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Kepes and Rand: Competing Models of Design at Mid-Century

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Abstract

Kepes and Rand: Competing Models of Design at Mid-Century By Veranika Paltaratskaya

Georgy Kepes and Paul Rand were two massively influential designers at mid-century. Kepes who was a student of the Bauhaus, wrote *Language of Vision*, a book that would be used as *the* textbook for college graphic design classes. Rand wrote *Thoughts on Design*, and his work for major companies such as IBM, UPS, and Westinghouse would establish the major design trends of his lifetime. Kepes used Rand's images to elaborate on the claims which he presented in *Language of Vision* even though, as I argue, Rand's vision of design ran largely in opposition to Kepes' own.

According to Kepes, art was, at its core, a sensory experience. If images could be made with human biology in mind, they could have the ability to transfer sensory content to anyone with a fully functioning perceptual apparatus. Understanding, on these terms, would be universal. It functioned in a dynamic equilibrium, a metabolic structure that comprised the essence of all things and could be understood by everyone. An artist could capture dynamic organization in an image and by doing so transfer his experiences to the spectator. The image would then be experienced by the viewer as an extension of their reality. The formal elements used to create the design would act without the constraints of natural representation, and contextual elements could be eliminated because the language of the image would be understood through the viewers biology.

Rand, on the other hand, stressed the contextual dimension of an image. Art was not an unconscious sensory experience as it was for Kepes, but a dialogue between the image, and spectator, within a particular historical and social setting. Instead of a single universal understanding, the literal meaning could change according to context even if the formal qualities remained the same.

Both of these men played an important role in shaping how artists approach their work. Kepes perpetuated art as a multidisciplinary practice of observation and creation. Rand in turn explored the complexity of image making that could communicate with an audience. Kepes and Rand: Competing Models of Design at Mid-Century

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In 1937, Georgy Kepes, who was a student at The Bauhaus in Berlin, moved to Chicago and published his highly influential book, *Language of Vision*. It was a book that went into thirteen printings, five editions, in four languages, and remains in print today. It was here that Kepes outlined man's process of ordering visual stimuli into a cohesive representation of reality. To make his argument Kepes marshaled advertisements, posters, and paintings by a wide range of modern artists and designers, including the influential work of designer Paul Rand. Rand was an eminently successful advertisement designer for companies such as Coronet Brandy, Westinghouse, IBM and a range of major companies. In 1947, at the age of 33, Rand published his own incredibly influential study entitled *Thoughts on Design*. This book, as I will suggest, offered a strongly competing vision of design from the one Kepes proposed. My aim here is to address their two highly influential and contradicting accounts of the nature of design at midcentury.

Whatever the differences, Kepes and Rand held in common a similar set of ideas, and shared exposure to a canon of modern works. Kepes was born in 1906 in Selyp, Hungary where he lived until 1914 when he moved to Budapest. He attended the Fasori Lutheran Secondary School and later studied painting at the Academy of Fine Arts from 1924 to 1928. His time in Hungary was marked by the unrest of the First World War and the subsequent transitions in government led him to join a group of radicals named *Munka* which aimed to foment a social revolt against the reactionary military regime. It was through his work with *Munka* that he discovered modernist art. He was especially fascinated with cubism, Suprematism, and Russian Constructivism. Kepes finished his degree and renounced painting to go work in Berlin under László Moholy-Nagy in 1930. Kepes traveled from Berlin to Hungary and back in order to deal with a prolonged illness, and when he recovered, he was forced to flee in 1936 to London due to

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the worsening political situation in Germany. He continued to work for Moholy's design studio, creating designs for motion pictures, stage productions and commercial exhibitions. He had the mission of using "formal structural image-making" to serve a socialist political agenda, and although his politically inspired work would change, Kepes' socialist aims were central to his commitments throughout his career.1 In 1937, Kepes received a telegram from Moholy asking him to lead the Light and Color Workshop in the New Bauhaus in Chicago. After much deliberation, Kepes left for America. The Second World War isolated him from his family who were under the persecutions of the Nazi regime and Jewish in origin. The Cold War would continue to separate them further, both physically and ideologically.2

For Kepes, the geographical uprooting of his travels was accompanied by a changing identity, indicated by his change in name. His original name was "Kepes György," following Magyar word order, in Berlin it was "Georg Kepes," in London "Geörgy Kepes," and in America he recreated himself as Georgy Kepes. He would put an end to identifying as Jewish after coming to America.₃ Surprisingly, this is a similar practice of recreation to what Rand would undergo in his process of becoming a designer. In the United States, Kepes would pursue a synthesis of science and art though commercial design, visual studies and theoretically-driven publications.

Paul Rand was born with the name Peretz Rosenbaum to a family of Orthodox Jews, in Brooklyn New York on August 15, 1914, just after the event triggering the First World War. The boy who was named Peretz showed a proclivity from early on to leave behind his Jewish roots.

¹ Gyorgy Kepes, "The Artist's Response to the Scientific World" (Cambridge, MA: Church Society for College Work, 1966), 36.

² Johm R. Blakinger, *Gyorgy Kepes: Undreaming the Bauhaus* (Boston, Masachusetts Institute of Technology, 2019), 6.

³ Blakinger, Gyorgy Kepes, 416.

As a child he drew constantly and developed a fondness for cartoons and comic books. He was also interested in drawing from the human form which was against the Jewish tradition that prohibits representation in drawing and sculpture. In his effort to become a painter he attended Pratt Institute by night while attending public high school by day. He graduated with two diplomas in 1932 and was forced to search for a practical way to make a living. It was at this time that Peretz discovered modern art in Europe which came to greatly influence his design thinking. Without enough money to study in Berlin, Peretz enrolled in the Art Students League in Manhattan and was later able to find a job as a part time illustrator in New York. It was at this time that he began to shed the last vestiges of his ties to his past and become a newly designed man, Paul Rand.

As I've tried to suggest, there is a strong parallel between the biographies of Rand and Kepes. The two Jewish designers both lived through the Great Depression and World War II. Both were determined to escape the confines of a conservative artistic education and looked toward modernist design out of school. At the time of their first publications both artists had commercial design and teaching experience. Despite the similarity of their backgrounds, what differentiates them is more indicative of their aims. Kepes, born earlier, was far more affected by the social unrest of the First and Second World Wars, than Rand. Above all, the great leaps of technological innovation garnered through World War gripped his imagination, while technological innovation was far from the center of Rand's concerns. Design for both men carried an autobiographical dimension, as it was constructed as something that could allow them to remake themselves, and yet this shared sense of identity as *something in the making* led them to opposing visions of design.

