

## 1: The Gradual Progression | 1 eMusic

*The Gradual Progression is a studio album by American drummer Greg Fox, released on September 8, by the label RVNG Intl. It depicts his first use of Sensory Percussion, a set of sensors created by drummer Tlacael Esparza where drum hits send MIDI data to virtual instruments.*

Gradual accumulation of lipid with progressive narrowing is greatest at the downstream end or exit of the stenosis in the region of low shear <sup>1, 2</sup>. Furthermore, a small amount of lipid accumulating within a moderate stenosis causes more severe additional narrowing than a comparable amount of lipid accumulation in nonstenotic arterial segments. Therefore, progression due to gradual lipid accretion is characterized by existing stenosis becoming more severe. In contrast, plaque rupture commonly causes new lesions at sites of no significant prior stenosis that may be silent or associated with sudden cardiac events or unstable coronary syndromes <sup>3-9</sup>. A spectrum of both types of progression may occur in different proportions in the same or different coronary arteries of any individual. Similarly, regression of coronary atherosclerosis is characterized by modestly decreased stenosis severity and absence of new lesions in association with reduced cardiac events proportionately greater than the modest reduction in stenosis severity <sup>3, 4, 10</sup>. The essential concept is that worsening of a flow-limiting stenosis over time most likely reflects the mechanism of gradual accumulation of lipids, whereas the appearance of new flow-limiting stenosis not present at baseline most likely reflects the mechanism of plaque rupture. Because active, progressive coronary atherosclerosis is multicentric <sup>14-17</sup>, assessing changes in the entire coronary artery tree is essential for identifying and quantifying progression or regression of coronary artery disease CAD, its response to risk factor treatment, and for predicting risk of clinical events. We have previously reported that combined intense lifestyle and pharmacologic lipid treatment to specific risk factor goals improves myocardial perfusion and markedly reduces coronary events, more than either lifestyle or pharmacologic treatment alone over 5-y follow-up. However, despite the severity of the baseline perfusion defect being a good predictor of clinical events, the changes in the most severe perfusion defect from baseline to follow-up PET over 2. Therefore, to explain this unexpected finding based on the literature above, we hypothesized that changes in myocardial perfusion throughout the entire coronary vascular tree in regions other than the baseline worst perfusion abnormalities by sequential dipyridamole PET perfusion imaging would i predict clinical outcomes at long-term follow-up better than the changes of the most severe perfusion defect due to the single worst flow-limiting coronary stenosis at baseline, ii correlate with intensity of risk factor treatment, iii identify new flow-limiting stenosis in new regions without a significant perfusion defect at baseline, and iv demonstrate worsening or improvement of the worst baseline flow-limiting stenosis consistent with a mechanism of gradual lipid accumulation or removal depending on risk factor treatment. In principle, precise myocardial perfusion mapping should noninvasively provide objective quantification of the net balance of mixed progression or regression of diffuse disease and localized stenosis for each coronary artery and for the entire heart that is not possible with coronary arteriography or intracoronary ultrasounds. For testing these new hypotheses, we developed automated software for objectively quantifying PET perfusion defects for changes in the same region as the most severe perfusion defect at baseline or changes in other baseline to follow-up paired regions that are not the same as the region with the most severe defect at baseline. All patients signed an informed consent approved by the University of Texas Committee for Protection of Human Subjects. Having 2 sequential cardiac PET studies with abnormal stress perfusion images at baseline was the criterion for inclusion in the study. The abnormal dipyridamole PET was a prerequisite for the study but not a coronary arteriogram. At the follow-up PET study, patients were categorized by blinded observers using predefined objective criteria into 3 groups based on the intensity of medical therapy during the interval between the 2 PET studies. As previously described in detail <sup>18</sup>, patients in the poor treatment group were not on a diet or a lipid active medication or were actively smoking. Patients with only 12 mo or less between baseline and follow-up PET, defined as inadequate for predicting long-term events, were analyzed as a separate group for PET endpoints. Accordingly, the minimum treatment period was 1 y. Patients with percutaneous coronary intervention PCI or

