DOWNLOAD PDF 2 PROPAGATION OF THE PHILOSOPHY.

Chapter 1 : Philosophy of the Unconscious - Wikipedia

A statement of teaching philosophy from Prof. Durgin follows. Prof. Durgin's engineering teaching philosophy is best summarized as rigorous analytical exercise married to compelling real-world applications.

The natural scientists of the 17th century refined this intuition into the wave theory of sounds, which appeared to be an obvious competitor for the quality or sensation proximal view. Indeed, around , Mersenne measured the speed of propagation of sound waves. Both Galileo and Descartes were aware that the medial account was revisionary relative to a common sense view of sounds, or at least as revisionary as is the sensation view. Sounds for the wave view or the sensation view are not what we unreflectively take them to be on the basis of the content of auditory perception. Indeed, Galileo himself endorsed both a proximal theoryâ€"sounds as sensations â€" and a medial theory, thereby possibly originating a dualist account. At the same time Galileo and Descartes, as well as other modern philosophers, were not particularly keen in detailing the phenomenological content of auditory perception. Sounds are construed as mechanical vibrations transmitted by an elastic medium. They are thus described as longitudinal waves, defined by their frequency and amplitude. A vibrating object the sound source, such as a moving vocal chord or a vibrating tuning fork creates a disturbance in the surrounding medium say, air, or water. Each particle of the medium is set in back-and-forth motion at a given frequency and with a given amplitude, and the motion propagates to neighboring particles at the same frequency, undergoing an energy loss that entails a decrease in amplitude. Seen macroscopically, the propagation of sound is the propagation of a compression in the medium followed by a depression, that is, the propagation of a wave. The behavior of each particle is described by a sinusoid that maps the cyclical pattern of compressions and depressions against time. A cycle is the complete path of the sinusoid from crease to crease, at the end of which the particle is back to its starting position. Amplitude is the distance between creases and valleys in the sinusoid, period is the distance between a crease and its successor, and frequency is the number of cycles per time unit. Contemporary philosophers of perception of the physicalist strand tend to align themselves on the wave theory. Perkins thus summarizes the view: The felt quality of high pitch is correlated with high frequencies; low pitch is correlated with low frequencies; High volumes are correlated with high, low volumes with low, amplitudes. Interestingly enough, the reduction of sounds to waves in a medium is arguably more successful than the corresponding attempt to reduce colors to properties of electromagnetic waves. The latter attempt is affected by some major problems, such as the existence of non-spectral colors like purple, or the fact that some spectral monochromatic colors such as orange are seen as being composed colors. For instance, there are metameric sounds as there are metamers among colors , that is, sounds that feel identical to the ear although the corresponding medial properties are different. There is no one-to-one psychophysical correlation between auditory content and sounds as waves Churchland Moreover, ultrasounds, above It further appears that the relationship between sound and sounding object remains underspecified. Do sound waves depend upon sounding objects in the sense in which we usually think sounds as auditory events do? Most importantly, as happened with proximal theories, medial theories do not locate sounds where an untutored conception of auditory perception suggests they are. If sounds were sound waves, we would be almost always mistaken in our aural perceptions on important aspects, which fact, once more, amounts to accounting for auditory perception in terms of a massive error theory. What is the nature of sounds under the wave theory? Relevant to our purposes, there are two main metaphysical conceptions about waves, in both cases construed as individuals. Either a waves are considered to be of the same nature as processes temporally extended entities, with temporal parts , or b they are taken as individuals of a peculiar kind. In case a , it may be argued that they do not move, for arguably processes do not move Dretske , but rather have phases temporal parts located at different spatial regions. Objects and people moved, as movement occurs whenever a whole entity is fully first in a place and then in another. Sound waves do not appear to be perceptually located where sounds are. A wave-process has some starting phases in the object, and some end-phases around the perceiver: In case b , sound waves are different from processes and are peculiar just because waves move, as individual substances do. But again, if sound waves move, the