A constant in the lives of the two men was the influence that modern design had on their careers as artists and advertisers. Both men looked toward the Bauhaus as young adults and aimed to emulate the style of art that was being produced in the highly influential school of design. One of the most influential artists in America at the time, Lázló Moholy-Nagy's teachings centered on the unification of science and art. According to Moholy contemporary life was constantly being shaped by the unwritten rules of social behavior, but the culture which created these norms did not allow for an individual to have many interests. People were being limited from performing the types of activities at which they would normally excel. Kepes reasoned that technological progress was propelled by the economy which as a system stifled personal growth. Capitalism encouraged individuals to limit their expertise to one field. For Moholy, technical progress needed to be shaped by the biological needs of an individual. In this sense, the best artistic values were anchored in the biological as well, and since biology was identical for everyone, it would be biology that could unify how people experienced art.

Moholy's aim was to create a theory that he could use to explain how individuals related to their environment. He reasoned that the influences acting on a person were comprised either of biological processes or cultural ones. An individual could only feel fulfilled if they were able to express themselves. Moholy devised a scheme for balancing cultural influences against personal expression. In this scheme culture and expression are placed in a closed loop – culture affects expression and expression affects culture. The biological processes inherent in emotion influences personal expression, and through it, culture. Moholy states, "we observe art because of its basic and common roots permeating life."⁴ In other words, individual expression must hold meaning for all people if it is to have criteria necessary to be able to contribute to visual culture.

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⁴ Lázló Moholy-Nagy, The New Vision (New York, George Wittenborn, 1928), 13.

Moholy has created a theoretic framework for how culture and biology interact, and the two forces combined are what affect the development of man in the modern age. Moholy generated his own definition for the biological aspect, stating: "biological stands generally for the laws of life which guarantee an organic development".⁵ This definition idealizes the needs of human individuals and relies on the "organic development" to which Moholy alludes but never defines. He reasons that in a perfect world "organic development" will occur without the influence of machinery, for man-made constraints are what stifle our biology. For example, Moholy states, "the Taylor system, the conveyor belt, and the like remain misinterpreted as long as they turn man into a machine, without taking into account his biological requirements – work, recreation, and leisure".⁶ Here, the efficiency of the tailor system is corrupt as it fails to take into account the basic physical and psychological needs of the humans working in assembly lines.

According to Moholy, biological processes must stand as the primary reference for development in mechanical, economical and social spheres of society. He maintains that human biological needs are simple; they have merely been deformed by social and technological constraints. He states that the development of false needs, "often happens through a misunderstood luxury which thwarts the satisfaction of biological needs."7 In essence, Moholy is discontented by the heightened capacity of production garnered by America's capitalist economy. Mechanical advances created the conditions for abundance, so it is the technology which should be targeted in order to establish a utopian society. He posits that, "technical civilization can be combatted" first by observing and protecting normal biological functions, and secondly, by "relating single results to all human activities."8

⁵ Moholy, *The New Vision, 16.*

⁶ Ibid., 16.

⁷ Ibid.,17.

⁸ Ibid., 18.

Moholy's main argument, and the one that shaped Kepes' attitude, is the claim that there is a universal dimension to biology. He argues that the biological structures and processes of human beings are inherently similar to one another. Everyone is equipped with the ability to detect stimuli and to assimilate it as sensation, and since the underlying biological processes are ubiquitous in humans, the sensations of similar stimuli will feel similar to all people. Through the process of generalizing sensation, people could also create new sensory experiences which other people could relate to. As long as individuals are able to overcome the social and economic restrictions created by modern society, they will be able to reach self-expression. Moholy states, "if we consider that anyone can achieve expression in any field, even if it is not his best outlet or essential to society, we may infer with still greater certainty that it must be possible for everyone to comprehend works already created in any field."9 Here the ability to create one thing is equated with the ability to *appreciate* all things, and the sensations of one person are generalizable to the sensations of everyone. Later, Moholy qualifies this statement by adding, "such receptivity develops by stages, according to disposition, education, mental and emotional understanding."10 That is, a person's ability to appreciate self-expression is dependent on the level of their "organic development." According to Moholy, people need to become better at creating designs that will communicate with people, and fulfill their physiological, psychological, and social needs.

In his introduction for *Language of Vision*, Sigfried Giedion praises Kepes for his efforts to "continue and make secure the modern tradition."¹¹ Kepes continued many of the teachings of the original Bauhaus when he moved to Chicago and incorporated many of Moholy's ideas in his

⁹ Ibid., 18.

¹⁰ Ibid., 18.

¹¹ Sigfried Giedion, "Art Means Reality", in Language of Vision (Chicago, Poole Bros. Inc., 1944), 6.

own work. In order to understand the biological concepts that Kepes was thinking about I will consider a design project that he completed before the publication of *Language of Vision*. In 1941, Kepes designed a pamphlet entitled "Illustration." The pamphlet contains a spread lauding the physiology of the human eye, calling it "the most complex and delicately balanced instrument known to science."¹² In the accompanying diagram (fig. 1), Kepes depicts the process by which an image is sensed by the photoreceptors of the eye. He separates sensation into multiple parts: first is the given, the image on the page. Kepes spells the word "Illustration" vertically across the left of the diagram. A dotted line stretches from each letter symbolizing the light rays reflecting off of the paper. Here the image is broken into its fundamental elements: the lines, shapes, and forms, each presented on a separate plane. The illustration, now simplified continues to travel to the eye as light which will pass through the cornea, lens, and vitreous humor to hit the rods and cones on the back of the retina.

The diagram presents a mistaken summary of the process of sensation. It shows the image separated into its comprising points, lines and shapes as if the eye, on its own, is able to disassemble the structure of the illustration. By adding this detail Kepes represents not a sensation, but an incomplete simplification of *perception*. He neglected to add the optic nerve stretching to the brain areas necessary for the conscious perception of visual stimuli. The text accompanying the diagram states, "some of the most striking original ideas in contemporary commercial design have been created by designers who asked themselves the question, How will I organize my message so that it will enter the eye most rapidly, easily, and accurately?"¹³ The question implies a separation between the eye which houses sensory receptors, from the brain

¹² Johm R. Blakinger, *Gyorgy Kepes*, 28.

¹³ Ibid., 28.

which interprets sensations so that they can be consciously perceived. Here the "message" must only enter the eye in order to be understood. How the "message" is organized determines how quickly understanding will occur. In reality, light enters the eye at the same speed, regardless of organization, and it is the brain that is in charge of interpreting messages. Thus, Kepes presents an interchangeable understanding of sensation and perception. The fascination with biology carries over from Moholy to Kepes. The diagram represents the mechanism by which Kepes thinks images are perceived. The question presented in the passage assumes a biology that is universal. The designer's job is simplified to one problem: if the biology of consumers is the same, what is the best way to deliver a message in order for it to be properly received.

