

1: Documentary Film | Tallinn University

*Perceiving the visual in cinema: Semantic approaches to film form and meaning (Jyvaskyla studies in the arts) [Jarmo Valkola] on www.enganchecubano.com *FREE* shipping on qualifying offers.*

Here, we discuss work on perception in cinema, ranging from cinematic techniques to the impact of casting. Detailed resources related to these sections can be found here.

Narrative Perception

The primary purpose of most films is to tell a story. The motivating question in narrative perception centers on how the viewer becomes immersed in the story. In this world, a picture is defined as a record of an observation made by an observer and thought to be worth noticing. Moving pictures, therefore, provide an even more accurate depiction of events considered worth noticing. In the ecological paradigm, the narrative of film is the element worth noting the recorded observation. The recorded narrative can be broken down into a series of events. Film aims to produce awareness of this train of events and their underlying causal structure [1]. Hochberg and Brooks assert that these events are depicted at three levels: Low-level mechanisms characterize the low-level motions of objects a scene, and are part of motion perception. However, the higher-level processes of relational parsing and generation of action schemas initiate internal mechanisms defined by Helmholtz likelihood principle. These mechanisms allow the user to anticipate future action, forming expectation of the storyline based on experiences from normal life which result in similar stimulation to that of the plot. This sense of perceived familiarity and normalcy allows the viewer to sympathize with and engross themselves in the narrative; a sensation which the director can manipulate to create "twists" in the plot: Whether the experiential inferences derived while watching film arise from an internal mental representation of scene and event or the directed information presented in the scene remains a topic of debate among psychologists. Key to this engagement is the concept of awareness, more specifically the direction of active attention in a scene. Attentional manipulation engages the viewer in the plot of a film. Factors such as film cutting and scene complexity can be used to engage the viewer and control the visual momentum of the scene. This engagement controls the attentional direction of the viewer, as demonstrated in multiple gaze experiments. These experiments have shown that the ways in which viewers gaze patterns shift during sequences changing views and the proportion of time spent attending to certain objects are directly related to characteristics of the presented views and the rates at which these views change [2]. Gibson [1] proposed first-person viewership as an optimal means of attentional manipulation for the purpose of narrative engagement. In particular, these cases allow the viewer to experience the entire series of events from the eyes of the protagonist. However, audiences were unreceptive to the film and reportedly felt "acutely constrained as if they are placed physically in the situation of the hero for the duration of the film. [Click here](#) for further information on narrative perception.

Scene Perception

Scenes for the building blocks from which the narrative of a film is constructed. Each scene contains some subset of information relevant to the plot, but the information presented within a scene is critical to how the viewer perceived both the scene and the overall film. Gestalt psychology discusses scene perception in terms of global perception. Global perception implies that some overall measure of the simplicity of a scene can be derived and applied to some overall unit. However, the definition of "some measure" and "some unit" are dependent up the content and context of a given scene [5]. Hochberg [5] proposes a more definite model of scene perception. His piecemeal perception model suggests that the windows for the perception of the scene are equivalent to those in which perceptual organization occurs pieces of the scene. Overall perception is then accomplished by binding the attributes together using spacial cues the whole scene. The model quickly accounts for the presence of ensemble perception in scenes [2]. Since the individual objects within the scene form the smallest perceptual units of the scene, ensemble perception can quickly summarize the low-level features of each of these objects to account for their reduced resolution in the periphery. Summarized features can include position, direction of motion, speed, and orientation. The summarized data allows viewers of film to more readily view attend to primary objects while quickly understanding the contextual information documented in the scene, even if the context is in motion. In addition to the information content of objects in the scene, camera angle can impact the perceived depth of the

scene [3]. Viewing primary attended objects from angles where the depth cues are obscured can hinder the illusion of three dimensional viewing in traditional film such as a cube viewed along a flat face or at a corner. Furthermore, since objects at the edges of the frame tend to be more perceptually salient, using the wrong viewing angle can distort the appearance of figures at the edges of scenes. The perceptual system tends to favor symmetrical figures. As a result, the visual system has a tendency to "complete" occluded objects using their symmetrical form. Bad camera angle or cut-off of important information can make completion errors at the edge of the frame highly salient. Dominant colors within a scene also attribute to the overall setting. Colors are most readily identified by category, not exact shades [4]. Studies have shown that, in realistic environments like traditional film, the categorization of color is actually independent of the illumination of the scene. Color categories can then be used to visually associate different elements of the scene, like characters belonging to some particular group without forcing the viewer to recognize the individual characters. Films like Avatar also manipulate color for the purpose of wonderment: [Click here for more resources on scene perception.](#)

Cuts and Montage The perceptual system has evolved to function in the real world, where action in the environment is generally continuous. However, in cinema, as a passive observer, the camera dictates what information the viewer can take in at any given time. Cutting techniques allow the director to control what information the user sees by breaking the continuity of the film in favor of changing camera angles and, consequently, what the viewer attends to. Understanding how the perceptual system handles cuts requires an understanding of how we process narrative. Along with the relation of information in a narrative to learned experiences discussed in Narrative Perception , the mind forms an internal representation of what is going on the scene. According to Gibson, this representation is based on the literal information presented in each scene [5]. Alternatively, Hochberg and other modern psychologists assert that narrative is internalized using an abstract representation onto which direct visual information can be stitched into its appropriate location within the story [1, 4]. This abstract narrative model functions based on the poverty-of-the-stimulus argument: Here, we will compare how the two approaches can be used to explain common cutting techniques: While cuts are useful for transitioning the viewer to different aspects of a scene, they do suffer from many perceptual challenges including limits on short-term visual memory [2], breaks in continuity, and visual or temporal consistency. These invariants orient the user as to the physical location of the scene within the narrative by allow the user to trace common information during the film. While he points to split-screen techniques as a potential solution to transitioning views without a common invariant, he notes that this technique can potentially introduce new perceptual challenges as it forces the user to perceive an event from multiple perspectives simultaneously. However, the internal representation theory uses the storyline to track common information across cuts. In this approach, the director can control the visual momentum of the scene. Different patterns and rates of cuts can prevent a scene from going cinematically dead -- no more interesting information is being presented in the current scene. However, cuts cause alterations in the gaze cues in the scene. In simple scenes, the glance rate is actually proportional to the cutting rate, whereas the inverse is true for overly complex scenes complex scenes need to be processed more deeply to answer cognitive questions about the scene content. An establishing shot presents the underlying contextual information of a scene in a single shot, creating an information foundation for cuts within the scene. However, the internal representation approach to narrative perception does not require the use of establishing shots. This approach implies that a cut need only fit into the overall narrative representation to be comprehended, not within an established scene context. Jump cuts tend to be regarded as evidence of bad film technique. They are formed by the juxtaposition of two similar shots with only a slight shift in camera angle. This shift generates a jarring discontinuity in the progression of the film. Flashbacks indicate a significant discontinuity in two dimensions: However, more recent work has revealed that people have learned to read flashbacks remarkable well and accept increasingly subtle cues to follow them. This discovery maps to the abstract representation model, where a flashback can be seen as a foundational moment designed to explain or foreshadow significant elements of plot. This plot element forms a scaffold to supplement the comprehension of the flashback and anchor its place in the film. To a lesser extreme, however, montage also relies on heavy cuts that must be related across a series of views. In the narrative representation model, the juxtaposition in montage instead forms a metaphor without the aid