coronary artery bypass graft surgery CABG in the interval between the 2 PET studies were considered separately as an internal comparison because the intervention would alter myocardial perfusion separately from risk factor treatment. We did not exclude patients with resting defects for several reasons: Therefore, including patients with resting defects is the most conservative statistically correct approach but patients with significant defects on the resting perfusion scan were also analyzed separately. Patients with severe liver or renal dysfunction or with coronary revascularization within 6 mo from the baseline PET study were excluded. PET PET was performed using the University of Texasâ€™ designed, Posicam, bismuth germanate multislice tomograph with a reconstructed resolution of mm full width at half maximum as previously described 18 â€™ Transmission images to correct for photon attenuation contained â€™ million counts. Emission images obtained after intravenous injection of MBq 18 mCi of cyclotron-produced  $^{13}\text{N}$  contained 20â€™40 million counts. At 40 min after administration of the first dose of ammonia, dipyridamole 0. Four minutes after infusion was complete, a second dose of MBq 18 mCi of  $^{13}\text{N}$ -ammonia was injected intravenously. Four minutes later to allow blood-pool clearing, PET was repeated by the same protocol as for the resting study. For angina, aminophylline mg was given intravenously. The follow-up PET scan was obtained at a mean of 2. A 3-dimensional 3D restructuring algorithm generates true short- and long-axis views from PET transaxial cardiac images, perpendicular to and parallel to the long axis of the left ventricle LV. Circumferential profiles are used to reconstruct 3D topographic views of the LV showing relative regional activity distribution divided into lateral, inferior, septal, and anterior quadrant views of the 3D topographic display in Figure 1.

## 2: The Gradual Progression - Wikipedia

*In contrast to the binary definition of the stem cell and the nonstem cell daughters, which is anatomically evident in the root cap, the process of cell differentiation in the proximal meristem follows a gradual progression.*

Discuss Abstract The utility model relates to a gradual and self adaptive tracking algorithm for overlapped targets analysis, belonging to the technical field of computer vision and pattern analysis. In the target tracking process, the tracking performance often gets worsened; and even the target is lost due to the failure of detection. Most of the prior algorithms are only dependent on the gray value of the picture elements in the current interest regions of the picture, to determine whether occlusion exists, so the result is not ideal. Context information of the space time is used in the utility model to gradually analyze the occlusion conditions of the region of interest, and the utility model is combined with a reference target and a motion vector, to further improve the reliability of the analysis results. Therefore, compared to the prior algorithm, the algorithm of the utility model has the advantages of better distinguishing the occluder from target, and the effectiveness of the algorithm is proved by a plurality of experiment results of the live video streaming. Probabilistic data association methods for tracking complex visual objects. Sequential Monte Carlo methods for multiple target tracking and data fusion. Robust online appearance model for visual tracking. Trans, on Pattern Analysis and Machine Intelligence, 25 Visual tracking and recognition using appearance-adaptive models for particle filters. Occlusion robust adaptive template tracking. Fast occluded object tracking by a robust appearance filter. Jpdf based HMM for real-time contour tracking. Contour based object tracking with occlusion handling in video acquired using mobile cameras. Lucas-Kanade 20 years on: The template update problem. Fast object tracking using adaptive block matching. Matthews Lucas-Kanade 20 years on SchonfeW Fast object tracking using adaptive block matching. Robust object tracking against template drift. Hu Robust object tracking against template drift IEEE Int, 1 Conf on ImageProc , to be published object of the present invention is to propose a species content adaptive progressive occlusion analysis content-adaptive progressive occlusion analysis, CAPOA target tracking algorithm. Firstly, the context information to make a preliminary analysis of temporal occlusion of the region of interest, then the motion vector by means of the reference target is further corrected initial results, analysis results to obtain a final occlusion. CAPOA algorithm has four inputs: If the current frame processed after discovery has changed the size of the target, the first, the original reference target zoom interpolation, so the same size as the current target size, and then update the reference target scaled interpolation, it changes in appearance of the current frame including the target value of a pixel of a reference target in the updated can be expressed as follows: Since the target between the adjacent two small dimensional change and therefore the interpolation error of the incremental templates are interpolated directly from the ratio of each reference target to a much smaller, and includes more details. Therefore, the reference target template itself is more than suitable as a baseline. This is used as a reference target the first criterion when testing here, the key issue is how to obtain a threshold value adaptively criterion that must be used for each image block The stencil mask M is initialized with the template 1 and so large full matrix. Read the next frame. The coordinate transformation template "x; fl mapped to the current frame. The total number of the scanning process is determined according to equation 3. ROI to be analyzed into a series of rectangular blocks of image scanning. If y W6 equal to one and not the last scan, the blocking state of the image block may be undefined. If there has not been determined contained a blocking state image block of pixels to be analyzed, go to Step The image to be analyzed is halved. If the entire ROI occlusion is not fully determined, go to step 9. By 2 updating the template f. By 5 updating the reference target 7V. If the video streams untreated finished, go to step 6, otherwise it ends. CAPOA overall algorithm flowchart. Analysis of the current image block is a flowchart of occlusion. Comparison of different tracking algorithm processing performance of a long occlusion. A content adaptive progressive occlusion analysis target tracking algorithm, characterized in that first USE context information to make a preliminary analysis of the occlusion region of interest, and then further corrected by the preliminary results of the reference and target motion vector, to give a final occlusion results. CN Content self-adaptive gradual-progression type sheltering analysis target tracking algorithm CNA

