## Peter Mahr

Televisionary Moholy-Nagy.
A Review of the Reprint of telehor from 1936

Our times are not the times of manifestos. At least not in the visual arts. This is proven by pastiches from the dawn of postmodernism. ${ }^{1}$ Quite the opposite of this vacuity was the case in the early 20th-century modernist art conceptions: the Futurist Manifesto of 1909, Luigi Russolo's Art of Noises manifesto of 1913, the De Stijl manifesto of 1918, the Dada Manifesto of 1918, and the Surrealist Manifestos from 1924 and 1929. Also, all of the fourteen Bauhausbücher from 1924 to 1929 belong here, with each one of that formidable series of books being an educational textbook, program, and outline of a new aesthetic at once. It was László Moholy-Nagy who did Bauhausbücher issue 8, entitled Malerei Fotografie Film, in 1925 - possibly the first book on media art - and issue 14, entitled Von Material zu Architektur, in 1929, which was distributed in English with the more programmatic title The New Vision: From Material to Architecture in 1932, as well as a series of shorter texts published in art magazines or unpublished since 1920. ${ }^{2}$

Due to today's need of recollecting the 20th-century radical modernist aesthetic, vision and politics, 2013 saw the reprint of the journal telehor. the international review new vision ${ }^{3}$ (1936) accompanied by an editorial brochure. The "double issue 1-2. L. moholy-nagy," originally published by architect Frantisek Kalivoda on 28 February 1936, contains 138 pages in French, English, Czech and German, formatted in A4, containing 58 black/white and 9 color illustrations along with photographs (many of them of paintings, drawings, reliefs,

[^0]sculpture and stage designs), photomontages, photograms, and film-clips, all of them interspersing the Czech translation of pages 49-112. Printed at "typia" Press, Brno, and distributed by Kommissionsverlag Dr. Hans Girsberger, Zürich/ Switzerland, the journal came with a spiral binding done by Felix Synek, Praha/ Brno, which was ultramodern back then, clichés by chemigrafia, Brno, and typography and layout by Kalivoda himself using the serifless 10 point Futura in double column.

Strictly speaking, telehor was to be the supplement to the journal of the same title that was to appear six times a year. It only happened once. The reprint comes with an 80-page supplement comprising the German/English commentary "Melancholy for the Future" by Klemens Gruber and Oliver A. I. Botar and additional translations into Spanish, Russian, Mandarin, and Hungarian. Both volumes are produced by Lars Müller Publishers at Zürich and shipped together for $€ 50$,-. It comes (and came back then) very much as an art catalogue accompanying later the Moholy-Nagy exhibition that took place in Brno in June 1935, being at once an enthusiastic as well as critical presentation of the work of László Moholy-Nagy, as Gruber and Botar indicate in the accompanying editorial brochure. ${ }^{4}$ It contains a theoretical "foreword" by Siegfried Giedion (1935, 27-29), Kalivoda's "postscript" (1936, 45f.) and Moholy-Nagy's texts "dear kalivoda" (1934, 30-32), "from pigment to light" (1923-26, 32-34), "photography, the objective form of vision in our time" (1932, 34-36), "problems of the modern film" (1928-30, 37-40), "supplementary remarks on the sound and colour film" (1935, 41f.) and "once a chicken, always a chicken" (1925-30, 43-45), a film script on a motif from Kurt Schwitters's dadaist story Auguste Bolte.

Before going into a closer reading of the texts in telehor, a few words about László Moholy-Nagy may be in order. He was born in 1895 and raised in the small south Austro-Hungarian village Bácsborsód, next to the border of Serbia, coming like many others, as Siegfried Giedion has it in his "foreword," from an agricultural country with little experience in technology. He survived World War I as a soldier and decided after studying law during the war to focus on painting in 1918. He moved to Berlin in 1920, participated in the 1922 Dadaist Convention, and had his first solo exhibit at Herwarth Walden's Berlin "Sturm" gallery in 1924. In 1921, Moholy-Nagy married his first wife, editor and photographer Lucia Schulz, who taught at the Bauhaus (as did Moholy-Nagy, who was appointed in 1923 as the youngest professor of that art school, leading the metal studio and replacing Johannes Itten, instructor of the central foundation course). Together with director Walter Gropius, he co-edited the Bauhausbuch series until 1928, when Moholoy-Nagy and Gropius left the Bauhaus. At this time Moholoy-Nagy proved his versatility in the visual arts of photography, typography, film, sculpture, printmaking, stage design and industrial design - all of them, as Giedion says in his "foreword," rooted in a basic painterly attitude which is still valid for the problems of light derived from the architectural and industrial needs as based on a new world view back then. He is perhaps most