of spoken narrative and subsequent cuts break visual continuity as a mechanism to make the viewer aware of this new metaphor. The law of aesthetics defines the bounds of when montage fails: According to the abstract narrative model, this would cause the elements of montage to be simultaneously mapped to multiple lines in the narrative, and potentially complicated procedure violating the simplicities thought to underlie the linearity of the abstract internal representation of the narrative. [Click here for more information on cuts and montage.](#)

Motion Perception The basic problem in the comprehension of single shots in a film is that of perceiving the motion within the shot [12]. In the case of cinematic perception, our discussion of motion perception revolves around the way motion is used in terms of both scene perception and cutting technique. As per the discussion on scene perception in film, a scene is comprehended at three different levels [5]. At the first of these levels, low-level sensory receptors respond to small displacements on the screen and to the differences between movements. This response functionality implies that we perceive the framework-relative paths of motions motion local to the scene, not absolute motions motion of the exact object. This sort of motion with respect to local stimulus is known as induced motion. Effects of induced motion can commonly be seen where a stationary foreground stimulus appears to be in motion when placed against a moving background see Demos. This type of illusory motion allows the film maker to control the pace and apparent motion of an object through as simple a change as placing an object in front of a moving backdrop often done using a green screen, for instance, when filming someone driving a vehicle. Other elements of a scene, including elements of the background, can have torsional effects on the eye and cause a visual mislocalization of elements within space, making objects appear to be placed in the wrong parts of the scene [13]. Distance between moving objects and primary characteristics, like orientation or color, can change the perception of a particular set of motions between global moving with respect to the scene and local moving with respect to other elements of the scene [1]. Global attributes are more readily perceived than local attributes, making global motions often the more desirable mechanism for conveying motion. However, the perceptual system tends to cluster elements together into the minimum number of group. These clusters are formed by elements in the scene that are proximally located and have similar sets of properties. Often the motion of elements of a cluster perceived as the generalized motion of all elements in a cluster. This aggregation and generalization of moving objects helps to explain why chase scenes tend to have the chase participants stand out so easily from the rest of the crowd: The cutting and production techniques used by film makers can also have a significant impact on the perceived motion within a scene. Klopfer [6] conducted an experiment on the perception of ballet motions cut at different points: These motion sets were shown to a group of expert dancers and lay observers. Although the experts were more tuned to spot errors in the motion, both sets of participants noted the unnaturalness of the executory-preparatory sequence.

2: BJS Vision Demos

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Are you sure you want to delete this answer? Yes Sorry, something has gone wrong. At First Sight is a fictionalized true story which was Oliver Sacks wrote about of a man, Virgil, who has been blind since the age of three. He does, and the operation is a success in that Virgil is able to see. However, this movie demonstrates that sensing seeing is not the same as perceiving comprehending what you see. Blink is the story of a woman who fights for her life after surgery to restore her sight brings about visual images of a murder she has witnessed. Children of a Lesser God is the story of a love affair between a male teacher of the deaf played by William Hurt and Sarah, a female janitor at the same school, who has been deaf since birth played by Marlee Matlin. Demonstrates hearing impairment and sign language. Daredevil stars Ben Affleck as the Daredevil, who by day is a blind attorney and by night is a superhero with super-keen sensory abilities that he uses to fight crime. Five Senses This film includes five interconnected stories about how people define themselves and their worlds through their senses. For example, a gay man with AIDS cries while being massaged because no one has dared to touch him in so long; a cake maker loses her sense of taste; and an eye doctor finds out that he will lose his hearing. Immortal Beloved stars Gary Oldman in a biography of Beethoven that illustrates various aspects of his personal life, as well as his hearing loss and resulting emotional problems. Little Shop of Horrors ; is a story about Seymour, who develops a special plant species that lives on human blood. The character of the sadistic dentist enjoys inflicting pain on his patients by withholding medication during dental procedures. The Miracle Worker ; is a gripping story based on the life of a dedicated teacher, Anne Sullivan, and her blind, deaf, and mute student, Helen Keller. Quest for Camelot is an animated feature film about a young girl and a blind man who embark on a quest to save the kingdom of Camelot. Ray stars Jamie Fox in this biography of music legend Ray Charles, who was blinded by glaucoma in childhood. As the result of his blindness, the colonel develops specialized capacities in other senses e. Sneakers is a smart film about high-tech security consultants, one of whom is blind. Sound and Fury features three generations of a family that includes many deaf individuals. This documentary shows how the family struggles with the issue of whether to take advantage of technological advances in the form of cochlear implants so that their children can hear.

