerialised and distorted. The more the image is distorted, the less real it will be. It will be more ideal and lyrical, further extracted from its personality and closer to *type*, with the same evolutionary effect of distortion as was followed by the Greeks in their search for their type of beauty.

There is an obvious difference between the photographic mechanicality of chronophotography -embryonic and rudimentary cinematography - and the tendency of Photodynamism to move away from that mechanicality, following its own ideal, and completely opposed to the aims of all that went before (although we do propose to undertake our own scientific researches into movement).

Photodynamism, then, analyses and synthesises movement at will, and to great effect. This is because it does not have to resort to disintegration for observation, but possesses the power to record the continuity of an action in space, to trace in a face, for instance, not only the expression of passing states of mind, as photography and cinematography have never been able to, but also the immediate shifting of volumes that results in the immediate transformation of expression.

A shout, a tragical pause, a gesture of terror, the entire scene, the complete external unfolding of the intimate drama, can be expressed in one single work. And this applies not only to the point of departure or that of arrival - nor merely to the intermediary stage, as in chronophotography - but continuously, from beginning to end, because in this way, as we have already said, the *intermovemental* stages of a movement can also be invoked.

In fact, where scientific research into the evolution and modelling of movement are concerned, we declare Photodynarnism to be exhaustive and essential, given that no precise means of analysing a movement exists (we have already partly examined the rudimentary work of chronophotography).

And so - just as the study of anatomy has always been essential for an artist now a knowledge of the paths traced by bodies in action and of their transformation in motion will be indispensable for the painter of movement.

In the composition of a painting, the optical effects observed by the artist are not enough. A precise analytical knowledge of the essential properties of the effect, and of its causes, are essential. The artist may know how to synthesise such analyses, but within such a synthesis the skeleton, the precise and almost invisible analytical elements, must exist. These can only be rendered visible by the scientific aspects of Photodynamism.

In fact, every vibration is the rhythm of infinite minor vibrations, since every rhythm is built up of an infinite quantity of vibrations. In so far as human knowledge has hitherto conceived and considered movement in its general rhythm, it has fabricated, so to speak, an algebra of movement. This has been considered simple and finite (cf. Spencer: First Principles - The Rhythm of Motion). But Photodynamism has revealed and represented it as complex, raising it to the level of an infinitesimal calculation of movement (see our latest works, e.g. The Carpenter, The Bow, Changing Positions).

Indeed, we represent the movement of a pendulum, for example, by relating its speed and its tempo to two orthogonal axes.

We will obtain a continuous and infinite sinusoidal curve.

But this applies to a theoretical pendulum, an immaterial one. The representation we will obtain from a material pendulum will differ from the theoretical one in that, after a longer or shorter (but always finite) period, it will stop.

It should be clear that in both cases the lines representing such movement are continuous, and do not portray the reality of the phenomenon. In reality, these lines should be composed of an infinite number of minor vibrations, introduced by the resistance of the point of union. This does not move with smooth continuity but in a jerky way caused by infinite coefficients. Now, a *synthetic* representation is more effective, even when its essence envelops an *analytically divisionist* value, than a synthetic impressionist one (meaning divisionism and impressionism in the philosophical sense). In the same way the representation of realistic movement will be much more effective in synthesis - containing in its essence an analytical divisionist value (e.g. *The Carpenter, The Bow*, etc.), than in analysis of a superficial nature, that is, when it is not minutely interstatic but expresses itself only in successive static states (*e.g. The Typist*).

Therefore, just as in Seurat's painting the essential question of chromatic divisionism (synthesis of effect and analysis of means) had been suggested by the scientific enquiries of Rood, so today the need for movemental divisionism, that is, synthesis of effect and analysis of means in the painting of movement, is indicated by Photodynamism. But - and this should be carefully noted - this analysis is infinite, profound and sensitive, rather than immediately perceptible.

This question has already been raised by demonstrating that, just as anatomy is essential in static reproduction, so the anatomy of an action - intimate analysis - is indispensable in the representation of movement. This will not resort to thirty images of the same object to represent an object in movement, but will render it *infinitely multiplied and extended*, whilst the figure *present* will appear *diminished*.

Photodynamism, then, can establish results from positive data in the construction of moving reality, just as photography obtains its own positive results in the sphere of static reality.

The artist, in search of the forms and combinations that characterise whatever state of reality interests him, can, by means of Photodynamism, establish a foundation of experience that will facilitate his researches and his intuition when it comes to the dynamic representation of reality. After all, the steady and essential relationships which link the development of any real action with artistic conception are indisputable, and are affirmed independently of formal analogies with reality.

Once this essential affinity has been established, not only between artistic conception and the representation of reality, but also between artistic conception and application, it is easy to realise how much information dynamic representation can offer to the artist who is engaged in a profound search for it.