en Priority Applications 1.

## 3: Gradual progression : SuperMarioRun

*Just as the ocean has a gradual shelf, a gradual slope, a gradual inclination, with a sudden drop-off only after a long stretch, in the same way this discipline of Dhamma (dhamma-vinaya) has a gradual training (anupubbāsikkhā), a gradual performance (anupubbakiriya), a gradual progression (anupubbapatipadā), with a penetration to gnosis.*

Going without sleep for long periods of time can produce a range of experiences, including perceptual distortions and hallucinations. Many questions, however, remain unanswered regarding the types of symptoms which are most reliably elicited, the time of symptom onset, and whether symptoms worsen over time toward psychotic decompensation. Since sleep deprivation exceeding 48 h is considered unethical today, an examination of historical studies with extreme sleep-loss duration is needed to obtain information about what happens during prolonged sleep loss. A systematic-review approach was used to identify experimental and observational studies of sleep deprivation in healthy people which describe the effects of prolonged sleep loss on psychopathological symptoms, without any date restriction. A total of articles were identified. Of these, 21 were eligible for inclusion. Duration of sleep loss ranged between 24 h and 11 nights total participants; average 72±92 h without sleep. All studies except one reported perceptual changes, including visual distortions. Symptoms rapidly developed after one night without sleep, progressing in an almost fixed time-dependent way. Perceptual distortions, anxiety, irritability, depersonalization, and temporal disorientation started within 24±48 h of sleep loss, followed by complex hallucinations and disordered thinking after 48±90 h, and delusions after 72 h, after which time the clinical picture resembled that of acute psychosis or toxic delirium. By the third day without sleep, hallucinations in all three sensory modalities were reported. A period of normal sleep served to resolve psychotic symptoms in many—although not all—cases. These experiences are likely to resolve after a period of sleep, although more information is required to identify factors which can contribute to the prevention of persistent symptoms. Introduction Studies are reporting that we, as a society, are sleeping less and less 1. This is concerning, given evidence of the negative impact of sleep loss on health and wellbeing 2. Long periods without sleep are associated with cognitive difficulties, and can produce psychological symptoms ranging from mood changes to psychotic experiences such as hallucinations 3, 4. This paper presents an examination of psychopathological experiences reported by healthy individuals who participated in sleep-deprivation studies ranging in duration from 24 h up to 11 days. We were particularly interested in the phenomenological description of perceptual distortions and hallucinations, and the changes that occur with progressive sleep loss. The interaction between sleep loss and psychotic symptoms has long been known. Historical texts speak of the erstwhile practice of torturing those accused of witchcraft by depriving them of sleep, and of the psychotic states that inevitably ensued 7. There is also an extensive clinical literature describing the link between sleep deprivation and acute psychotic states. Studies in schizophrenia and bipolar disorder show that sleep problems are among the most prominent correlates of positive symptoms—such as auditory hallucinations and delusions—and illness severity. Studies also show that many psychotic episodes are preceded, if not precipitated, by prolonged insomnia 8—Insomnia is a well-known clinical stressor, and it is indeed considered a prodromal symptom of psychosis 13. Finally, clinical studies have observed the dynamic relationship that exists between sleep and symptoms, with reductions in sleep duration being directly followed by increases in psychotic symptom severity with a time lag of approximately 1 day 8, 15—Perceptual distortions and hallucinations after a period of sleep loss have also been reported in individuals with no history of psychiatric illness. These sleep-loss phenomena offer the opportunity to study the continuum of perception in healthy humans from the point of view of a normally occurring stressor. One common approach to the subject of sleep loss involves epidemiological studies conducted in the general population. These show that sleep problems correlate with an increased frequency of psychotic disturbances such as hallucinations and delusional beliefs [e. For instance, Sheaves et al. Another large study involving 45 countries demonstrated that sleep problems increase the odds of at least one psychotic symptom by 1. One limitation of epidemiological studies is that they are not designed to chart causal inferences, or observe subtle symptom changes which occur as a direct function of time spent awake.