3: Perceiving the Arts CH8 Cinema

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World leaders, including the then-current U. Bush, were attending the summit. Many roads in the area were closed for security reasons, and police presence was high. Group member Chas Licciardello was in one of the cars disguised as Osama bin Laden. The motorcade was waved on by police, through two checkpoints, until the Chaser group decided it had taken the gag far enough and stopped outside the InterContinental Hotel where former President Bush was staying. Licciardello stepped out onto the street and complained, in character as bin Laden, about not being invited to the APEC Summit. Only at this time did the police belatedly check the identity of the group members, finally arresting them. Afterward, the group testified that it had made little effort to disguise its attempt as anything more than a prank. The Chaser pranksters later explained the primary reason for the stunt. They wanted to make a statement about the fact that bin Laden, a world leader, had not been invited to an APEC Summit where issues of terror were being discussed. An ecological approach to perceptual learning and development. In most cases the system is successful, but as you can see from the above example, it is not perfect. In this chapter we will discuss the strengths and limitations of these capacities, focusing on both sensation Awareness resulting from the stimulation of a sense organ. Sensation and perception work seamlessly together to allow us to experience the world through our eyes, ears, nose, tongue, and skin, but also to combine what we are currently learning from the environment with what we already know about it to make judgments and to choose appropriate behaviors. The study of sensation and perception is exceedingly important for our everyday lives because the knowledge generated by psychologists is used in so many ways to help so many people. Psychologists work closely with mechanical and electrical engineers, with experts in defense and military contractors, and with clinical, health, and sports psychologists to help them apply this knowledge to their everyday practices. Behavioral dynamics of steering, obstacle avoidance, and route selection. *Journal of Experimental Psychology: Human Perception and Performance*, 29 2 , “ We will see that sensation is sometimes relatively direct, in the sense that the wide variety of stimuli around us inform and guide our behaviors quickly and accurately, but nevertheless is always the result of at least some interpretation. We do not directly experience stimuli, but rather we experience those stimuli as they are created by our senses. Each sense accomplishes the basic process of transduction The conversion of stimuli detected by receptor cells to electrical impulses that are then transported to the brain. Explain the difference between sensation and perception and describe how psychologists measure sensory and difference thresholds. What Can We Experience? Humans possess powerful sensory capacities that allow us to sense the kaleidoscope of sights, sounds, smells, and tastes that surround us. Our eyes detect light energy and our ears pick up sound waves. Our skin senses touch, pressure, hot, and cold. Our tongues react to the molecules of the foods we eat, and our noses detect scents in the air. On specification and the senses. *Behavioral and Brain Sciences*, 24 2 , “ In many ways our senses are quite remarkable. The human eye can detect the equivalent of a single candle flame burning 30 miles away and can distinguish among more than , different colors. The human ear can detect sounds as low as 20 hertz vibrations per second and as high as 20,000 hertz, and it can hear the tick of a clock about 20 feet away in a quiet room. We can taste a teaspoon of sugar dissolved in 2 gallons of water, and we are able to smell one drop of perfume diffused in a three-room apartment. We can feel the wing of a bee on our cheek dropped from 1 centimeter above Galanter, Holt, Rinehart and Winston. Link To get an idea of the range of sounds that the human ear can sense, try testing your hearing here: Photo courtesy of Harald Dettenborn, <http://www.harald-dettenborn.com/> Although there is much that we do sense, there is even more that we do not. Dogs, bats, whales, and some rodents all have much better hearing than we do, and many animals have a far richer sense of smell. Birds are able to see the ultraviolet light that we cannot see Figure 4. Cats have an extremely sensitive and sophisticated sense of touch, and they are able to navigate in complete darkness using their whiskers. The fact that different organisms have different sensations is part of their evolutionary adaptation. Adapted from Fatal Light Awareness Program. *Measuring Sensation Psychophysics* Is the branch of

psychology that studies the effects of physical stimuli on sensory perceptions and mental states. The measurement techniques developed by Fechner and his colleagues are designed in part to help determine the limits of human sensation. One important criterion is the ability to detect very faint stimuli. The absolute threshold The intensity of a stimulus that allows an organism to just barely detect it. In a typical psychophysics experiment, an individual is presented with a series of trials in which a signal is sometimes presented and sometimes not, or in which two stimuli are presented that are either the same or different. Imagine, for instance, that you were asked to take a hearing test. The signals are purposefully made to be very faint, making accurate judgments difficult. The problem for you is that the very faint signals create uncertainty. Because our ears are constantly sending background information to the brain, you will sometimes think that you heard a sound when none was there, and you will sometimes fail to detect a sound that is there. Your task is to determine whether the neural activity that you are experiencing is due to the background noise alone or is a result of a signal within the noise. The responses that you give on the hearing test can be analyzed using signal detection analysis. Signal detection analysis A technique used to determine the ability of the perceiver to separate true signals from background noise. Lawrence Erlbaum Associates; Wickens, T. Elementary signal detection theory. As you can see in Figure 4. Two of the possible decisions hits and correct rejections are accurate; the other two misses and false alarms are errors. The analysis of the data from a psychophysics experiment creates two measures. One measure, known as sensitivity, refers to the true ability of the individual to detect the presence or absence of signals. People who have better hearing will have higher sensitivity than will those with poorer hearing. Imagine for instance that rather than taking a hearing test, you are a soldier on guard duty, and your job is to detect the very faint sound of the breaking of a branch that indicates that an enemy is nearby. You can see that in this case making a false alarm by alerting the other soldiers to the sound might not be as costly as a miss a failure to report the sound , which could be deadly. Therefore, you might well adopt a very lenient response bias in which whenever you are at all unsure, you send a warning signal. In this case your responses may not be very accurate your sensitivity may be low because you are making a lot of false alarms and yet the extreme response bias can save lives. Another application of signal detection occurs when medical technicians study body images for the presence of cancerous tumors. Again, a miss in which the technician incorrectly determines that there is no tumor can be very costly, but false alarms referring patients who do not have tumors to further testing also have costs. The ultimate decisions that the technicians make are based on the quality of the signal clarity of the image , their experience and training the ability to recognize certain shapes and textures of tumors , and their best guesses about the relative costs of misses versus false alarms. Although we have focused to this point on the absolute threshold, a second important criterion concerns the ability to assess differences between stimuli. The difference threshold or just noticeable difference [JND] The change in a stimulus that can just barely be detected by the organism. The German physiologist Ernst Weber “ made an important discovery about the JND” namely, that the ability to detect differences depends not so much on the size of the difference but on the size of the difference in relationship to the absolute size of the stimulus. As an example, if you have a cup of coffee that has only a very little bit of sugar in it say 1 teaspoon , adding another teaspoon of sugar will make a big difference in taste. Our tendency to perceive cost differences between products is dependent not only on the amount of money we will spend or save, but also on the amount of money saved relative to the price of the purchase. Influence without Awareness If you study Figure 4. But can subliminal stimuli Stimuli that are below the absolute threshold and of which we are not conscious. Stimuli below the absolute threshold can still have at least some influence on us, even though we cannot consciously detect them. A variety of research programs have found that subliminal stimuli can influence our judgments and behavior, at least in the short term Dijksterhuis, Automaticity and the unconscious. But whether the presentation of subliminal stimuli can influence the products that we buy has been a more controversial topic in psychology. The impact of subliminal priming and brand choice. Journal of Experimental Social Psychology, 42 6 , “ To be sure they paid attention to the display, the students were asked to note whether the strings contained a small b. However, immediately before each of the letter strings, the researchers presented either the name of a drink that is popular in Holland Lipton Ice or a control string containing the same letters as Lipton Ice NpeicTol. These