corresponding sounds are not generally heard as moving. Sound waves propagate in all or most directions from a sounding object, but the corresponding sounds are not actually heard as propagating in any direction: It follows that if sounds were sound waves in this sense, we would not be hearing them as they are. Consider an analogy with light. In the realm of vision, the closest analogon to sounds are the activities of light sources. We perceive these activities, and we perceive them as located where their sources are: Do we perceive light itself, as opposed to the events of light emission at light sources? But what we perceive is the emission event, and not the light. An irrelevant element of disanalogy is related to the temporal unfolding of sounds and light events respectively. Typically in the environment light is emitted continuously, whereas sounds occur episodically and have short lives. If most light sources were intermittent as in piezoelectric lighters, or if most objects were buzzing all the time, this element of disanalogy would be less salient. Pasnau In some conditions it looks as if we perceive light rays, e. But what is actually perceived is a set of particles of water or of dust that intercept light. In order for a light ray to be visible, it would have to send information to our eye without the mediation of interposed matter. Coming back to sounds, the argument based on the constraint of fidelity to the content of auditory perception is thus, in a compact form: So we do not hear them. But we do hear sounds. Hence sounds are not medial sound waves. Consider first the fact that sounds are sometimes loud and sometimes soft; as we have seen, in the wave theory this feature is correlated with amplitude of the sound waves. However, the location of the sound plays a role in establishing the correlation. A loud sound, which is heard as being far from us, is different from a soft sound, which is heard as being close to us. The spectra of the two sounds are different. If you want a vivid example, consider what happens if you amplify the sound of a person who is speaking low. You do not have the impression of a person who speaks loud. You have, on the other hand, the impression of having come very close to a low-speaking giant. In some conditions, however, it can be difficult for us to tell a loud sound in the distance from a soft sound nearby, because in the part of space closer to our ears the sound waves that reach us and correspond to the two sounds can have the same amplitude. This only holds for an ideal case of a long lasting sine wave with no sharp attack. This type of sound is practically distance-proof because having a single component, the only possible variation is in amplitude, and no other spectral differences arise. Indeed, the fact that the two sine waves have the same amplitude when they are close to the ear accounts for the indistinguishability of the two sounds. Nevertheless, the two sounds, even if indistinguishable, are distinct, whereas the two sound waves are not. A way to put the difficulty is as follows: As we have seen discussing proximal theories, we can make perfect sense of the notion of distal volume of sounds, even in the case in which we cannot distinguish a loud distant sound from a soft sound in the vicinity. Something decrease in amplitude happens to sound waves which does not happen to sounds the distal volume does not change. Hence it can be argued that on this account too sounds are distinct from sound waves. As a matter of fact, one may want to distinguish two possible lines of argument here: A phenomenological argument, claiming that sometimes we hear a constant sound constant in intensity, for instance , even though the source is moving away from us. Here different sound waves can correspond to one and the same sound. A metaphysical argument, holding that sometimes the sound waves corresponding to two sounds are the same while the sounds are clearly different: Here the very same sound waves can correspond to distinct sounds. The latter argument is not lethal, but is a useful reminder that there is no fully developed theory of sounds as medial sound waves as yet. Should the sound be identified with the sound waves when they reach the ears, or with the whole train of sound waves from the source to our ears, or with the sphere filled with sound waves and centered on the source? The thesis that sounds are sound waves is also often motivated by the argument from vacuums. Surely, it is argued, sounds cannot exist in a vacuum. But is the claim that there are no sounds in vacuums really obvious? On pain of question begging, it cannot be made to follow from any particular metaphysics of sounds. In order to assess it on its own merits, consider once more the analogy between, on the one hand, sounds and air, and, on the other hand, emission events at light sources and light. Air is the medium of auditory perception, and light is the medium of visual perception. The reasoning now is that just as things can sensibly be taken to have colors in the dark, they can sensibly be taken to produce sounds in a vacuum. In the above arguments an important role is played by the following requirement: A theory of sounds should be true to the phenomenological content of auditory perception. It