Moreover, epidemiological studies are not suited for capturing detailed information about symptom phenomenology. For example, it is not clear which sensory modality is most commonly affected when hallucinations arise in the context of sleep deprivation, and which other psychotic symptoms are reported. Is the symptom profile more similar to schizophrenia-spectrum disorders with its predominance of auditory hallucinations, distorted thinking and delusions, or to hallucinations in individuals with eye disease or neurodegenerative disorders in whom visual hallucinations are more common? Prospectively assessing symptom changes after sleep loss is not an easy task, as it requires detailed monitoring of time spent awake and repeated tracking of mental changes over time. Therefore, sleep-deprivation studies are ideally suited for examining the dynamic effects of sleep loss on symptoms. In sleep-deprivation studies, participants are kept continuously awake for prolonged periods of time [e. It is a powerful methodological tool to examine whether sleep loss is causally related to mental changes. It allows for full control over sleep duration as an independent variable, and provides optimal conditions to examine the dose-dependent relationships that might exist between the duration of time awake and symptoms. Few studies of the impact of sleep loss on psychological symptoms have been conducted in the past 20 years [e. These studies show that going without sleep for one or two nights can induce powerful perceptual changes, but they have not been able to extend the experiments past 2 days without sleep. Extreme sleep-deprivation studies i. Since they cannot be performed anymore, we need to revisit early historical studies to obtain information about what happens after very prolonged sleep loss. The present study therefore aims to describe and appraise published studies on the effects of sleep deprivation on psychopathological symptoms in healthy volunteers, without any date restriction. Using a systematic-review approach to identify relevant studies, the questions we asked were as follows: What sensory modality is the most commonly affected? What other symptoms are elicited after sleep deprivation? Do symptoms evolve as a function of increasing time spent awake? Do symptoms spontaneously resolve after a period of normal sleep?