words were presented so quickly for only about one fiftieth of a second that the participants could not see them. People cannot counterargue with, or attempt to avoid being influenced by, messages received outside awareness. Due to fears that people may be influenced without their knowing, subliminal advertising has been legally banned in many countries, including Australia, Great Britain, and the United States. Charles Trappey Trappey, C. A meta-analysis of consumer choice and subliminal advertising. *Psychology and Marketing*, 13, 1-10. The results of his meta-analysis showed that subliminal advertising had a negligible effect on consumer choice. And Saegert, p. Why marketing should quit giving subliminal advertising the benefit of the doubt. *Psychology and Marketing*, 4 2, 1-10. Taken together then, the evidence for the effectiveness of subliminal advertising is weak, and its effects may be limited to only some people and in only some conditions. But even if subliminal advertising is not all that effective itself, there are plenty of other indirect advertising techniques that are used and that do work. For instance, many ads for automobiles and alcoholic beverages are subtly sexualized, which encourages the consumer to indirectly even if not subliminally associate these products with sexuality. Priming effects of television food advertising on eating behavior.

4: james e. cutting : department of psychology : cornell university

However, in these cases, visual cues still tend to dominate the perception of a scene. Recent studies, however, have revealed situations in which audio cues can dominate the perception of film. Carter et al [3] examined the impact of synchronization and pitch on the performance and emotion of a film clip.

This article has been cited by other articles in PMC. Abstract Over the last decade, television screens and display monitors have increased in size considerably, but has this improved our televisual experience? Burbeck, , we wondered whether object size itself might be an important factor. To test this, we needed a task that would tap into the subjective experiences of participants watching a movie on different-sized displays with the same retinal subtense. In Experiment 1, we found that subjective ratings of presence increased with physical screen size, supporting our hypothesis. Face scenes also produced higher presence scores than landscape scenes for both screen sizes. In Experiment 2, reaction time and pupil dilation results showed the same trends as the presence ratings and pupil dilation correlated with presence ratings, providing some validation of the method. Overall, the results suggest that real-time measures of subjective presence might be a valuable tool for measuring audience experience for different types of i display and ii audiovisual material. The recent growth in the size of visual displays for both home cinema and the working environment e. Do larger displays improve our visual experience, or are manufacturers simply tapping into our belief that this must be so? One might argue that it is obvious that larger displays are better because they will produce larger retinal images, but there are several problems with this argument. First, it might be that people view larger displays from greater distances, thereby negating the retinal image effects. Second, one might apply a counter argument that by expanding the retinal image, much of the image detail falls outside of the fovea, whereby it suffers from the poor spatial resolution of the visual system. The issues above prompt numerous research questions, many of which are beyond the scope of the present study. Here, we limit ourselves to investigating the effects of display size while keeping retinal image size visual angle constant. With this approach, we can be sure that any experimental effects that we find can be attributed to the perception of object size and are not an effect spurious or otherwise of varying the number of retinal receptors involved. Given the commercial popularity of large screen displays, one would expect to find a large body of research on this topic; however, it appears that rather little properly controlled research has been done. However, in that study, it appears that luminance covaried with projection area and that might have influenced the subjective ratings. Similarly, Tan confirmed the benefits of physically larger displays with fixed retinal image size for several performance tasks. Tan also recognized the need to control for possible luminance effects. However, this was done by adjusting the luminance of each display according to subjective criteria and so it is not possible to rule out luminance differences as a factor in that study. This type of approach was used by Tan as shown above, but in that study, the interest was in the use of visual displays as part of the manâ€™ machine interface, where task performance measures are central to the investigation Robertson et al. In contrast, our interest in the study here was with the depth of engagement that audiences have with audiovisual imagery. Aiming to achieve high levels of presence has been important in virtual reality, in virtual worlds, and in gaming e. One of the difficulties in measuring presence is that it is usually assessed by questionnaire after the viewing experience has finished e. This means that the information needs to be held in memory for a considerable period before a response is made and that moment-to-moment variations in presence during the viewing experience cannot readily be determined Slater, Instead, we wanted to measure presence in real-time, with the ultimate goal which we only edge toward here of understanding the factors that cause presence to wax and wane throughout the televisual experience. Corroborative measures One of the arguments leveled against presence ratings is their inherent subjectivity. For example, the experimenter cannot know for sure that the response marks on the gauge lines are true measures of presence. To try and deal with this, indirect measures have been developed that might be expected to relate to presence. Such measures give us an important insight into the uptake of visual information, but they are less revealing about the perceptual consequences of the patterns of eye movements and it is not clear that how these could be related to the subjective responses of the participants.