In this way fight and movement in general, light acting as movement, and hence the movement of light, are revealed in Photodynamism. Given the transcendental nature of the phenomenon of movement, it is only by means of Photodynamism that the painter can know what happens in the intermovemental states, and become acquainted with *the volumes of individual motions*. He will be able to analyse these in minute detail, and will come to know the *increase in aesthetic value of a flying figure*, or its *diminution*, relative to light and to the dematerialization consequent upon motion. Only with Photodynamism can the artist be in possession of the elements necessary for the construction of a work of art embodying the desired-for synthesis.

With reference to this the sculptor Roberto Melli wrote to me explaining that, in his opinion, Photodynamism 'must, in the course of these new researches into movement which are beginning to make a lively impression on the artist's consciousness, take the place which has until now been occupied by drawing, a physical and mechanical phenomenon very different from the physical transcendentalism of Photodynamism. Photodynamism is to drawing what the new aesthetic currents are to the art of the past.'...

Now, with cinematography and Marey's equivalent system the viewer moves abruptly from one state to another, and thus is limited to the states that compose the movement, without concern for the intermovemental states of the action; and with photography he sees only one state. But with Photodynamism, remembering what took place between one stage and another, a work is presented that transcends the human condition, becoming a *transcendental photograph of movement*. For this end we have also envisaged a machine which will render actions visible, more effectively than is now today possible with actions traced from one point, but at the same time keeping them related to the time in which they were made. They will remain idealised by the distortion and by the destruction imposed by the motion and light which translate themselves into trajectories.

So it follows that when you tell us that the images contained in our Photodynamic works are unsure and difficult to distinguish, you are merely noting a pure characteristic of Photodynamism. For Photodynamism, it is desirable and correct to record the images in a distorted state, since images themselves are inevitably transformed in movement. Besides this, our aim is to make a determined move away from reality, since cinematography, photography and chronophotography already exist to deal with mechanically precise and cold reproduction.

We seek the interior essence of things: pure movement; and we prefer to see everything in motion, since as things are dematerialised in motion they become idealised, while still retaining, deep down, a strong skeleton of truth.

This is our aim, and it is by these means that we are attempting to raise photography to the heights which today it strives impotently to attain, being deprived of the elements essential for such an elevation because of the criteria of order that make it conform with the precise reproduction of reality. And then, of course, it is also dominated by that ridiculous and brutal negative element, the instantaneous exposure, which has been presented as a great scientific strength when in fact it is a laughable absurdity.

But where the scientific analysis of movement is concerned - that is, in the multiplication of reality for the study of its deformation in motion - we possess not merely one but a whole scale of values applied to an action. We repeat the idea, we insist, we impose and return to it without hesitation and untiringly, until we can affirm it absolutely with the obsessive demonstration of exterior and internal quality which is essential for us.

And it is beyond doubt that by way of such *multiplication of entities* we will achieve a *multiplication of values*, capable of enriching any fact with a more *imposing personality*.

In this way, if we repeat the principal states of the action, the figure of a dancer - moving a foot, in mid-air, pirouetting - will even when not possessing its own trajectory or offering a dynamic sensation, be much more like a dancer, and much more like dancing, than would a single figure frozen in just one of the states that build up a movement.

The picture therefore can be invaded and pervaded by the essence of the subject. It can be obsessed by the subject to the extent that it energetically invades and obsesses the public with its own values. It will not exist as a passive object over which an unconcerned public can take control for its own enjoyment. It will be an active thing that imposes its own extremely free essence on the public, though this will not be graspable with the insipid facility common to all images that are too faithful to ordinary reality.

To further this study of reality multiplied in its volumes, and the multiplication of the lyrical plastic sensation of these, we have conceived a method of research, highly original in its mechanical means, which we have already made known to some of our friends.

But in any case, at the moment we are studying the trajectory, the synthesis of action, that which exerts a fascination over our senses, the vertiginous lyrical expression of life, the lively invoker of the magnificent dynamic feeling with which the universe incessantly vibrates.

We will endeavour to extract not only the aesthetic expression of the motives, but also the inner, sensorial, cerebral and psychic emotions that we feel when an action leaves its superb, unbroken trace.

This is in order to offer to others the necessary factors for the reproduction of the desired feeling.

And it is on our current researches into the *interior* of an action that all the emotive artistic values existing in Photodynamism are based.

To those who believe that there is no need for such researches to be conducted with photographic means, given that painting exists, we would point out that, although avoiding competing with painting, and working in totally different fields, the means of photographic science are so swift, so fertile, and so powerful in asserting themselves as much more forward looking and much more in sympathy with the evolution of life than all other old means of representation.