John Blakinger, author of *Gyorgy Kepes: Undreaming the Bauhaus* explains that Kepes "suggests a way of seeing in which the formal elements of abstract art are exploded from the scale of the single sheet of paper or solitary square of canvas and expanded to the vast dimensions of our surroundings ... these elements turn the environment itself into an immense optical puzzle."¹⁴ In other words, the diagram represents an image of a design that would be experienced as continuous with reality to the observer. The spectator would not simply see the image as a work of art but experience it *as he would experience a view*. At stake here is the confusion between art and life. In fact, the idea that is presented in this diagram is one that would be expanded in *Language of Vision* as the answer to the preceding question. Kepes would create a language that commercial designers could use to transform advertisement into an extension of reality, and therefore imminently salient to modern consumers.

In the opening lines to *Language of Vision*, Kepes explains that the lives of humans in the modern age are steeped in chaos. People are incapable of satisfying their physical and

¹⁴ Ibid., 27.

psychological needs because they are not prepared for the rapid advances of technology and the immense impact of increasing amounts visual stimuli. Kepes considered that scientific developments were largely helpful to humanity because they had made resources and technology more available to the public. His concern was that the "structure of a smaller, outgrown world" prevented technology from being successfully integrated for contemporary needs.15 According to Kepes, the "waste of human and material resources and the canalization of almost all creative effort" was evidence that the standard approach to understanding visual comprehension was not just inadequate but destructive.16 He emphasized that new technologies were a powerful connective force that if harnessed correctly could be used to create a new life, one which would expand our notion of sensory awareness. Kepes states that man must become "truly contemporary and fully able to use his capacities" if the integration of the new technological order is to be achieved.17 All that was left was to re-educate man though a new visual language that would integrate an expanded realm of "sensory, emotional and intellectual dimensions" into a new whole.18 The process of re-education could not rely on a single experience. Since individual experiences are isolated from one another they cannot be used to develop a full picture of reality. As Kepes frequently put the matter, "man must restore the unity of his experiences."¹⁹ That is to say, man would have to combine his experiences in order to reclaim the senses that had been dulled by unregulated technological advancement. For Kepes it was necessary to reorganize the visual language in order to re-form man. He wanted to break down peoples' static conceptions of the world and awaken them to a new dynamic reality. According to Kepes,

¹⁵ Georygy Kepes, *Language of Vision* (Chicago, Poole Bros Inc., 1944), 12.

¹⁶ Kepes, *Language of Vision*, 12.

¹⁷ Ibid., 12.

¹⁸ Ibid., 13.

¹⁹ Ibid., 13.

organizing vision into a language was the best way to read the man-made media that served as contemporary communication. He stated, "to perceive a visual image implies the beholder's participation in a process of organization."²⁰ In other words, the spectator had to define, to literally create, the unity of an image in order to properly understand it. By breaking down the original image into its elementary parts the viewer was effectively participating in the organization of the work. As should be clear, the same break down of the image was presented in his diagram for "Illustration".

Kepes sought to define the basic aspects of sensory perception in order to create a framework for his new language. He writes, "vision is a primary device of orientation; a means to measure and organize spatial events."²¹ On this account, vision is the most important of the human senses. Processes in the brain allow us to orient towards stimuli and binocular vision allows us to see depth. As technology advanced the environment changed and people were forced to re-evaluate the spatial measurements that they were familiar with. Now, instead of the spatial measurement of walking, people had to become familiar with cars, subways, and airplanes. Kepes writes, "the visual image today must come to terms with all this: it must evolve a language of space which is adjusted to the new standards of experience."²² It was man's attempt at settling conflicts with other men that led to the development of a visual communication that relied on a "static system of object concepts."²³ By reorganizing visual language it would become possible to break out of the standards of a static iconography into dynamic representation. According to Kepes, in order to achieve the new language of vision

²⁰ Ibid., 13.

²¹ Ibid., 13.

²² Ibid., 14.

²³ Ibid., 14.

artists simply had to "apply the laws of plastic organization" and "utilize the visual representation of contemporary space-time events." Then they could use their creative resources to "develop a contemporary dynamic iconography."²⁴

If vision is to be considered as a language then it should be made up of similar units as a verbal language, namely its own type of words, sentences and syntax. Understanding what is seen should be similar to the process of translating words into the concepts that they represent. When first introduced to vision, people are taught to perceive abstractions or stereotypes of what they are actually seeing, and because of this they create an inaccurate impression of reality. They lose necessary information about reality due to their faulty perception of it. Just as in written language, when words are insufficient or imprecise, the poor use of visual language can be lost in translation. Applying Kepes' "laws of plastic organization" to visual communication would mitigate these effects. People would be compelled to "learn the greatest possible variety of spatial sensations inherent in the relationships of the forces acting on a picture surface."25 That is, people would be increasing their visual vocabulary in order to find the "words" to explain the relationships of visual cues. As a result, the information gained from perception would become more accurately attuned to reality and no longer dependent on visual representation to gain meaning.

According to Kepes, people could escape the static imagery of representation by establishing a dynamic order. This dynamic order, much like the physiological processes of equilibrium, was dependent on the continuous process of stabilizing an environment which is continuously in flux. Kepes writes, "as the wheels of a bicycle stand erect only through perpetual

²⁴ Ibid., 14.

²⁵ Ibid., 23.

movement, so the organism keeps its form through constant motion...internal forces are acting to restore balance after each disturbance from the outside."₂₆ Visual imagery needed to have the quality of dynamic equilibrium if it was to communicate successfully with an audience. In Kepes' words, "the dynamic tendency to integrate optical impacts into a balanced unified whole acts within the field of the physiological and psychological make-up of man."₂₇ In other words, the internal physiological forces of man were already working to maintain the equilibrium necessary for effective communication.

Kepes explained the process by which an image containing a dynamic equilibrium could work with the biological processes of man to create a visual composition that was concurrent with reality. In his analysis of Rand's ad for Coronet brandy (fig. 2), Kepes characterizes the work as an example of plastic organization. The design is comprised of several overlapping elements. There is a brandy snifter, animated into a caricature of a waiter by the addition of a face and limbs. His arms wrap in opposite directions, one lifting a crown on his head, and the other wrapping under a tray. The tray carries a tall glass of brandy, a soda bottle, and the Coronet brandy bottle. The form of the soda bottle is delineated, standing behind the glass in shape only, via a dotted pattern. Below the brandy snifter is a line drawing of a dog standing on its hind legs and balancing a top hat on the tip of its nose. With the exception of the glass and brandy bottle, the majority of the elements sit flat against the picture plane. A large field of red and one of an earthy brown encircle the area to the left and right of the brandy snifter respectively. A plane of blue marks the shadow inside the form of the brandy snifter. The crown is yellow, balanced by a swatch of the same color overlapping the dog, and black delineates the shadows cast on the tray

²⁶ Ibid., 30.

²⁷ Ibid., 34.

by the glassware to balance the black of the typography. The planes of color push into one another, creating the only sense of dimensionality, and compensate for the lack of form in the illustrated brandy snifter. The cup and brandy bottle, both photographed images, pop out of the surface of the page, and draw the viewer's attention despite being surrounded by bright hues of middle values.