seems quite reasonable to require that as sounds are the objects of hearing, whatever they are should be somewhat revealed in hearing. In point of fact, there are two ways in which the fidelity to auditory content requirement can enter the arguments. It may be argued that this principle is too strong because it is unjustifiedly specific. Why should location, among all possible features of sounds, be protected against the possibility of systematic illusion? In another, weaker version Casati and Dokic it is the representational power of auditory content that is appealed to. It is then natural to assume that auditory experience would be able to represent sounds as moving, if sounds were indeed moving entities by their nature. But such is not the case; hence auditory experience correctly represents them as firmly located. This construal of the requirement is compatible with the existence of systematic, though possibly selective, illusion. The requirement of fidelity to auditory content may be challenged on a number of grounds. First, it may be challenged by opposing its rationale. Auditory content may well be massively illusory, and this could be just the price to pay for any realist account of sounds. Possibly there is here an analogue to the case of colors, in which there is room for selective illusion and for the choice between realism about location, say, and realism about hue. Most arguments for the subjectivity of colors start from the existence of strong correlations between phenomenal hue structures such as the relation of complementarity between colors, e. These arguments then stress the absence of physical correlates for hue structure nothing in the wavelengths corresponding to red and green hues can make one predict the subjective complementarity between red and green. They finally conclude that colors are mind-dependent.

Chapter 2 : Relationship between Education and Philosophy in the modern world

Causal forks of three kinds (conjunctive, interactive, and perfect) are introduced to explicate the principle of the common cause. Causal forks account for the production of order and modifications of order; causal processes account for the propagation of causal influence.

Education and philosophy, the two disciplines, are very closely related and in some areas they overlap each other. One can never be thought of without the other. The presence of one is incomplete without the other. The art of education cannot be completed without philosophy and philosophy cannot convert others to its aims and values without education. There is a close interaction between the two; one without the other is unserviceable. It is not vague to say that theory and practical are identical. The educator, who has to deal with the real facts of life, is different from the arm chair theorist who is busy in speculation. But a close observation of the various interpretations of philosophy will prove that these two are nothing but the one and same thing seen from different angles. Philosophy is the study of the realities, the pursuit of wisdom. It is not mere theorizing but something which comes naturally to every individual. A person who goes deep into the reason and nature of things and tries to arrive at certain general principles with a view to apply them in his daily life, is a philosopher. Philosophy is a way of life. In a wider sense philosophy is a way of looking at life, nature and truth. It sets up the ideals for an individual to achieve them in his life time. Education on the other hand is the dynamic side of philosophy. It is the active aspect and the practical means of realising the ideals of life. Education is a sacred necessity of life, both from the biological and sociological point of view. It is true that education works like a catalyst for a better life, a social desirable life. As a pot is made out of clay and a finished product comes out of raw material, so also from the immature child comes out the civilized man through education. Education renews and re-builds the social structure in the pattern of philosophical ideals. Human being, who is born and grows up with inherited propensities, determines the basic trails of man, but education paves a long way for his success in life. Education according to Indian tradition is not merely a means to earn living, nor is it only a nursery of thought or a school for a citizenship. Rather, it is the initiation into the life of spirit, a training of human souls in pursuit of truth and the practice of virtue. The basic relationship between philosophy and education can be analysed as follows. It is philosophy, that provides the purpose or the aim and it is education which makes it practical. Philosophy shows the way and education moves on in that direction. When we define education as the modification or behaviour, the direction in which, modification to be carried out is determined by philosophy. Thus philosophy deals with the end and education with the means. In fact, we can observe that the great philosophers of all times have been also great educators. For example, Socretes and Plato, the great philosophers, were also famous educators. According to Thomson, every teacher should realize the importance of philosophy in education. Good philosophy thus would not only conceive the type of society which is needed in the society. It is philosophy which would give to the teachers a sense of adventure. The choice of students must cater to the principles and purposes of philosophy. Choice of curriculum needs philosophers or leaders of thought. With the change of time and circumstances, the curricula also changes and this change can be brought out by philosophers alone. The necessary conditions should be fulfilled so that the child is allowed to go in a free atmosphere with the ultimate aim of becoming a happy and a rightly adjusted person of the society. The learning process is an active way of doing things; hence the curriculum for the child should concern itself with the realities of life. As far as the methods of teaching are concerned, it can be said that the child is influenced; to give a particular shape to his life by the way he is taught. The philosophy of the teacher is reflected in the child by his method of teaching. So the course of life of the child is definitely influenced by philosophy. Here comes the utility of philosophy. The Education-philosophy relationship may be further pointed out as given below: According to Alfred Weber "Philosophy is a search for comprehensive view of nature, an attempt at a universal explanation of the nature of things a person who searches into the reason and nature of things, who tries to arrive at a general principle, and who attempts to apply those principles to daily conduct of life, acts like a true philosopher. According to John Dewey, philosophy is "critical reviewing of just those familiar things. To discover the general truth that lies