**Methods Search Strategy** We used a systematic-review approach to identify experimental and observational studies which reported on the impact of prolonged sleep loss on psychopathological symptoms. A systematic search was carried out in Embase which includes Medline titles without any date restriction. The date of the last search was May, Excluded were studies involving psychiatric populations, involuntary participants, treatment studies, drugs, reviews, and meta-analyses. Moreover, all studies that lacked symptom assessments or reports were excluded. Data Analysis All eligible papers were analyzed, and the following variables were extracted: When such distortions occurred in the visual modality, they were referred to as metamorphopsias. After removal of duplicates, papers remained to be examined for suitability, leaving 38 papers which were downloaded. A further 17 articles were removed reasons given in Figure 1, leaving 21 articles which met the full criteria, reporting on participants. Design and Participant Description Participants comprised volunteers recruited from the general community, the military, and universities, as well as medical interns Table 1. Most were male The mean age was List of studies included in the review and summary of key findings. A standard procedure involved participants being kept to a laboratory or other defined area, reading, watching TV, talking or playing board or card games. A team of researchers, working in shifts, attended closely to these participants, preventing them from dozing off or napping. When participants appeared drowsy, they were made to walk or engage in gentle physical activity. Fifteen studies were conducted in hospital conditions, with the detailing of neurological or psychological assessments. Across the 21 articles, the duration of sleep deprivation ranged from 24 h one night to h 11 nights. The duration of sleep deprivation was usually predetermined, except for four studies in which the participants were asked to stay awake as long as they could 18, 28, 28, 28. In two studies, very brief episodes of intermittent sleep had been allowed 28, In the study involving medical interns 31, participants slept for 2 h during a h period i. Table 1 provides an overview of experiences reported during the experiments. The only study which failed to register any changes in perception involved medical interns who were allowed a brief sleep period of 4 h The visual modality was the most commonly affected by sleep loss, as reported in all studies except one. Somatosensory changes were the second most common experience reported in half of all the studies, followed by the auditory modality a third of the studies see Appendix in Supplementary Material for descriptions Figure 2B. Symptoms included the following, in descending order of frequency: Visual experiences 19 studies, which included a spectrum of

symptoms, ranging from visual distortions, illusions, and hallucinations Appendix A in Supplementary Material. These included visual distortions metamorphopsias 13 studies , referring to distortions of size e. These distortions were experienced intermittently, and elicited behavioral reactions ranging from surprise to irritation. Visual illusions 13 studies comprised the transformation of common items e. Finally, 12 studies reported visual hallucinations which were generally transient and fleeting in nature, and most often of the simple type e. Complex visual hallucinations fully formed images were reported in five studies, and involved the sudden appearance of animals, people or objects which were not really there. In 10 studies, participants reported all three types of visual misperception distortions, illusions, and hallucinations. Somatosensory experiences, reported in 11 studies Appendix B in Supplementary Material. These were bodily distortions e. There were also tactile hallucinations e. Auditory experiences, reported in seven studies Appendix C in Supplementary Material. Auditory distortions, described in all of these seven studies Appendix C in Supplementary Material were brief in duration, and included the mislocation of externally generated sounds, as well as changes in the quality of voices and other sounds There were also reports of multimodal i. A range of other symptoms were reported, as follows see Figure 2: Participants described that their thoughts had become jumbled, and reported difficulties forming thoughts, finding words, and composing sentences 28 , 31 , 35 â€” Memory loss was also a common feature, with participants forgetting names 34 , 35 , 37 , 39 , 41 , Motor incoordination, unsteadiness, and ataxia, comparable to intoxication behavior, were also reported. These feelings of distance persisted until the end of the experiment As time without sleep increased, errors in time judgement occurred more frequently, and gross temporal disorientation was reported 30 , We examined the time course of symptom development with increasing duration of sleep loss. The time at which symptoms were first elicited was extracted from each study. The results showed similar reports regarding the progression of symptoms with increasing time spent awake Figures 3 , 4. A number of observations can be made:

## 4: Talk:The Gradual Progression - Wikipedia

*The gradual development of symptoms starting with blurred vision and diplopia, progressing to visual distortions and illusions, and finally hallucinations in multiple sensory modalities, points to a gradually weakening perceptual system.*