To Kepes, Rand's design, beyond its representational surface, was deploying shapes to stimulate the viewer's nervous system. The image was no longer a depiction of a static object but the layering of different surfaces. The viewer, now no longer a spectator, was required to assemble these surfaces using their senses. According to Kepes, the viewer was would respond to the work's elementary formal elements (point, line, form, color) rather than to any association, meaning, idea, or conscious understanding. The contradictions that we saw in the image became the basis for our brains to create a more complete organization of the elements. Resolving the visual conflicts trained the viewer to create new realities within the picture plane and bring this mode of problem solving into their lives.

In Rand's book *Thoughts on Design*, he describes the process by which he arrived at the concept behind the Coronet Brandy images which Kepes references in his book. He wrote, "the Coronet Brandy advertisements are based on a common object – the brandy snifter- in animated form. The dot pattern of the soda bottle was designed to suggest effervescence … the oval tray individualizes for Coronet the silver tray that we used to see in liquor advertisements."²⁸ For Rand, each element of the advertisement directly related to its meaning outside the picture, but which took on new values inside the picture. In other words, the shapes, put in a new relation on the surface of the image, are an alternation of the meanings suggested by the shapes outside the

²⁸ Paul Rand, *Thoughts on Design* (New York, Van Nostrand Reinhold Company, 1946), 46.

work. According to Rand, the geometric forms or "attention arresting devices" that dominate the work, function to attract viewer interest. Once looking at the image the viewer's point of focus would be redirected to the "photographic images." 29 Thus Rand is able to control the sequence by which the message is absorbed by the viewer from the moment it is noticed. Rand takes into account far more than just the context of the images on the page but looks at the context of the advertisement in a sea of other images. He writes, "for an advertisement to hold its own in a competitive race, the designer must steer clear of visual clichés by some unexpected interpretation of the common place."30 Here, the designer must create an image which he knows will attract attention within a context of other advertisements. Instead of looking at the image alone and unconsciously experiencing the formal elements as Kepes would have it, Rand wants the viewer to make an immediate connection to the design and be drawn in by the meaning inherent in the work. Rand openly acknowledges what to Kepes would be visual stereotypes, and if Kepes attempted to completely remove them by eliminating the context inherent in representation, Rand merely wanted to reinterpret it for a more effective design. Rand is recontextualizing the object he is trying to sell by reviving the elements within the work with a new set of relations, rather than as Kepes insisted, unleashing the formal elements to generate effects independent of any context.

In *Thoughts on Design*, Rand states that design is not created from original elements. Although a good design can be created by rearranging the elements on a surface, that is often not the case. For Rand, design is a study of the source material. He writes, "the experienced designer does not begin with some preconceived idea ... the idea is the result of careful observation, and

²⁹ Rand, *Thoughts on Design, 37*.

³⁰ Ibid., 36.

the design is the product of that idea."³¹ In other words, the design should look back at the original context of the product. If that context is altered slightly the design will become more interesting and overcome the preconceived ideas associated with the product. Thus, the advertisement will become more complex when it is compared to the "visual cliché." To this end, Rand quotes Kant, stating "man's knowledge is realized in the act of comparing, examining, relating, distinguishing, abstracting, deducing, demonstrating – all of which are forms of actual intellectual effort."³² In other words, Rand's viewer will participate in the image by drawing connections about the information that is presented based on their past experiences. In opposition to Kepes, Rand did not see the need to add contradictions to design in order to compel the viewer to engage with the work. It was enough that they were able to draw connections to the elements comprising the image.

According to Rand the designer used three types of materials: the given resources, provided by the client; the formal elements of style; and the psychological element of perception, both from the perspective of the designer and the viewer. The "psychological material," for Rand, is different from the biological that Kepes is interested in. While Kepes focuses on the qualities of sensation and perception, Rand considers the "psychological material" to include "the spectator's instincts, intuitions, and emotions."³³ In other words, Rand benefits by incorporating aspect of human socialization and culture.

In *A Designer's Art*, Rand's 1968 publication, he explains the job of a graphic designer. Rand states that the task of a graphic designer is to solve "problems of visual communication."³⁴ Although the statement looks back towards the ideas in *Language of Vision*, Rand clarifies them

³¹ Ibid., 12.

³² Ibid., 12.

³³ Ibid., 12.

³⁴ Paul Rand, A Designer's Art (New York, Princeton Architectural Press, 1968), xiii.

with another meaning in mind. He states, "graphic design is essentially about visual relationships – providing meaning to a mass of unrelated needs, ideas, words, and pictures."₃₅ Here, as before, Rand is concerned with creating a meaning out of the elements of the piece. According to Rand, it is impossible to create a design completely without context. He writes, "the designer who creates something entirely new is not rarer than the painter who does the same."₃₆ Creating "new" works is inconceivable as artists are influenced by the designs that they have seen before. A designer may start an assignment with the memory of a typeface that they remember liking on a poster they once saw or remembering a layout of a particular add in the newspaper that day. If he wants to advertise clothes, for example, the designer may decide to use a specific, popular model who he has worked with before. Each of the decisions he generates occurs with a frame of reference. His source material comes from the images of advertisements, movies, and photographs which he consumes on a daily basis.

The overwhelming number of images being used in modern society is what concerned Rand in an article he wrote for the Academy of Arts and Sciences. Rand explains that visual artists are constantly bombarded by images created both by themselves and others, and since artists are responsible for creating new images, they cannot ignore this stimulation as others can. Artists are then constantly consuming the visual output of a society. For Rand the situation raised the question: "can the advertising artist ... have those deep and valid experiences which are the necessary basis for a genuine art?"³⁷ The question looks toward the concerns that Kepes and Moholy had about the negative effects that a changing environment had on the human biology. For these two men, design needed to function in tandem with biology in order to fulfil the

³⁵ Rand, A Designer's Art, xiii.

³⁶ Ibid., xiii.

³⁷ Paul Rand and Ann Rand, "Advertisement: Ad Vivum or Ad Hominem?" Daedalus, 89 (1960), 127.

biological needs of an individual. Rand, on the other hand, is concerned about the overstimulation of the artist rather than the viewer. He writes that the role of the artist has changed from what it was before. In the past, artists were able to produce art without being questioned about the validity of their work. Rand explains that the environment was not what caused this relationship to artists, but that the "ways of thinking, feeling, and believing have become utterly different."38 People had become committed to a change at unprecedented speeds. That is, both the speed of creation and the speed of consumption had increased. The constant barrage of information that had become available meant that consumers had limited time to analyze what they were seeing, and advertisements were no longer being judged based on their visual qualities. Rand questions, "what has aesthetics to do with selling?" 39 If all an artist did was create advertisements for a consumer audience what was his purpose in making art? Moholy would have said that artists could only feel fulfilled if their creations presented a meaningful contribution to society. An artist's work could not be meaningful unless it could be appreciated by anyone. The answer that Rand devises is twofold. For him, an artist is on the side of aesthetics over economics. The artist "must design a product that will sell, or create a visual work that will help sell a product, a process, or a service ... he will automatically try to make the product or graphic design both pleasing or visually stimulating ... his work will add something to the consumers experience."40 Secondly, an artist's belief in the necessity of his existence should be reason enough for him to create art. Rand, unlike Kepes and Moholy, approached the apparent problems of the modern age with the goodwill that allowed him to trust in the abilities of other designers, and in the intellect of the consumer.