Physiological measures, such as skin conductance, electroencephalogram EEG, and pupil dilation Kahneman, are probably more profitable because there is a possibility that these one-dimensional measures might map onto our one-dimensional presence ratings. Another possibility is to measure reaction time RT. This is commonly used to indicate the degree of difficulty in exiting from the current process to make a response. So in our case, we might expect RTs to be longer when participants are more deeply involved more present with the audiovisual material. Therefore, in addition to our presence scores, we also measured RTs and pupil dilation. Choice of audiovisual material We have already mentioned that we are interested in measuring responses to movies, but why? There are several reasons for this. Our initial interest was with how effectively audiovisual displays can invoke presence. This is a paradox of presence research and is presumably a consequence of the fact that cognitive scientists who design the experiments are not necessarily skilful at making displays that are interesting to watch. Instead, our approach was to use audiovisual material that is known to achieve high levels of presence, precisely because that is what it was produced for. They consist of a coherent narrative divided into visual shots that have durations in the order of several seconds. Clearly, movies are familiar stimuli and ones that can provide an enjoyable experience. Although there is a wealth of cinemetric data about their composition e. They found a significant effect of a combined variation in retinal image size and display size. Neither of the studies above used a full-length feature film as a stimulus but showing a movie presents difficulties. The viewing experience is likely to be much altered if the movie has been seen before, so a possible solution is to show an old, obscure movie. However, fashions in movies change and so an old movie may not produce high values of presence in a modern audience. A correlational analysis identified those portions of the movie that led to a high activation in the same brain area across participants. The results of this study therefore allowed us to identify scenes that lead to high levels of activation of particular brain areas with the hope that this would be relevant to our presence task. We chose 16 moments in the film that coincided with the highest degrees of activation of either the FFA or the PPA regions reported by Hasson et al. We were thus able to present a complex, dynamic, multimodal stimulus while at the same time, being confident that the probed moments produced particular patterns of cortical neural excitation. We had no specific hypothesis about whether faces or landscapes would produce the higher presence scores, but previous work hints that this might be an important factor Cutting et al. Overview Several of the studies reviewed above Freeman et al. Advancing them is important though because if we were to find that large screen displays produce greater levels of presence, then this might go some way toward explaining the current popularity of large screen televisions. Therefore, the aim of these experiments was to find out whether the presence i. To reiterate, we chose to study the effect of physical size while keeping the retinal size constant, because it could easily be argued that a larger retinal angle stimulates more retinal receptors. In that case, greater presence scores might be associated with this larger neural signature, whether consciously recognized or not. Keeping the retinal size of the screen constant therefore provides a more conservative measure of the effect of physical screen size. Our hypothesis was that the larger physical display would nonetheless invoke a greater sense of presence owing to the high-level influences from the general belief that bigger is better, or more engaging Silvera et al. We tested this hypothesis in Experiment 1. In Experiment 2, we extended the study to include measures of RT and pupil dilation. We should also consider the design of the experiment. A repeated-measures design appears the simplest. However, we were concerned that watching the same movie more than once would diminish the immersive effects that we were trying to measure. A between-subjects design avoids this problem and has the additional benefit that participants are kept blind to the screen size variable. Our study here is preliminary, but its outcome suggests that our general technique on-line assessment of presence using a line bisection task could also be used to study the psychological effects of other display variables such as color, stereo depth, compression technique, and so forth. Screen size and presence 3. Methods Forty participants took part. Participants were tested individually. None of the participants had seen the movie before, and informal discussions after the experiment indicated that they found the movie gripping and not dated partly because it is a costume drama. The movie was projected onto a screen using a Sony video projector model CX20 XGA with a resolution of 1, h by v pixels. In both conditions, the image subtended This was achieved by having two sizes of screen and two viewing distances. The image size was adjusted

using the zoom control on the projector lens. The presence ratings were obtained by illuminating a bright LED above the screen for 1 s; participants used a pen to bisect a black line presented one per page in a response book to indicate their level of presence immediately after the light went on. Each line was 9 cm. The instructions to each participant were as follows: If you feel that you are viewing the movie, then place your mark on the far left of the line. Participants were asked whether these instructions required clarification. None asked for further clarification. Sound was provided by small loudspeakers set to a constant, comfortable listening level. Presence ratings were obtained at a total of 16 points in time identified by Hasson et al. The face scenes contained close-ups of faces in a mix of indoor and outdoor scenes, some well-lit and some dimly lit. The landscape scenes were mainly long shots, and informal observation suggested that like the face scenes, they were similarly mixed in terms of their range of contrast and luminance. We address this formally in the analysis of Experiment 2. The line bisections in the booklets were measured by a single experimenter using a ruler and converted into percentage of the total line length giving the presence rating per subject.

5: What are some movies that deal with sensation and perception? | Yahoo Answers

The recent growth in the size of visual displays for both home cinema and the working environment (e.g., Robertson et al.,) suggests that the popular notion "bigger is better" is correct (Silvera, Josephs, & Giesler,). But is it?

Yet this also makes cinema the most deceptive of mediums. Its artifice is cloaked in pretensions of authenticity. Its range of perceptions, its immersiveness, leaves its audience with tremendous blind spots. This qualifies film to investigate the limits and nature of perception better than any other art form. Film can shape what we see, hear, and feel in a variety of ways. And since our basic relationship to it is one of credulity, wanting to buy into its artifice for the sake of entertainment, it can loop back on its self, make suggestions, play games and tricks, fool and tease us in more ways than photography, painting, theater, radio, or music. Movies fold all of the above into a single experience and, taking our investment in its reality as a given, if a film so chooses it can call perception its self into question and make reality seem unstable. The most common way films do this is by calling their own methods into question. What you get are competing sets of perception. Film is our broadest and most perceptually inclusive art form. At its most considerate and perceptive it cannot help considering itself. A medium based so elementally on approximating the collective human experience will inevitably aspire to untangle the mysteries of perception, though as these films show, it often ends up pulling at the threads of its own construction. Antonioni was an acute observer of moods. His eye for sadness, ennui, and malaise tested the facets of cinema. A medium bred for intensity and motion was in his hands elegiac and circumspect. The story of *Blow Up* concerns a London fashion photographer named Thomas who has lost his zest for his charmed life. He lolls through his work and his play with a disaffected boredom one could rightly describe as Antonioni-esque. One day while photographing in a park he takes images of a couple as they embrace and kiss. The woman notices him and becomes agitated. She demands the photos. He refuses at first but says she can have them after he has developed them. We learn he wants them for a book he is planning featuring candid portraits. Everything to this point has been a lead up, a description of the character. It is only once he begins developing the pictures from the park that the photographer comes alive. In the park, in the moment, Thomas only perceived the intimate play of the couple. Now, with the help of photographic technology, this one moment balloons out into something sinister. The central fact of a photographer becoming stimulated by reality through his craft, a craft that allows him to enlarge and manipulate perception, reveals as much about Antonioni as his character. Because not only is Thomas, the photographer, in a rapture of craft, so is Antonioni. In a career of open-ended stories, subtle misdirections, and sternly unanswered questions, the developing sequence in *Blow Up* is Antonioni at his most involved, open, and engaged. It is not hard to nominate those minutes in the middle of *Blow Up* as the best of his career. To paraphrase Ebert, he seems awakened, in rhythmic sync, happy. It opens on a sequence of a film that the characters are making which is so overtly cinematic it can only be read as a wink at the audience. This sequence features a concentrated tableau of puerile misogynistic imagery the like of which most schlock filmmakers could only dream of constructing. When one saw the graphically suggestive posters on grindhouse marquis and video boxes in rental shops, this movie within the movie is what most imagined. Though these films tended to be tamed by their terminal badness, lacking the imagination or technical skill to be genuinely shocking. De Palma teases us with this opening sequence making us wonder, just for an instant, if he might not actually be that kind of film maker. But after a few minutes we are jarred out of this schlock horror picture and into the actual narrative space of *Blow Out*. It is about a sound designer played by John Travolta who, at the request of the director of the film within the film, goes out one night to record new wind effects. He stands on a bridge and we hear what he hears. He records wind, lovers talking, and a frog croaking in the distance. Then he hears a car approaching. He turns his microphone in that direction. He hears a bang, a tire blow-out, and sees the car crash into the lake. Like *Blow Up*, *Blow Out* takes an incident recorded by an element of cinematic technology and places it at the center of its story. For De Palma, even when deconstructing the process of cinema and the levels and dimensions of perception it both enables and obscures, cinema can only be an excuse for more cinema. The recording leads to a murder plot, a political conspiracy, and a spectacular