behind the particular facts, to discern also the reality that lies behind appearances. These are some of the questions of philosophical enquiry. Different philosophers try to answer these questions according to their own mature reflection and thinking. These different answers lead to different philosophies. The Major Branches of Philosophy are: Philosophy influences even the daily life of every individual. An educator not only holds certain beliefs and ideals of life, he also tries to convert his pupils to his own views and his own way of life. The influence of a person, holding a vital belief, brought to bear upon another person with the object of making him also to hold that belief, is education. Thus education means to lead out, through the modification of the native behaviour of the child. Education is a laboratory where philosophic theories and speculations are tested and made concrete. Education may, therefore, be rightly called applied philosophy. Philosophy is wisdom; education transmits that wisdom from one generation to the other. Philosophy is in reality the theory of education. In other words, education is the dynamic side of philosophy, or application of the fundamental principles of philosophy. Philosophy formulates the method, education its process. Philosophy gives ideals, values and principles, those ideals, values and principles. A philosopher tries to live in accordance with those aims and values and also wants others to be converted to his beliefs and live according to them. This he can achieve through education which is the best means for the propagation of his philosophy. Emphasis on knowledge received universal acceptance. In 20th century, the two world wars, and the consequent mass destruction wrought by the application of science, gave rise to less of faith in mere intellect. Humanism, faith in higher principles and values of life, character development and emotional integration gained greater impetus.

Chapter 3 : Yeast propagation - Brewery Convention - Buffalo Brewing Blog

David Hume, entry in the Internet Encyclopedia of Philosophy, by James Feiser (University of Tennessee, Martin) David Hume archived version of a webpage on Hume by Bill Uzgalis (Oregon State).

MOL 3 Katherine Falconer Hume realized that David was uncommonly precocious, so when his older brother went up to Edinburgh University, Hume went with him, although he was only 10 or There he studied Latin and Greek, read widely in history and literature, ancient and modern philosophy, and also did some mathematics and natural philosophyâ€"what we now call natural science. The education David received, both at home and at the university, aimed at training pupils to a life of virtue regulated by stern Scottish Calvinist strictures. Prayers and sermons were prominent aspects of his home and university life. At some point, Hume read The Whole Duty of Man, a widely circulated Anglican devotional tract that details our duties to God, our fellow human beings, and ourselves. The intensity of developing his philosophical vision precipitated a psychological crisis in the isolated scholar. Here he read French and other continental authors, especially Malebranche, Dubos, and Bayle, and occasionally baited the Jesuits with arguments attacking their beliefs. By this time, Hume had not only rejected the religious beliefs with which he was raised, but was also opposed to organized religion in general, an opposition that remained constant throughout his life. In , when he was only 23, he began writing A Treatise of Human Nature. Hume returned to England in to ready the Treatise for the press. Six years later, he stood for the Chair of Logic at Glasgow, only to be turned down again. Hume never held an academic post. A year later he became secretary to his cousin, Lieutenant General James St Clair, eventually accompanying him on an extended diplomatic mission in Austria and Italy. He also included material he had excised from the Treatise. Published in six volumes between and , his History was a bestseller well into the next century, finally giving him the financial independence he had long sought. Friends and publishers persuaded him to suppress some of his more controversial writings on religion during his lifetime. In , Hume accepted a position as private secretary to the British Ambassador to France. He became the rage of the Parisian salons, enjoying the conversation and company of famous European intellectuals. He was known for his love of good food and wine, as well as his enjoyment of the attentions and affections of women. Hume returned to Edinburgh in He spent considerable time revising his works for new editions of his Essays and Treatises, which contained his collected Essays, the two Enquiries, A Dissertation on the Passions, and The Natural History of Religion, but â€"significantlyâ€"not A Treatise of Human Nature. In , Hume was diagnosed with intestinal cancer. He summarizes his project in its subtitle: The ancient philosophers, on whom he had been concentrating, replicated the errors their natural philosophers made. He was convinced that the only way to improve philosophy was to make the investigation of human nature centralâ€"and empirical HL 3. The problem with ancient philosophy was its reliance on hypothesesâ€"claims based on speculation and invention rather than experience and observation. By the time Hume began to write the Treatise three years later, he had immersed himself in the works of the modern philosophers, but he found them disturbing, not least because they made the same mistakes the ancients did, while professing to avoid them. Their theories were too speculative, relying on a priori assumptions, and paying too little attention to what human nature is actually like. These systems, covering a wide range of entrenched and influential metaphysical and theological views, purport to have discovered principles that give us a deeper and more certain knowledge of ultimate reality. Metaphysics aids and abets these and other superstitious doctrines. His critique of metaphysics clears the way for the constructive phase of his projectâ€"the development of an empirical science of human natureâ€"and Hume is not at all skeptical about its prospects. The new foundation is the scientific study of human nature. They are all human activities, so what we are able to accomplish in them depends on understanding what kinds of questions we are able to handle and what sorts we must leave alone. If we have a better grasp of the scope and limits of our understanding, the nature of our ideas, and the operations we perform in reasoning about them, there is no telling what improvements we might make in these sciences. We should expect even more improvement in the sciences that are more closely connected to the study of human nature: Although Hume does not mention him by name, Newton â€" is his hero. Any laws we discover must