[^1]famous for the 1930 Light Prop for an Electric Stage, later called Light-Space Modulator. From 1927 to 1929 he served as film and photography editor for the international magazine i 10 and, from 1929, die neue linie, one of the first lifestyle magazines, and designed exhibitions and advertisements. He married his second wife and assistant Sibyl Moholy-Nagy in 1932. After an unsteady life, and joining a group of émigré artists in the mid 1930s in London where he produced special effects for the 1936 sci-fi movie entitled Things to Come, he became director of a Bauhaus-like art school in Chicago in 1937. One year after his death in 1946, his long-prepared book Vision in Motion was published.

## The First Meaning of telehor

In "photography, the objective form of vision in our time," the English translation of "fotografie, die sehform unserer zeit" (dated 1932), mistakenly subtitled "a new instrument of vision" in English, Moholy-Nagy declares the special photogram technique as a key to photography altogether, which in turn is the key to all future art. This can be considered the technological credo of Moho-ly-Nagy. With light and the photosensitive layer used without a camera, the photogram "is the most completely dematerialised medium [German version: "die am meisten durchgeistigte Waffe <weapon>" (1205)] which the new vision commands." (35) Remaining in black and white, the optical quality can be enhanced by means of an impressionist optical design of light and dark like in film and photography. Additionally, electrical light sources allow for fluent light, grading of shadows, and vitalization of surfaces.

For Moholy-Nagy, photography, "the objective form of vision," is equally important as a new kind of representation that emerges hand in hand, as he puts it, with the sublimating technology of photography: bird's-eye perspective, intersection, mirroring, penetration, fixation in a thousandth of a second, "ultra-rapid snapshots and the millionfold magnification of dimensions employed in microscopic photography" (35). All of them prepare a physiological transformation and education of the eyes in the long run. We will experience, he says, an increased power of sight diversifying vision in eight ways: -1- abstract vision with the direct light design of the photogram, -2- a precise vision by means of the fixation of reportage, -3 - rapid vision by means of the fixation of short movements with snapshot and slow motion, -4 - slow vision by means of the fixation of long movements with light traces and time acceleration, -5- enhanced vision by means of micro-photography and filter photography with varying chemical properties, -6- expanded vision by means of panorama photography and X-ray, -7- simultaneous vision by means of cross-fading, for instance of photomontage, and -8- an altogether different vision by means of artificially produced optical humour. By incorporating a new experience of space and developing non-pictorial series in photography - film - this new vision proceeds to photographic alphabetism: "a knowledge of photography

[^2]is just as important as that of the alphabet; the illiterates of the future will be ignorant of the use of camera and pen alike." (36) ${ }^{6}$ As photography, for Mo-holy-Nagy, has already been the visual form of the present for 100 years, "the new" emerges only if there are no ambitions like in scientific photography, for instance aesthetic or artistic guidelines applied beforehand. Photography in its autonomy need not produce art or be reviewed by art criticism and can yet become an art of its own, thinks Moholy-Nagy. This vision is still interpreted aesthetically-philosophically by circles influenced by the painting of all previous art-isms and to a lesser extent by photography. So there is still inhibition to be overcome. If all this is devoted to a distant productive seeing in space, another part or dimension of the "telehor" concerns a future time. We may invest and indulge in a pure vision into the distant future. But this amounts to nothing less than a utopia, the utopia of new vision.