She is the author of Simply Resourceful. Her site talks about simple ways to be more conscious about how we use our resources. She tells her story of gradual progression into the homesteading lifestyle and her dreams for the future. After graduating from college in my husband and I started a log furniture making hobby. We had a lot of student loans and not a lot of money so we kept ourselves busy gathering wood in the mountains of Wyoming and made furniture in our spare time. We enjoyed the frugal lifestyle and were very happy living within our means. Furniture making opened our eyes to self-sufficiency and we wanted to acquire more of these skills. With gardening came food preservation, collecting fruit from orphan trees, ordering lugs of produce from local farms, and going to all the u-pick farms near us. Food preservation spilled into beekeeping, soap making, mushroom growing, and sewing. After moving to a country home in West Virginia in , we expanded the garden plot to 6, square feet and no longer needed other farms for our produce. With a country home we raise chickens, more honeybees, forage for mushrooms, tap maple syrup, and make more furniture. We have a 16 x 8 green house that we use year round. During the summer we remove the plastic covering and have pole beans crawl up the sides and grow other shade vegetables inside. We live in West Virginia in zone 6b. Our soil is loamy and we have very humid summers. Each summer we try new tricks on how to cope with the pests. This year we are using row covers over some of the heavily infested plants such as the brassicas and beans. We planted 41 fruit trees and 53 berry bushes three years ago. The deer are a problem here so every tree is individually protected with 6 foot wire fencing. There are many old walnut trees here and we harvest the nuts each fall. Our property has a lot of maple trees that we tap for syrup each spring. We receive eggs from the chickens and honey from the bees. We sell eggs to coworkers and soap to friends. I have taught soap making classes and people pay for the class. We only use vinegar and borax for cleaning. Our home is not full of knickknacks and other things without a purpose. Almost all of our decorations are handmade by us or a family member e. You will see the draw knife that we use to scrape the bark off the logs for our furniture hanging on the wall, a cider press and raw hide drum in the corner of a room, and a saw hanging on the wall. The normal energy efficiency upgrades have been done in the home but we would like a smaller home so living off grid is feasible. The dream for our next home is to build a root cellar, be off grid and have a dairy animal. You May Also Like.

## 5: A Gradual Progression: Holly's Story

*Abstract. In plants, apical meristems allow continuous growth along the body axis. Within the root apical meristem, a group of slowly dividing quiescent center cells is thought to limit stem cell activity to directly neighboring cells, thus endowing them with unique properties, distinct from displaced daughters.*

## 6: Gradual training - Wikipedia

*The Gradual Progression is a transformative collection of new music by Greg Fox. The seven pieces of The Gradual Progression activate spiritual states through physical means, Fox's rigorous inner rhythms the mandalic vessel for unbound expression and arrangement.*

## 7: Gradual shortness of breath

*She tells her story of gradual progression into the homesteading lifestyle and her dreams for the future. Holly's Homestead Story Homesteading sort of evolved for my family and we didn't even call it homesteading until about a year ago.*

*The legend of the sons of God The Heinemann Toefl Practice Tests History unveiling prophecy Ensuring Health and Income Security for an Aging Workforce The Amazing Family Game Board Book (Amazing Game Board Books) Social Status and Cultural Consumption Nfpa 13 2010 handbook Labelling and tracing of GM food and animal feed An outline of mining law The Independence of the Judiciary Odd Craft (Large Print Edition) Terrain Tracks (Many Voices Project) Working capital financial management Water, fuels, and tourism, 1945 through the 1950s 2. And then came Hahnemann Spindle River (Cambridge Reading) The First White Man Of The West Or The Life And Exploits Of Colonel Danl Boon, The First Settler Of Kentu Empowering toward service Confessions of a Surly Barber The Films of 20th Century-Fox The legend of Mont Saint-Michel. 100 deadliest karate moves Science that binds Beauty tips in urdu The Mid-China mission Contemporary feminist theories Pediatric Brain and Spine, An Atlas of MRI and Spectroscopy The Programmers Survival Guide Ganga water tank price list Embodying culture: toward an anthropology of pregnancy The decennial census, 1965 Soil mechanics and foundation engineering nptel The judicial process and the third republic Itty Bitty Florals-Pretties Heated j kenner Collected works of Plato A Cats Chance in Hell Eglwysi Cymru Au Trysorau Health, power and politics in Windhoek, Namibia, 1915-1945 In the Devils Shadow*