be established by observation and experiment. Hume is proposing an empiricist alternative to traditional a priori metaphysics. His empiricism is naturalistic in that it refuses to countenance any appeal to the supernatural in the explanation of human nature. As a naturalist, he aims to account for the way our minds work in a manner that is consistent with a Newtonian picture of the world. Hume portrays his scientific study of human nature as a kind of mental geography or anatomy of the mind EHU 1. In the first section of the first Enquiry, he says that it has two principal tasks, one purely descriptive, the other explanatory. Hume, however, wants to go much further. But he emphasizes that while he will try to find the most general principles, rendering them as universal as possible, all of his explanations must be based completely on experience. Although philosophy, as an empirical enterprise, is itself bound by experience, this is not a defect in the science of human nature. The same is true for all the sciences: Explanations must come to an end somewhere. Hume is Newtonian in much more than method. He sees that Newton is significantly different from John Locke â€" and the other Royal Society natural philosophers, because he rejects their mechanist picture of the world. By appealing to these same principles throughout, Hume gives an explanation of these diverse phenomena that enable him to provide a unified and economical account of the mind. Each piece is warranted by experience. The early modern period was the heyday of the investigation of the ideas of causation, moral good and evil, and many other philosophically contested ideas. Hume holds an empiricist version of the theory, because he thinks that everything we believe is ultimately traceable to experience. He begins with an account of perceptions, because he believes that any intelligible philosophical question must be asked and answered in those terms. He uses perception to designate any mental content whatsoever, and divides perceptions into two categories, impressions and ideas. Impressions include sensations as well as desires, passions, and emotions. He thinks everyone will recognize his distinction, since everyone is aware of the difference between feeling and thinking. Hume distinguishes two kinds of impressions: He calls them original because trying to determine their ultimate causes would take us beyond anything we can experience. Any intelligible investigation must stop with them. Impressions of reflection include desires, emotions, passions, and sentiments. They are essentially reactions or responses to ideas, which is why he calls them secondary. Perceptionsâ€"both impressions and ideasâ€"may be either simple or complex. Complex impressions are made up of a group of simple impressions. My impression of the violet I just picked is complex. Among the ways it affects my senses are its brilliant purple color and its sweet smell. I can separate and distinguish its color and smell from the rest of my impressions of the violet. Hume initially distinguishes impressions and ideas in terms of their degree of force and vivacity. Impressions are more forceful and vivacious than ideas. At various times, Hume tries other ways of characterizing the difference between impressions and ideas, but he was never completely satisfied with them. Still, what he says works well enough to give us a handle on the felt differences between impressions and ideas. When Hume distinguishes impressions and ideas in terms of their relative force and vivacity, he is pointing out something that is generally true of them as a matter of fact. On occasion, in dreams or a high fever, ideas may approach the force and vivacity of impressions, but these are exceptions that prove theâ€"empiricalâ€"rule. In general, impressions and ideas are so different that no one can deny the distinction. He argues first that there is a oneâ€"toâ€"one correspondence between simple ideas and simple impressions. But he is so confident the correspondence holds that he challenges anyone who doubts it to produce an example of a simple impression without a corresponding simple idea, or a simple idea without a corresponding simple impression. Since he is certain they will fail, he concludes that there is a constant conjunction between simple impressions and simple ideas. There must be a causal connection between them, but do ideas cause impressions or do impressions cause ideas? Finally, he argues that experience tells us that simple impressions always precede and thus cause their corresponding ideas. To support this claim, he appeals to two sorts of cases. First, if you want to give a child an idea of the taste of pineapple, you give her a piece of pineapple to eat. You never go the other way round. He imagines someone who has had the same sorts of experiences of colors most of us have had, but has never experienced a certain shade of blue. Hume thinks that if he orders all the shades of blue he has experienced from the darkest to the lightest, he will see immediately that there is a gap where the missing shade should be. While scholars have wondered exactly how the person might supply the missing shade, he seems unconcerned with the details. For