In the mid-1930s Moholy-Nagy was a utopian, perhaps with some "melancholy towards the future."7 This darkening may be seen best in "dear kalivoda" (1934), Moholy-Nagy's letter to his editor friend, which takes a look in retrospect with ten suggestions or demands in the context of old pictures for times of new technological and design potential. First of all and most extensively, photography, again, ought to move on from pigment to light. It should paint and build and make frescoes with light. New apparatuses should help realize light visions for special screens and spaces, for instance with a number of projectors, with spotlights, and moving walls like fog, gas, and clouds (think today of Olafur Eliasson), including new materials like galalith, Trolit, chrome, and nickel. Moholy-Nagy thinks of light compositions on the basis of musical scores, outdoors advertisement, spotlight guns, and light games, produced from airships, for festivals or indoors: movies using projection with simultaneous color effects, reflectory light games, including a television process coming from wave networks, light frescoes. Secondly, Moholy-Nagy demands in particular a black-white-grey light game. Third, after the failure of manifestos he demands that youth must develop further ideas already contained in the manifestos. Fourth, Moholy-Nagy diagnoses the material dependence on capitalism, industry, and workshop, an anxiety against exact knowledge and mastered technology as well as the debilitating difficulties of demonstration and the lack of a knowledgeable public. Moholy, fifth, recognizes the dangers of an art news service, its greed for ranking, sensations partially made up, a fast reporting

[^3]contrary to the tempo of artistic development, all of this being effectuated in artificially produced interests and pseudo-activities. This is, sixth, accompanied by real obstacles: a dissonance between human beings and technology, old economic forms, record production, and an unnatural mentality in workers as well as entrepreneurs. The causes for this are recognized by Moholy, seventh, in capitalism and the resistance of the reigning class to a planned economy, to a socialist transition from an unmastered technologized world to a balance of human being and the technologized world. Moholy, eighth, sets his hopes in creative powers, in the temperament of daily problems as well as that of the germinating and the still untested. Our lives impose not only a revolutionary, but an evolutionary way as well. Therefore, Moholy-Nagy stresses, ninth, the necessity of the usage of utmost technological means, if easel painting is meant to be trangressed. In short, experiments with light ought best go hand in hand with the painting of pictures.

## The Second Meaning of telehor

With television we look into the distant, simultaneously grasping two different locations and events and spatially bridging them, let us say, in more commercialized or less conventional manner. Moholy-Nagy highly probably did not have in mind the teletopia of the television system as it began to be commercialized a short while after 1936. Moreover, what he may have had in mind is the production technology behind his five enamel paintings that were ordered in 1922 by telephone at a signpost factory, after he had communicated in writing to one of the factory workers the manner of the telephone order to be expected. The painting "construction in enamel," the illustration of which is given on page 69 in the Czech version of "photography, the objective form of vision in our time," would later be called "telephone paintings." ${ }^{8}$ With the intention of encompassing old as well as recent visual technologies and the awareness of television on the threshold of commercialization in 1936, Moholy-Nagy may probably have thought of the production mode of the re-productive procedure for his telephone paintings as one of the main traits of an art of the future. ${ }^{9}$ While Moholy-Nagy and the two other authors of telehor, i.e. Kalivoda and Giedion, do not give any indications or even explanations for the name "telehor,"

[^4]it seems to be suggestive that the enamel painting's elegant "construction" of a large black vertical beam and two small overlayering slender red/red-yellow and yellow/black crosses anticipates a different kind of visual future, namely that of a particular mixture of black and white and color picture parts which is still not regularly used in the arts of our times: the black/white/grey spectrum as derived from the pure quantities of light is confronted - "chiaroscuro in place of pigment"10 - with the color spectrum qualities which, as one may presume, for Moholy-Nagy still require translation by the application of color pigments as traditionally used by painting, and not only the challenge by the introduction of Kodachrome film in 1935. In any case, this kind of 'television' as a form of artistic production and not mass consumption provides part of the second meaning of, I take it, telehor, the word which is the proper Greek rendering of what is covered today with the Greek/Latin compositum mixtum 'television. ${ }^{\prime 11}$

## The Third Meaning of telehor

The considerations of Moholy-Nagy revolving around photography are rooted in texts like "from pigment to light" (1923-26). For Moholy-Nagy the various designations of '-isms' are confusing. However there is a logical development in new painting analogous to all other forms of artistic creation. Since the time of naturalism, photography unchains the canon of representational pictures and the laws and effects of color. The designer of the optical sphere learns with purely optical means. Any '-ism' is thereby revealed as a purely individual method, a destruction of the old picture for new insights and new elements. Photography and its luminance, the use of its beams without a camera, the movement of the radiance of a film - all these procedures teach us a future cinematography that will melt the emotional world of the individual and the objective connections of an optically expressed material. Since in 1936 there is little knowledge about this yet, Moholy-Nagy lists several requirements for a thorough psycho-physiological exploration of an expressive practice with the following elements: light/shadow, light/dark, values of light, time/measure, modes of measuring, the movement of light, fraction of light, color/pigment, intermedia, color intensity, chemistry of color and of light effects, the conditioning of form by color/site/surface quantity, biofunctions, physiological reactions, the statics/dynamics of composition, apparatuses, and the technology of coloring and projection.