³⁸ Rand, "Advertisement", 127.

³⁹ Ibid., 128.

⁴⁰ Ibid., 130.

One of the elements of art that advertisement designers were interested in was color. By modifying the hue, value, and intensity of a color designers aimed to create advertisements that were more expressive and had a stronger impact on the viewer than ever before. One of the most influential thinkers on the question of color and someone that Kepes and Rand cited was the director and film theorist Sergei Eisenstein. In 1942, Eisenstein's book *Film Sense*, was translated from Russian into English and published in the United States. Although the book covered the aesthetics of filmmaking it profoundly influenced the way artists and designers thought about commercial art. It contained a chapter entitled "Color and Meaning", and this chapter was familiar to Kepes and Rand who cited it several times.

Eisenstein begins his discussion by stating the question of whether there is such a thing as " 'absolute' relationships between particular emotions and particular colors."⁴¹ He goes on to explore this question by examining the works of famous artists and writers who spoke about color, and in particular the color yellow. According to Eisenstein, there is a difference between a color which is placed within a context and one which is not. The first type of color is surrounded by elements of design, imagery, and ideas. The second is an attempt at "*meaning* of an inner feeling."⁴² In other words, such color is supposed to represent some sort of meaning to the viewer by the simple fact that it is before him. The colors are presented in "a method [which] *consciously attempt to divorce all formal elements from all content elements.*"⁴³ That is, different colors could interact with each other on or behind the picture plane, but they could not become shapes, express depth, or make a statement by their arrangement. Eisenstein uses Wassily Kandinsky's stage composition "The Yellow Sound" as an example. In the program notes of the

⁴¹ Sergeir Eisenstein, "Color and Meaning" in *Film Sense* (New York, Meridian Books, 1957), 113.

⁴² Eisenstein, "Color and Meaning",113.

⁴³ Ibid., 117.

musical performance by Thomas de Hartman, Kandinsky outlines the shifts and undulations of the color forms which were supposed to draw parallels from the sounds of the performance. For example, in scene two Kandisnky writes, "the background suddenly turns dirty brown. The mound turns dirty green. And at the very center of the mound an indefinite black spot is formed, alternately becoming clearer and then blurry gray."⁴⁴ Kandinsky attempts to relate his personal experience of synesthesia to the reader. The description ultimately proves to be subjective and unique to Kandinsky, and Eisenstein rejects the possibility of an absolute relationship between color and emotion.

Eisenstein focuses on color connected to a context. He references the contextualization of yellow by writers and artists such as Paul Gauguin, Walther Bondy, T. S. Eliot, Nikolai Gogol, Frédéric Portal, Vincent van Gogh, Walt Whitman William Shakespeare, and others. Each of the authors transformed the meaning of yellow to suit the message that they wanted to deliver. The emotions associated with the color were dependent on the sum of additional meanings surrounding it. Eisenstein uses Walt Whitman as an example stating, "Whitman must have loved color, but he loved it enough not to restrict its application to one use alone." ⁴⁵ Instead Whitman created descriptions of nature "full of a 'positive' use of yellow, growing into great, warm, 'positive' landscapes"; he connected yellow with themes of work and added it to descriptions of somber passages of sunsets harkening on the process of aging and dying. ⁴⁶ He even used yellow to explore the progression of human decay. The conflictual associations of yellow were generated by the context that accompanied them, and if the meaning of color could change it was no longer tied to an absolute meaning or emotion. Color could not generate meaning on its own.

⁴⁴ Ibid., 115.

⁴⁵ Ibid., 131.

⁴⁶ Ibid., 129.

Eisenstein's argument changes the assumption that an unconditional relationship between color and emotion supposes. Earlier in history color was tied to a sort of magical thinking. Simply looking at a color was said to elicit a particular emotion, and color was tied to superstitions and rituals. Eisenstein argues that color is no longer sufficient to generate an emotion or idea on its own. Eisenstein posits that a color association can occur after an individual generates it by personal association, and it cannot occur on its own. He states, "if we look carefully at the schemes for 'absolute' relationships ... we will discover that in almost each citation, its author speaks not of 'absolute correspondences,' but of images to which he has attached *personal* color concepts."47 Common color associations evolve over time by the repeated overlapping of the personal associations of multiple authors. Eisenstein writes that even color associations that are accepted by a large, common group of people can be trace to "the concrete episode that binds [the] color to specifically associated ideas."48 Here the argument compels two questions: first, is there any biological input into the creation of color associations; and second, can sensory stimuli such as vision or hearing, have an effect on a viewer's biology? Eisenstein considers Arthur Rimbaud's "Voyelles." In the poem, Rimbaud lists vowels and links them to specific colors thereby attaching the auditory aspect of vowel sounds to the visual nature of color. The vowels and colors are further attached to an emotional association by the use of visual imagery. Eisenstein has a different reading of the poem, one in which Rimbaud fails to accomplish his connections between visual auditory and emotional elements. Eisenstein writes: "We may say without fear of contradiction that purely physical relations do exist between sound and color vibrations. But it can also be said, just as categorically, that art has extremely little in

⁴⁷ Ibid., 141.

⁴⁸ Ibid., 144.

common with such purely physical relationships."⁴⁹ In other words, even if we assume that there are connections between auditory and visual stimuli, the connection will be lost when more stimuli are introduced to the viewer. Furthermore, the connections Rimbaud makes between color and emotion are context dependent. Rimbaud doesn't associate "E" with frigidity because it is white. "E" is cold because it is referenced within the context of "spears of proud glaciers" and "shivers of Queen Anne's lace." It is even more difficult to find a relationship between the auditory qualities of the poem and the emotional associations created by the imagery.

The connection between emotion and color is also one that interested Kepes, but unlike Eisenstein, Kepes believed in the possibility of universal color associations. In *Language of Vision*, Kepes explores what he calls the different "dimensions of color."⁵⁰ For Kepes, the use of color has evolved over time until it was finally liberated from the constraints of representation. The first use of color by ancient civilizations, children, and primitives, was also nonrepresentational. He writes that color "stood in a clear symbolic role for the objects."⁵¹ In this state colors were experienced purely for their sensory qualities, but when details of representation were added in an attempt to achieve a greater realism, purely sensory color qualities were lost. The artist's goal became to reproduce the "transmitted atmospheric light" in their paintings, and this meant mixing pigments on the surface of the canvas. For Kepes, mixing pigments was the problem. Due to the material qualities painters could not create luminance, and therefore the surface of a painting did not react in the same way as naturally transmitted light. In other words, it was the difference between additive and subtractive color mixing.