chase scene. *Blow Up* is a movie about moviedom and its obsessions. It is a happy slave to formula and even celebrates its own plot holes. The movie seems to be exalting in this absurdity with bells, bands, and fireworks. It has a central story structure from which branch numerous tangential accountings of events. It is a device that has been appropriated and simplified into a stock comedic trope. Nearly every television sitcom that runs for more than two years will eventually do its own version of the Rashomon plot. It is the story of three men hiding from a rainstorm. Two of them have just come from a trial whose incident and result has left them both deeply shaken. They tell the story of the trial to the third man who is a cynical and disillusioned individual. During the trial the story of a rape and murder are told from three different perspectives, that of the bandit, the rape victim, and the ghost of the murdered man with the help of a medium. All versions differ in nearly every detail but each is terrible in its own particular way, revealing nearly infinite possible weaknesses and transgressions among the participants. Each interpretation presents evils done and suggested beyond the facts of the crime and whatever the truth is, someone must be lying and their motivations cut to the heart of even more complexities and questions. In his introduction to the Criterion edition DVD Robert Altman speaks of the way movies create a reality we instinctively buy into as result of its immersiveness. When lazier hands take up this plot device it becomes about differences in interpretation, comic variations conforming to basically the same events, suggesting that truth is constant and is merely colored by perception. Rashomon aims higher and presents a vision of truth that is far less stable. *A History of Violence* – David Cronenberg

David Cronenberg has very often concerned himself with the way perception is subject to forces like electronic media Videodrome, *Existenz*, chemical imbalance and narrative concepts *Naked Lunch*, deviant sexuality *Crash*, and perceived identity *Dead Ringers*. But more so than in earlier films his movie *A History of Violence* considers how perceptions within movies, determined by genre expectations and formulae, shape characters themselves. The movie takes place in an insular idealized small town in Indiana. The main character is Tom Stall, played by Viggo Mortenson as taciturn and humble Tom owns a diner in town and is married to a local lawyer with whom he has two children. Up to this point the perception of Tom within the film is that he is just like everyone else, strong and quiet but normal. To read the genre expectations of a family drama set in a small town wherein a main character is being held at gunpoint we might expect he will survive and suffer guilt. His family will rally around him as his son finds love and self worth in a concurrent B-plot. But Tom is an interloper from a different genre with different expectations. He smashes one killer in the face with a coffee pot, leaps of the counter, retrieves the gun the injured man dropped and shoots both men dead. It is a fast and brutal scene handled with typical Cronenberg grit and visceral detail. Tom is praised as a hero, his image is broadcast on television and soon men come looking for him. They call him Joey and intimate a dark hidden past. Tom is a family man. Joey was a ruthless killer. What makes the difference? These facts and questions make up the story of *A History of Violence*, but at a very basic structural level what we have is a gangster film that ended twenty years before this film began and this film is what happens when genres collide. Expectations and reality combine to create dissonance and characters are forced to confront themselves and each other without the comfort of their expectations as an easy guide. This is the unique sight a film playing within the limits of perception as defined by cinematic convention testing where they might overlap and seeing weather or not they will break. It is told backward from the perspective of a character that cannot form short-term memories. He operates by means of Polaroid pictures, notes left for himself, and tattoos left on his body. As seen in *Memento* perception is actually a mess of fragments placed into a largely artificial order so that we may confidently act upon them. Thus we are encouraged to explicitly contemplate perception as an element of the story. What we know, what the characters know, what truth is being uncovered or obscured, and how long any of it will persist makes the specter of perception a constant presence in *Memento*.

6: Perception while watching movies: Effects of physical screen size and scene type

Movies fold all of the above into a single experience and, taking our investment in its reality as a given, if a film so chooses it can call perception its self into question and make reality seem unstable.