Be it photography or a projected series of transparent photographs better known as film - all of this and other prospective means and forms of art are

[^5]necessary in order to evade the anxieties of technification and exhaustion of older arts by new optical canons and registration procedures as well as an "inventive potency, ... (a) genetic tension" (33) that results from present and future intuitive knowledge. McLuhanesque in tone, Moholy-Nagy says that the loss of earlier color experience as prompted by the printed and literary word can only be compensated by the constructive potential of industrial technification, however measured by a technologically assisted standard language of expression taking account of man's strong emotional side. Moholy-Nagy, in this manifesto, already dreams of a future of "immaterial, evanescent images (Bilder)" (34) using light intensities of an infrared penetration that leaves behind the day's electromechanical devices like the mechanical piano or classic painting made mobile.

There are more thoughts on film in "problems of the modern film" (1928-30) and "supplementary remarks on the sound and color film" (1935). Here it remains to be assessed if Moholy-Nagy really transgresses his already sufficiently radical paradigm of photography, if this was intended at all.

True, the work program for film design and film expression as "mobile spatial projection" ("problems of the modern film," 37) is recognized insofar as it is thought to be extended to radio, TV, telefilms and teleprojection (1936!). Moholy-Nagy is tireless in examining this projection in detail, in the technical components of the optical, kinetic, and acoustic spheres. Malevich, Vertov and abstract film are referred or alluded to, with the key to all of this being the black and white, and later color, photogram and layering of film stripes, as well as the montage, however restricted to the tasks of reportage 'talkies' and the prospective technological advances combining sound with motion pictures and movement, all of them trangressing the standard cinema 'easel painting' dispositif. ${ }^{12}$

True, there is a vast array of technological and artistic innovations recounted by Moholy-Nagy: synthetically drawn talkies, sound tricks, comical effects, infrared photography, new objectives for panorama cameras, the Gasparcolor system, Technicolor, Lumière's plastic film, sliding cameras and cameras on cranes, the movement of scenes with a revolving stage or a running band, relative movements as with swings or airplanes, differentiated optical systems approaching optical methods of the human eye, and new cultures of color film.

But all of these observations and recommendations rest on a basic discovery, namely that photography and with it the artistic use of light are at the center of all of the now-liberated visual arts. This preponderance of light in Moholy-Nagy's theory is emphasized by Kalivoda: The special problem of light emerges from the 19th century and perseveres with thematic and abstract film and the cameraless photograms, all of them enhancing the pivotal importance of abstract art as the referential point for Moholy-Nagy's light art, according to Moholy-Nagy's statements. And Kalivoda reminds the reader that Moholy-Nagy's desired project of an urban light game with "light-displays in the open air" (Kalivoda, 46)

[^6]has as a vanishing point the abstract absolute film, with all of Moholy's needs for light sensations, light frescos, reflectory light games, spotlight projection, and cloud projection.

That the color cover illustration is taken from oil painting "construction «z 7»" does not change the factual centrality of light in Moholy-Nagy's reflections. This is only due to the exigencies which Moholy-Nagy increasingly experienced during the 1930s, when not only the political conditions for free art became difficult on the European continent, but artistic developments were unable to arrive at convincing conclusions for a pervasive new form of art. Even in this respect, a meaning of telehor, the third one, deserves to be interpreted: as a testimonial of "work on a new aesthetic"13 of Moholy-Nagy and his compatriots that reaches well into a future that unfolds into the 1960s and is still doing so in our recent times.