⁴⁹ Ibid., 149.

⁵⁰ Kepes, *Language of Vision*, 166.

⁵¹ Ibid., 164.

The process of perceiving light relies on a human's ability to detect wavelengths in the electromagnetic spectrum that are visible to the human eye. Color is determined by the wavelength of light which is hitting the retina. The mixing of different wavelengths of this light is considered an additive process because mixing light only creates more light. For instance, a beam of light which is red combined with a green light will create a light that is perceived as yellow. If blue light is added to that, the light will become white. In additive color mixing, combining light of different spectrums results in white; therefore, the vibrancy of the color being transmitted can only be lessened by decreasing the amount of total light that is present.

On the other hand, the way that pigment reacts on a surface is considered a subtractive process because the more colors are mixed the less light can be reflected. Pigment works by absorbing all wavelengths of light except for the one corresponding to the color that we perceive. For instance, we perceive a wall as red because the pigment on that wall is absorbing all of the wavelengths of light that are hitting it, except for light with a wavelength that is 700nm long. Pigments cannot be mixed to make a white light because adding pigments together will only decrease the amount of light they are able to reflect. A red and yellow can be mixed to produce an orange, but if more pigment is added, say blue, the resulting mixture will no longer be able to produce color. That is, it will become black.

Kepes had a mistaken understanding about the way that subtractive color mixing worked on a picture surface. He reasoned that the luminous quality of color would be returned if pigment could be added to a surface in a way that allowed it to be "mixed on the retina" instead of the canvas.⁵² Small dots of lines of pure color could be added to a surface. The resulting picture of disparate elements would become fused on the back of the retina. The processes that Kepes

⁵² Ibid., 165.

called "additive color mixing" were the techniques of pointillism and impressionism. Neither technique used the process of additive color mixing because they still relied on adding pigment to a surface. Additionally, neither technique could be assimilated on retina because the individual dots and lines of color would remain distinguishable from one another. Later Kepes acknowledges, "visual experience was formulated only in terms of the eye as a physiological apparatus, and the picture was simply a replica of the color dots on the retina blown up in the scale of the picture plane."⁵³ In other words, the surface of the canvas had still retained the material qualities of a canvas covered in paint. The qualities of atmospheric light could not be recreated through the subtractive pigment mixing necessary for painting.

As Kepes established the idea of color's liberation from realistic representation he began to explore how the perception of color worked. He states, "we experience color stimulations primarily with reference to the object world and consequently color signifies the color of objects."⁵⁴ In other words, in our minds color is associated with particular objects, and upon seeing a color we are reminded of the color-object associations. For example, because of our experience of the sky as blue, when we see the color blue, we will automatically associate it with the sky. The connection between color and object could also work in reverse. That is the colorobject association would not change even if the color of the object did. For instance, if a person were to look at the sky during sunset, they would perceive the sky as having a range of colors from a deep purple, to orange, to a light yellow, but they would still associate the sky with the color blue. Thus, as Kepes puts it, "color appears to reside in the objects entirely independent of illumination."⁵⁵

⁵³ Ibid., 165.

⁵⁴ Ibid., 140.

⁵⁵ Ibid., 140.

The memory of color contexts is an assumption central to Kepes' argument, but it nonetheless remains vague. To Kepes, our memories of certain objects were tied to their color. Likewise, the color on its own would be tied to a specific object. The association of color and context requires the initial memory that produced the object – color association. After the memory is established the color will retain an association to the sensual qualities of the objects. Kepes writes, "while one is seeing color substance, one also sees is as cold warm, bright gay, sad, depressing, irritating pleasing, [etc.]"56 By remembering the original color context, colors become associated with the other sensory qualities. Auditory, olfactory, and tactile sensations could be associated with color because of the "common structural basis" for the biological functions regulating sensation in the human body. 57

As I have mentioned, Kepes understood sensation and perception as interchangeable elements which originated from the biology of humans' sensory receptors. Artists had the ability to take the sensations perceived by themselves and transfer them to a viewer through their art. In his book *The New Landscape in Art and Science* (1956), Kepes imagines the procedure by which Wu Chen (1280–1354) was able to create a transcendent symbolic imagery in his painting titled *Bamboo in the Wind* (fig. 3). For Kepes, Chen first had to be in the position where he was able to perceive the bamboo in its gross anatomic structures. By perceiving the bamboo, he would develop an understanding of its properties from the largest level of organization to the smallest. He would also become familiar with the sensation of the wind as it, in a "transference of energy ... displace[d] physical substances in its path."₅₈ The properties of the bamboo, their interaction with the environment, as well as Chen's own sensations would become transformed by the

⁵⁶ Ibid., 140.

⁵⁷ Ibid., 167.

⁵⁸ Gyorgy Kepes, *The New Landscape in Art and Science* (Chicago: Paul Theobald and Co., 1956), 256.

painter's biology into the essence of the bamboo's symbolic forms. Kepes explains, "now the sensed pattern had been transformed by the neural processes inside his head into symbolic pattern corresponding point for point, with the pattern of the world outside ... the symbolic forms were fixed in his memory and were capable of being eternalized."⁵⁹ For Kepes, the artist was able to transform his experience of the natural world into an ordered system of forms on the picture surface. By doing so he would directly transfer his own experience to the spectator. The viewer would now be able to look at the image and sense through the elements of the image, the physical encounter between wind and bamboo which Chen originally experienced.

The ability of an artist or viewer to connect multiple sensations to one another was most evident in Kepes' attempt to connect sound to color. His discussion in *Language of Vision*, follows the pattern which Eisenstein had previously introduced, but unlike Eisenstein, Kepes was certain that there was an absolute connection between sound and color, and color and emotion. Kepes referenced A. W. Schlegel, a poet and proponent of German Romanticist literature. Much like Rimbaud, Schlegel connects letters to color, although without context. He writes: "'A' represents the light clear red, and signifies youth, friendship, radiance. 'I' stands for celestial blue, symbolizing love. 'O' is purple, 'V' stands for violet, etc."₆₀ Here Schlegel takes the association between the letters, colors and their symbolism as naturally given. Specifically, the colors are imbued with their own inherent associations which they in turn transfer onto the letters. In the context of the poem, the colors have become an all-powerful entity, able to instill meaning and emotion into the letters which have no meaning on their own. Where Eisenstein pushes the ability of color to adapt to the meanings of the context in which it is placed, Kepes

⁵⁹ Kepes, *The New Landscape*, 258.

⁶⁰ Kepes, *Language of Vision*, 167.

stresses the contrary ideal that there are fixed and universal color associations assessable to everyone on a sensory level.