Peterson, Barbara Gillam, H. Google Books A discussion of how film can be used to control the viewers attention. PubMed A brief introduction to visual short term memory. Google Books Application of change blindness and gaze cues to the perception of film. Gibson at the Movies. Turning the other cheek: PubMed Exploration of the impact of facial after-effects when viewing faces from different angles in order to understand the viewpoint-dependency of facial adaptation. Identifying regions that carry the best information about global facial configurations. Journal of Vision Discussion of key identifying characteristics of faces. Adaptation to orthogonal and anti-expressions. PDF Presents a series of experiments to determine how facial expressions are coded by perceptual mechanisms. Multi-feature objects elicit nonconscious priming despite crowding. Holistic crowding of Mooney faces. Journal of Vision Analysis of the crowding phenomena on Mooney faces with specific focus on facial recognition in the periphery and under several flanker conditions. PDF Survey of the applications of ensemble perception to different aspects of visual perception. Selective interference between configural representations of faces in crowded scenes. Journal of Vision Exploration of the impact of orientation on facial crowding. Adaptation to natural facial categories. Journal of Vision Adaptation effects between faces biases the perceptual system towards natural facial variation. PDF Survey of facial recognition mechanisms and techniques focusing on machine learning motivations and applications. Local versus global perception of ambiguous motion displays. Journal of Vision Explores motion as a global or local phenomena based on the simultaneous motion of different sets of objects. Body Motion Dominates in Multisensory Conversations. ACM Explores the impact of visual desynchronization of body movements, gestures and voices in multi-character interactive scenarios. Google Books Overview of the perceptual processes involved in film perception. Computer Animation and Simulation. Allocation of attention to biological motion: Local motion dominates global shape. Journal of Vision Accuracy of motion is heavily biased by the local movement of foot points in space. Google Books Comparison of Kofermann cubes to determine how symmetry impacts the perceived dimensionality of a figure. Google Books Application of motion perception to dance and evaluation of expertise and structure on the perception of dance films. Investigating the role of body shape on the perception of emotion. PDF Analysis of the impact of character form on the perception of emotion from animated motions. Eurographics state of the art reports. PDF Survey of foundational work on the impact of perception in interactive images, rendering, and animation. Egocentric and allocentric localization during induced motion. PDF Evaluation of the impact of induced motion on the perception of the egocentric and allocentric positions of objects determining that the egocentric, not allocentric, locations are impacted by induced motion. Human perception of quadruped motion. PDF Experimental analysis of the ability of people to identify different species of animals from their respective motion captures. Motion distorts visual space: PDF Exploration of factors impacting the perceived location of different objects in visual space. General Perception 1 Cutting J. Google Books A comparison of several famous perceptual theories. Google Books Provides an exploration of the grounding of perception fundamentals. Scene Perception 1 Cutting J. Categorical color constancy for real surfaces. Journal of Vision Exploration of the robustness of color categorization and classification under different illumination schemes. Grouping of Stimulus Elements Over Distances. Google Books Discussion of global perception of scene from the Gestalt perspective and piecemeal perception from the Hochberg perspective. Perceptually motivated guidelines for voice synchronization in film. PDF Examines the affects of audio visual synchrony and pitch on perceived performance and emotion. A memory model for autonomous virtual humans. Eurographics Ireland Workshop, Dublin, Ireland, pp 21 - PDF Introduces the idea of memory in virtual agents as a mechanism for promoting realistic interaction with their environments. Bottom-up visual attention for virtual human animation. IEEE Introduces a system for mimicking attention in virtual agents to increase the realism of their behaviors. The influence of shape cues on the perception of lighting direction. PDF Study exploring how

people approximate lighting direction from shaded figures. Adjacency and surroundedness in the depth effect on lightness. Journal of Vision Lighting and illumination has power over the presentation of depth cues in a scene.

7: Perception in Film and Animation

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The effect has been applied in the arts by writing or drawing with a light source recorded by a camera with a long exposure time. Newton disc Colors on spinning tops or rotating wheels mix together if the motion is too fast to register the details. A colored dot then appears as a circle and one line can make the whole surface appear in one uniform hue. Thaumatrope[edit] In April the first Thaumatrope was published by W. Phillips in anonymous association with John Ayrton Paris. When the discs spin and the top disc is retarded into regular jerky motions the toy exhibits "beautiful forms which are similar to those of the kaleidoscope " with multiplied colours. Gorham described how the colours appear mixed on the spinning top "from the duration of successive impressions on the retina". Gorham founded the principle on "the well-known experiment of whirling a stick, ignited at one end" a. Persistence of vision has been discarded as sole cause of the illusion. It is thought that the eye movements of the observer fail to track the motions of features of the object. A two-dimensional POV display is often accomplished by means of rapidly moving a single row of LEDs along a linear or circular path. The following developments are relevant to that story. Historical references to afterimages[edit] Aristotle – BCE noted that the image of the sun remained in his vision after he stopped looking at it. The discovery of persistence of vision is sometimes attributed to the Roman poet Lucretius c. He noted how the different colors of sectors mixed together into one color and how dots appeared as circles when the wheel was spinning very fast. When lines are drawn across the axis of the disc they make the whole surface appear to be of a uniform color. This also happens in the case of shooting stars, whose light seems distended on account of their speed of motion, all according to the amount of perceptible distance it passes along with the sensible impression that arises in the visual faculty. Certain intervals between repeated impressions are not detected. A white or black spot on a spinning cone or top appears as a circle of that color and a line on the top makes the whole surface appear in that color. He deduced that sight needs some time to discern a color. When spinning fast the colors seem to blend and appear as white or rather an off-white light hue. It was dated Dec. The discs could also be translucent and lit from behind through the slits of the counter-rotating disc. On December 10, scientist Michael Faraday presented a paper at the Royal Institution of Great Britain, titled On a Peculiar Class of Optical Deceptions, about the optical illusions that could be found in rotating wheels. He suggested that the illusion was "rather a mental than a retinal phenomenon". That version of the theory was discarded well before the invention of film and also disproved in the context of film in by Wertheimer [32] but persists in citations in many classic and modern film-theory texts. A visual form of memory known as iconic memory has been described as the cause of this phenomenon. Some scientists nowadays consider the entire theory of iconic memory a myth. In other words, vision is not as simple as light registering on a medium, since the brain has to make sense of the visual data the eye provides and construct a coherent picture of reality.

8: Optical illusion - Wikipedia

Film (Cinema) perception refers to the sensory and cognitive processes employed when viewing scenes, events, and narratives presented in edited moving-images. Dynamic visual media such as film and television have increasingly become an integral.