## Aesthetician Moholy-Nagy?

While a philosophical assessment of art manifestos like Moholy-Nagy's remains to be awaited, it seems to be obvious, following Kalivoda's "postscript" in telehor, that Moholy-Nagy addresses explicitly the problems of modern art forms, in particular the relationship between art genres like painting, photography, and film, as well as the unity of the arts in (visual) art. Moholy-Nagy may not have been an aesthetician, nor a philosopher. But his thoughts stand on the threshold of entering a philosophical context - be it that of his time, or be it the more systematical one of our philosophically more advanced times.

First of all, telehor is bound to photography and centered in the photogram only in order to give a comprehensive perspective on what could be termed, with a correspondence to onomatopoeia, photopoeia. Accordingly, the photogram technique is the key not just to photography in a painterly attitude as with Giedion, or a post-painterly attitude after Clement Greenberg and the Six years of dematerialization, ${ }^{14}$ but any future visual art including electric light and mobile spatial projection of "telefilms" achieving an artistic totalization of light. A philosophy of the arts would have to triplicate this tendency. It would have to conceive in the same way that which was ocularcentrically set aside in Moholy-Nagy's nostalgia for the silent movie and skepticism concerning montage: sound in general, and with it the tonal arts. Likewise, it would have to fan the fire of words in general for taking account of the linguistic arts. Such an aesthetics would rely on the integrative powers of arts radicalized by the visual, auditory and linguistic material in its technologically advanced form. The relationship between arts like painting, photography, and film stressed by Mo-holy-Nagy would have to be extended beyond a unified visual art to all the arts.

Secondly, telehor stands for an anticipation of what is today the arts and aesthetic of telecommunication or the new media. What is given with the

[^7]model of the 'telephone painting' - which embodies a mode of distant production and reproduction of an artwork - is what is today known as the art of telecommunication or of electronic media. Accordingly, television or telehor is not just television technology in the ordinary sense: an extension of art using light for visually bridging distances. It is the prototype for a communicative art from the very beginning of production. This may run into what has come into existence in the limited commercialized form called the prosumer, but it could be equipped with full aesthetic and creative powers on the side of both the artist and the spectator/listener/reader.

Third, the aim for a new aesthetic was certainly maintained by Moholy-Nagy after his educational and programmatic efforts in the bauhausbücher of the 1920s. Once commercially available, this aesthetic conception extended to the mixture of black and white and color pictures. But the artist-theoretician Moholy-Nagy does not have in mind an aesthetic just for design purposes. The "objective form of vision" does not apply only to photography. What leads from photography's techniques of representation and sublimation to a physiological education of the eyes that amounts to a photographic alphabetism may, in the long run, develop an entirely new form of vision. This may finally be signified by the telehor which is the vision apparatus for what is the subject of a historically new kind of aisthesis altogether, not just vision. In other words, it is the theoretical organon of a utopia for something that is not yet here, but which lends a metaphorical vision of a distant future.
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[^0]:    1 See: the band Bauhaus from 1978 to 1983, Roxy Music and its album Manifesto, London-E: E.G./Polydor/Atco 1979, and the band Art of Noise, the title of one of Luigi Russolo's manifestos, from 1983 to 1990. As the first modern manifesto handed down by Georg Hegel and probably written by Friedrich Hölderlin and Friedrich Schelling can be considered "Das älteste Systemprogramm des deutschen Idealismus" (1797), see Diana I. Behler's 2005 translation at http://www.cross-x.com/ topic/7381-the-oldest-systematic-program-of-german-idealism/.

    2 Moholy-Nagy made the typographic and layout design of bauhausbücher not only for his own books but also, for instance, for Paul Klee's Pädagogisches Skizzenbuch = Bauhausbücher 2, München: Albert Langen 1925, in English: Pedagogical sketchbook, edit. and transl. by Sibyl Moholy-Nagy, New York: Frederick A. Praeger 1953.

    3 The title of the journal, titles of the articles and quotations of the journal will be given in non-capital letters according to the 1936 modernist way of writing.

[^1]:    4 Klemens Gruber/Oliver A. I. Botar, Editorische Notiz. Melancholie für die Zukunft/Editorial Note. Melancholy for the Future, in: telehor. I. moholy-nagy. Kommentarband/Commentary \& Translations, Zürich: Lars Müller Publishers 2013, 6-29.

[^2]:    5 Numbers in brackets refer to page numbers in the reprint.