Biological uniformity and imprinted memory of object-contexts are Kepes' basic assumptions around his vision of universally transmittable "meaning." To Kepes, the emotions generated from an experience with an object would continue to be associated with that object long after. Furthermore, they would become identified not only with the object, but with the color of the object, and later when the color was removed from its context, it would maintain the emotional relationships that were previously established. The universality of absolute color relationships relies on the ubiquity of the experiences which establish the initial object – color associations. For example, it is commonly recognized that fire is hot; therefore, red as the primary color of fire retains the sensual qualities of heat. Likewise, white retains the frigid sensations of snow, but although these associations may be true in latitudes further from the equator, it is not for regions of the world that do not experience snow. The argument is complicated further as we consider the various other contradictory contexts in which white would be experienced. In the west, white is the color worn by brides on their wedding days, while in some eastern countries it is the color worn at funerals. Furthermore, colors in art works function differently, intentionally so, from the commonplace associations in life. Kepes writes that impressionist paintings which turned toward the arbitrary application of color neglected the constancy of a "fixed optical reality." 61 In other words, the object was no longer linked to its fixed color association. As time progressed representation was disposed of altogether, and the image became a "psychological angle of vision." 62 That is, the image could be experienced on a

⁶¹ Ibid., 168.

⁶² Ibid., 168.

purely sensual level. To Kepes, the biological essence of vision overcomes the cultural differences of individuals and, "color remains as a universal keyboard of feelings," a phrase he borrowed from Kandinsky. 63

Color is repeatedly used in the design examples which are presented in Kepes' book, and perhaps, for artists with synesthesia, such as Malevich, this inclusion was appropriate. Rand, on the other hand, refused the identification of color with fixed patterns. In an essay entitled "Black Black Black," Rand explores the use of black as a crucial aesthetic element in design by exploring its contradictory and deeply evocative nature. In a direct reference to Eisenstein's discussion on color, Rand quotes Rimbaud's poem "Voyelles": "A' is a black corset and over it flies/ Boil noisy where the cruel stench fumes slow."64 According to Rand, "Rimbaud uses the word black to describe and symbolize carnality, death, and decay" and it is the perpetuation of black as an aversive color that has cause it to be "limited or misunderstood."65 In other words, black as a pure color has the necessary elements to connote any number of meanings, and the current view of black as negative is a result of a sort of type casting into that role. Rands analysis, like Eisenstein's connects the emotional association of black with a context, and unlike Kepes, he realizes that color is experienced in various, contradictory situations. He writes, "the decidedly ambivalent nature of black has been understood in daily use...black is by far the most popular color for pleasure vehicles, but it is also the color for the hearse. In clothes black is the color of tragedy, mourning. At the same time, it is the color of elegance and of sensual enjoyment."66 In order to further his point, Rand adds an additional quote from *Film Sense*. He writes:

⁶³ Ibid., 168.

⁶⁴ Rand, A Designer's Art, 203.

⁶⁵ Ibid., 203.

⁶⁶ Ibid., 203.

Even with the limitations of a color-range of black and white ... one of these tones not only evades being given a single "value" as an absolute image, but can even assume absolutely contradictory meanings, dependent only upon the general system of imagery that has been decided upon for that particular film.⁶⁷

In other words, a set of values can be generated around a color, and since this stylization is man-made the choices of color can be completely arbitrary and still hold within the larger context of the work. Rand cited two films directed by Sergei Eisenstein, *Old and New* and *Alexander Nevsky*. In *Old and New* the color associations define black as having negative connotations and white as connoting things that are positive. The other film, *Alexander Nevsky*, subverts these roles by identifying white with brutality and domination while black is identified with the heroes. Eisenstein explained this reversal of symbolism by referring to famous works of literature such as *Moby Dick* which follows the same pattern of color associations.

Rand acknowledged the changing functions of color throughout history. Much as Kepes stressed the liberation of color from representation in images, Rand recognized that color could stand alone on an image surface. He writes, "the possibilities of rendering color as a thing in itself, and not primarily as a description of three-dimensionality or 'objectivated light' have been rediscovered and exploited. Coincident with this trend, black has come into its own as a positive 'plastic' value."₆₈ In other words, even when color is placed alone an image surface, it cannot be tied to any one sensation of emotion. The emphasis on the "plastic" values of black implies a changing connotation that can be altered to suit the dominant aesthetic elements of a work.

To Rand the associations and uses of color are constantly changing depending on the context; he is mainly concerned with exploring the effects of color, and black specifically, in an effective composition. To do so he analyzes a catalogue cover which

⁶⁷ Ibid., 205.

⁶⁸ Ibid., 205.

he designed for the 1949, Arensberg Collection of 20th century art (fig. 4). On the cover, Rand has placed the letter "A" on the center of the page. It is a white letter in roughly 800pt font on a black surface. Fitting in between the two vertical strokes of the letter is the line "20th century Art." Bellow the "A" runs "Arensberg collection." The design is striking yet simple and gains most of its effectiveness as a composition from the choices of color, font, and proportionality. Rand explains, "this cover is composed of a series of contrasts, the most important of which is black and white... when they are juxtaposed each becomes more vivid."69 The strong contrast of white against black is effective because each is a value on the opposite ends of the spectrum, black the darkest possible value and white the lightest. Rand's decision to omit the other possible colors doubles as the decision to omit other possible values and means that there is less competitions for attentions in the composition. The proportionality of the elements is another aspect of the composition that benefited from the color decisions. Rand writes, "the tension between black and white in the cover is heightened by opposing a large area of black to a small area of white."70 Despite the large font of the "A", the thin strokes of the typeface create the allusion of delicacy in the letter while light value pushes it to the surface of the page as the black recedes into the background. Additionally, the two lines of text written in a smaller font balance the weightlessness of the "A" by putting it in contrast with an even smaller element. The tilt of the letters is another element that creates opposition, Rand notes that "the extreme diagonals of the letters are counteracted by the right angles of the book itself."71 The leftmost stroke of the "A" rests at an angle on the page, the rightmost

⁶⁹ Ibid., 207.

⁷⁰ Ibid., 207.

⁷¹ Ibid., 207.

a perfect vertical, and the short connecting line a perfect horizontal. The serifs balance the long verticals by creating additional horizontal elements. The variation in the components of the typography heightens the viewers awareness of their contrasting details. The simplicity of the design allows the viewers to focus on the message which is being delivered.

In *A Designer's Art*, Rand summarizes his views on color by referencing two authors. Rand quotes Maurice Denis in his phrase, "It is well to remember that a picture – before being a battle horse, a nude woman, or some anecdote – is essentially a plane surface covered with colors."⁷² Here the design is created of disparate parts which if looked at separately appear to be unrelated to one another. For instance, the extreme contrast of black and white may not have anything to do with the tilt of a typeface when addressed separately, but the combination of these decisions is what contributed to the overall appearance of Rand's design. Composition is addressed in the second quote which Rand references, a statement by Vasari: "Design is the animating principle of all creative processes."⁷³ In other words, the fundamental elements of design on their own cannot come to life without a holistic composition, putting the elements into an *order* on the surface. When the design is complete, the consideration put into every detail will create an image that is greater than the sum of its parts.