Rabbit-duck illusion To make sense of the world it is necessary to organize incoming sensations into information which is meaningful. Gestalt psychologists believe one way this is done is by perceiving individual sensory stimuli as a meaningful whole. A floating white triangle, which does not exist, is seen. The brain has a need to see familiar simple objects and has a tendency to create a "whole" image from individual elements. The use of perceptual organization to create meaning out of stimuli is the principle behind other well-known illusions including impossible objects. The Gestalt principles of perception govern the way we group different objects. Good form is where the perceptual system tries to fill in the blanks in order to see simple objects rather than complex objects. Continuity is where the perceptual system tries to disambiguate which segments fit together into continuous lines. Proximity is where objects that are close together are associated. Similarity is where objects that are similar are seen as associated. Some of these elements have been successfully incorporated into quantitative models involving optimal estimation or Bayesian inference. The Ponzo illusion is an example of an illusion which uses monocular cues of depth perception to fool the eye. But even with two dimensional images, the brain exaggerates vertical distances when compared with horizontal distances, as in the vertical-horizontal illusion where the two lines are exactly the same length. In the Ponzo illusion the converging parallel lines tell the brain that the image higher in the visual field is farther away therefore the brain perceives the image to be larger, although the two images hitting the retina are the same size. Escher painting Waterfall exploits rules of depth and proximity and our understanding of the physical world to create an illusion. Like depth perception, motion perception is responsible for a number of sensory illusions. Film animation is based on the illusion that the brain perceives a series of slightly varied images produced in rapid succession as a moving picture. Likewise, when we are moving, as we would be while riding in a vehicle, stable surrounding objects may appear to move. We may also perceive a large object, like an airplane, to move more slowly than smaller objects, like a car, although the larger object is actually moving faster. The phi phenomenon is yet another example of how the brain perceives motion, which is most often created by blinking lights in close succession. The ambiguity of direction of motion due to lack of visual references for depth is shown in the spinning dancer illusion. The spinning dancer appears to be moving clockwise or counterclockwise depending on spontaneous activity in the brain where perception is subjective. Recent studies show on the fMRI that there are spontaneous fluctuations in cortical activity while watching this illusion, particularly the parietal lobe, because it is involved in perceiving movement. The background is a color gradient and progresses from dark grey to light grey. The horizontal bar appears to progress from light grey to dark grey, but is in fact just one colour. Perceptual constancies are sources of illusions. Color constancy and brightness constancy are responsible for the fact that a familiar object will appear the same color regardless of the amount of light or color of light reflecting from it. An illusion of color difference or luminosity difference can be created when the luminosity or color of the area surrounding an unfamiliar object is changed. The luminosity of the object will appear brighter against a black field that reflects less light compared to a white field, even though the object itself did not change in luminosity. Similarly, the eye will compensate for color contrast depending on the color cast of the surrounding area. In addition to the Gestalt principles of perception, water-color illusions contribute to the formation of optical illusions. Water-color illusions consist of object-hole effects and coloration. Object-hole effects occur when boundaries are prominent where there is a figure and background with a hole that is 3D volumetric in appearance. Coloration consists of an assimilation of color radiating from a thin-colored edge lining a darker chromatic contour. The water-color illusion describes how the human mind perceives the wholeness of an object such as top-down processing. Thus, contextual factors play into perceiving the brightness of an object. For example, a door is perceived as rectangle regardless of how the image may change on the retina as the door is opened and closed.

Unfamiliar objects, however, do not always follow the rules of shape constancy and may change when the perspective is changed. The Shepard illusion of the changing table [21] is an example of an illusion based on distortions in shape constancy. When light hits the retina, about one-tenth of a second goes by before the brain translates the signal into a visual perception of the world. Scientists have known of the lag, yet they have debated how humans compensate, with some proposing that our motor system somehow modifies our movements to offset the delay. This foresight enables humans to react to events in the present, enabling humans to perform reflexive acts like catching a fly ball and to maneuver smoothly through a crowd. Evolution has seen to it that geometric drawings like this elicit in us premonitions of the near future. The converging lines toward a vanishing point the spokes are cues that trick our brains into thinking we are moving forwardâ€”as we would in the real world, where the door frame a pair of vertical lines seems to bow out as we move through itâ€”and we try to perceive what that world will look like in the next instant. Pathological visual illusions usually occur throughout the visual field, suggesting global excitability or sensitivity alterations. Types of visual illusions include oscillopsia , halos around objects , illusory palinopsia visual trailing , light streaking , prolonged indistinct afterimages , akinetopsia , visual snow , micropsia , macropsia , teleopsia , pelopsia , Alice in Wonderland syndrome , metamorphopsia , dyschromatopsia , intense glare , blue field entoptic phenomenon , and purkinje trees. These symptoms may indicate an underlying disease state and necessitate seeing a medical practitioner. Etiologies associated with pathological visual illusions include multiple types of ocular disease , migraines , hallucinogen persisting perception disorder , head trauma , and prescription drugs. If a medical work-up does not reveal a cause of the pathological visual illusions, the idiopathic visual disturbances could be analogous to the altered excitability state seen in visual aura with no migraine headache. These symptoms are often refractory to treatment and may be caused by any of the aforementioned etiologies, but are often idiopathic. There is no standard treatment for these visual disturbances. List of illusions[edit] There are a variety of different types of optical illusions. Many are included in the following list.

9: Persistence of vision - Wikipedia

"Visual perception feels like a continuous stream, but it's not," he said. What actually happens is that we look at one thing at a time, taking in a bit of information here, then moving our eyes.

The Lord is on our side SBTs in Great Britain The recent judicial departure in insanity cases The wrong box book The impregnable rock of Holy Scripture The world assails heaven. Speak the language of yes, but take no for an answer Blumenfeld photographs Tensas Par LA Marriages v1 1842-1900 1850-1900 Green Shakespeare You, the childrens book writer . maybe : defining your goals Japanese Phrases For Dummies Nevada vascular plant types and their collectors Book Trade of the World Theunfair advantage the value patent trolls canrealize Machine drawing book by kl narayana Martial arts training for beginners at home Daniel black extermination A New Years address to the congregation of Trinity Free (Episcopal Church, Halifax, N.S. The Burton and Ashby light railways 1906-1927 Silent hill book of lost memories Basic general knowledge mcqs with answers Using our daily energy The Home Energy Diet Lifeguarding blended learning instructors manual Monster hunter alpha Back to West Point The Painted Veil (Penguin Twentieth Century Classics) Indias Concerns over Collectors originality guide Busy accounting software notes in hindi Editor touch screen Unpopular science Pirates of the caribbean medley piano sheet music Chapter 2 the planting of english america The will kristen ashley tuebl Introduction to health economics Manual on low cycle fatigue testing. Nicholai Konstantinovich Roerich The biggest gamble of the war