[^3]:    6 In the same year of the publication of telehor in 1936, Walter Benjamin held ("L'oeuvre d'art à I'époque de sa reproduction mécanisée," in: Zeitschrift für Sozialforschung 5 (1936), 40-66, section VI) that photographic takes escape contemplation and require precise captions. This was already Benjamin's reply to Moholy-Nagy ("Fotografie ist Lichtgestaltung," in: Bauhaus. Zeitschrift für Bau und Gestaltung 1 (1928), 2-9, 5: "Die Grenzen der Fotografie sind nicht abzusehen. Hier ist alles noch so neu, daß selbst das Suchen schon zu schöpferischen Resultaten führt. Die Technik ist der selbstverständliche Wegbereiter dazu. Nicht der Schrift-, sondern der Fotografieunkundige wird der Analfabet der Zukunft sein. My translation into English, my italics of what Benjamin chooses to quote, PM: The limits of photography are not yet to be seen. Everything here is still so new that even pure search leads to creative results. Technology is the natural pioneer. Not the illiterate but the ignorant of photography will be the illiterate of the future.") in Benjamin's "Kleine Geschichte der Photographie" (1931), in: Das Kunstwerk im Zeitalter der technischen Reproduzierbarkeit, Frankfurt am Main: Suhrkamp 1963, 65-93, 93.

    7 Klemens Gruber/Oliver A. I. Botar, op. cit., 12 f .

[^4]:    8 Lucia Moholy-Nagy tells that Moholy-Nagy exclaimed he could have done so by ordering with a phone call: Krisztina Passuth, László Moholy-Nagy, Weingarten: Kunstverlag Weingarten 1986, 38. Laszlo Moholy-Nagy himself tells in his "Abstract of an Artist," in: Laszlo Moholy-Nagy, The New Vision and Abstract of an Artist, New York: Wittenborn, 1947, 79: "In 1922 I ordered by telephone from a sign factory five paintings in porcelain enamel. I had the factory's color chart before me and I sketched my paintings on graph paper. At the other end of the telephone the factory supervisor had the same kind of paper, divided into squares. He took down the dictated shapes in the correct position." Source: Eduardo Kac, Aspects of the Aesthetics of Telecommunication, in: Siggraph Visual Proceedings, ed. by John Grimes and Gray Lorig, New York: ACM 1992, 47-57, also at http://www.ekac.org/telecom.paper. siggrap.html; chpt. "Telephone Pictures."

    9 Detlev Schöttker communicates (Kommentar, in: Walter Benjamin, Das Kunstwerk im Zeitalter der technischen Reproduzierbarkeit, Frankfurt am Main: Suhrkamp 2007, 99-248, 117) that Moholy-Nagy, who became known to Walter Benjamin in the mid 1920s, thought this way already in his text "Produktion - Reproduktion," in: De Stijl, 5 (July 1922), no. 7, 98-100.

[^5]:    10 Laszlo Moholy-Nagy, Painting Photography Film, ed. by Hans M. Wingler and Otto Stelzer, transl. by Janet Seligman, London: Lund Humphries 1969, 7.

    11 Compare Theodor W. Adorno, Kulturkritik und Gesellschaft, in: Gesellschaftstheorie und Kulturkritik, Frankfurt am Main: Suhrkamp 1975, 46-65, 46: "Who is used to thinking with ears is vexed by the sound of the word Kulturkritik because it is pieced together, like Automobil, of Latin and Greek." (my translation) That Dénes von Mihály probably invented the word in his technological treatise about television (Das elektrische Fernsehen und das Telehor, Berlin: Krayn 1923) does not explain the use of the word 'telehor' for telehor, as there seem to have not surfaced yet references in documents to this fact earlier or later than 1936 with or around Moholy-Nagy.

[^6]:    12 I hereby allude to Jean-Louis Baudry who was, to my knowledge, the first who applied the notion of the dispositif to one of the arts, in his case cinema (Le dispositif: Approches metapsychologiques de l'impression de réalité, in: Communications, no. 23, 1975, 56-72).

[^7]:    13 Klemens Gruber/Oliver A. I. Botar, op. cit., 15.
    14 Lucy R. Lippard, Six Years: The Dematerialisation of the Art Object from 1966 to 1972, New York-NY: Praeger 1973.