Both Kepes and Rand considered that the components of a design acted on each other to generate meaning, but the type of meaning that each wanted to generate was different. A way to understand these distinctions would be to categorize their images as either denotative or

⁷² Rand, A Designer's Art, xi.

⁷³ Ibid., xi.

connotative. A denotative image is one that stands for nothing other than itself. It is an image that can be taken at face value for what it is, and it has no further implications. On the other hand, connotative images layer social, cultural, and historical meaning onto the literal meanings of the images depicted. By its definition, graphic design aims to combine text and images to generate a meaning that goes beyond denotation. The images created through design must be able to convey an idea, to sell a product, or to evoke an emotion. Kepes and Rand both attempted to use denotative and connotative images to develop a point, but while Rand succeeded in adding elements to construct a connotation, Kepes wrongly believed that the mere use of formal elements could generate a contextual interpretation of a design.

Kepes' arguments for a plastic organization and an escape from visual representation work toward "the understanding of values inherent in the relationships of the meaningful elements of visible nature."⁷⁴ That is, he wanted to develop meaning through the visual relationships established on the picture surface. According to Kepes, once artists took a dynamic approach to art making their designs would be able to affect the observer on a sensory level. Once viewers began to truly experience images, artists would be able to implement a dynamic system of symbolism. It is Kepes' argument for plastic organization of elements devoid of context that effects his ability to use Rand's works to demonstrate an organization of contradictions in a meaningful whole.

Kepes references Nathan Lehner's image *Eye with Barbed Wire* (fig. 5) when he says, "we look at a photograph of an eye stuck in the mud and see in the same picture barbed-wire."⁷⁵ He presents the picture in which the contradictory elements are supposed to evolve into a feeling

⁷⁴ Kepes, *Language of Vision*, 200.

⁷⁵ Ibid., 202.

for the viewer. In the image, the barbed wire draws across the foreground, framing the eye which sits under it surrounded by dirt. If one were to say "unease" was the feeling of this picture it might hit upon what Kepes had attempted to outline in a resolution, but Kepes goes much further in his interpretation. For him the picture incites "protest against life under inhuman conditions."76 In other words, his reading of it projects a social, historical context onto the image, a process largely forbidden by his approach. The viewer is no longer registering formal impact on a subconscious level, as Kepes intended, but actively associating terms such as mechanization, industrial, and union worker to the image. We no longer see the eye as a circle, the wire as a line and the ground as a form. It is now an idea that is consciously being presented. In an attempt to define his approach Kepes writes, "whereas the relationship of plastic qualities emerges through the dynamic organization of the spectator into a spatial whole, in the case of organization of meaningful signs the unifying whole has the dimensions of human attitudes, feeling and thought."77 Although this definition of a dynamic iconography implies that the viewer will engage with a visual symbolism, it neglects to associate meaningful ideas with the imagery that is presented. Kepes is still focused in the idea that the sensations elicited by the fundamental elements on a page will somehow transform into the meaning that was intended by the artist.

Compare Nathan Lehner's image *Eye with Barbed Wire*, now, to Rand's cover for *Direction* magazine (fig. 6), which conveys a similar set of complex ideas but ones that seem more warranted by his approach. Rand's work also shows barbed wire stretched across the horizontal and vertical in the foreground. This time the wire produces a cross, splitting the image

⁷⁶ Ibid., 202.

⁷⁷ Ibid., 202.

into fourths. A series of bright red dots is scattered beneath it, and a card in the upper left quadrant reads "Merry Christmas." The meanings of the image register on multiple levels. At once, it is a present wrapped for the holiday's, but, on a second look, there is the presence of barbed wire and bright red polka dots, now too reminiscent of drops of blood. At the time, it would have been obvious that the image was also referring to the second World War. Rand writes, "the form is intensified by dramatic narrative association. The literal meaning changes according to context; the formal quality remains the same." 78 In other words, he could produce multiple meanings in the work without changing the composition of the design.

For Rand, communication was the problem which the designer needed to resolve. He writes, "visual communication ... is the integration of the beautiful and the useful."⁷⁹ That is communication needed to take on aesthetic forms in order to satisfy the viewer. Design needed to marry the form of the images to the function of the ideas that were being conveyed in the image. In Rand's design, form is the barbed wire. Its function was to relate a message about one of the most destructive events in history. By integrating the message into the aesthetic program of the design Rand was able to incorporate multiple layers of meaning into his work. To Rand, a designer needed to predict his spectator's reactions and understand the "visual perceptual and optical illusion problems, the spectator's instincts, intuitions, and emotions as well as the designer's own needs."⁸⁰ This does not mean that Rand's work eliminated the viewer as a participant in understanding the work. It only underlines the strongly intentionalist approach that Rand ascribed to the designer. He writes:

⁷⁸ Rand, *Thoughts on Design*, 14.

⁷⁹ Ibid., 9.

⁸⁰ Ibid., 12.

Visual statements such as illustrations which do not involve aesthetic judgment and which are merely literal descriptions of reality can be neither intellectually stimulating or visual distinctive ... the visual statement on the other hand which seeks to express the essence of an idea, and which is based on function, fantasy, and analytic judgement, is likely to be not only unique but meaningful and memorable as well.⁸¹

In other words, Rand was not only working with elements of design but with ideas which he attempted to relate in novel forms. Literal or denotative compositions did not stimulate the viewer and did not compel them to participate in the work by deciphering the meaning of the image. Rand, like Kepes sought to create relationships between the elements of his work. He wrote, "the showing of seemingly unrelated objects or ideas as a single picture…enables the designer to indicate simultaneous events or scenes which by more conventional methods would result in a series of isolated pictures."⁸² The "objects" were added to the image not only to add contrast to the composition as they did for Kepes, but also to deepen the meaning of the design. By incorporating simultaneous events within a design, Rand's illustrations became visual arrangements with the added dimensionality of time. In disregarding laws of perspective, he could create "visual tests" which the viewer would have to decipher, and by doing so this viewer would become an active unit in the creative process of the image. Unlike Kepes, who was solely reliant on human biology to construct meaning out of sensation, Rand trusted the viewer to draw his own conclusions about the work.

Here lies the essential difference between these two highly influential approaches; for Rand, what matters is how context changes meaning, while for Kepes, context is what needs to be eliminated in order for the image's formal effects to be experienced. Unlike Kepes, Rand doesn't shy away from either abstraction or contextualization in his work. He embraces the

⁸¹ Ibid., 36.

⁸² Ibid., 48.

associations that might be perceived and uses them to his advantage in order to create design that speaks to an audience at the level of form and association, as though both were variants on the other.

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