Hume, once again the exception proves theâ€”empiricalâ€”rule. As his diagnosis of traditional metaphysics reveals, Hume believes that the chief obstacle â€¦ to our improvement in the moral or metaphysical sciences is the obscurity of the ideas, and ambiguity of the terms. Getting clear about the content of the ideas and the meanings of the terms we are investigating requires something else. He believes he has found a way to accurately determine their contentâ€”his account of definition. Begin with a term. Ask what idea is annexed to it. If there is no such idea, then the term has no cognitive content, however prominently it figures in philosophy or theology. If there is an idea annexed to the term, and it is complex, break it down into the simple ideas that compose it, and trace them back to their original impressions. If the process fails at any point, the idea in question lacks cognitive content. Hume uses his account of definition in his critical phase to show that many of the central concepts of traditional metaphysics lack intelligible content. He also uses it in his constructive phase to determine the exact meaning of our terms and ideas. This suggests that There is a secret tie or union among particular ideas, which causes the mind to conjoin them more frequently, and makes the one, upon its appearance, introduce the other. Hume identifies three principles of association: When someone shows you a picture of your best friend, you naturally think of her because the picture resembles her.

Chapter 4 : Sounds (Stanford Encyclopedia of Philosophy)

thank you, agree. My initial thought is that it be split into two articles International propagation of Salafism and Wahhabism, by activity (or leave title as is) and International propagation of Salafism and Wahhabism, by country.

Here are described the methods in which these stocks are used to introduce new yeast cultures into the brewery. All fermentations generate yeast sufficient to re-pitch two or more further fermentations. In some breweries, particularly traditional ale top-cropping types, this cycle proceeds ad infinitum and single yeast cultures have been in use for many years. Frequently, these may be mixed cultures; however, fermentation performance is considered to meet the needs of the process without the need for propagation of fresh yeast. More commonly, however, and without exception in modern breweries, new cultures of yeast are introduced periodically to replace existing stocks. This is prudent for a number of reasons. Most importantly, it provides an opportunity to introduce a culture of known and guaranteed identity. Continued serial fermentation and cropping carries with it the risk that variants may be selected for within the yeast population. Consequently, over a number of generations of fermentations a gradual drift may occur in the properties of the yeast see Section 4. This is particularly the case where the cropping regime may inadvertently select for variants. For example, early cropping from the cones of cylindroconical fermenters may select for flocculent sub-populations within the yeast. It is also reported that the formation of petite mutants see Section 4. Periodic re-introduction of a new yeast line taken from a master culture limits the opportunities for the occurrence of this source of variation. Even in the best-managed brewery, the production environment provides opportunities for the introduction of contaminants to bulk yeast. These may be in the form of bacteria Section 8. The consequences of contamination with wild yeast can be significant, resulting in process changes floccu-lation, fining or flavour changes phenolic, medicinal character. With respect to bacteria, contamination with Obesumbacterium spp. From another standpoint, cross-contamination of yeast strains may occur where several are in use in a single brewery. Continued serial re-pitching of yeast may be associated with gradual deterioration in yeast condition, which can result in a decline in fermentation performance. This is unlikely in the case of rapid top-cropped fermentations where there is an opportunity to ensure that the fraction of yeast retained is that which is produced when fermentation is at its most vigorous. In addition, such cropping regimes are to some extent self-purifying see Section 6. In the case of bottom-cropped fermenters , particularly large-volume cylindroconicals, there is opportunity for high levels of contamination of yeast with trub. The possibility of selecting for non-standard yeast variants has been alluded to already. The use of very large vessels and the tendency towards high-gravity brewing has undoubtedly increased the stresses to which production yeast is subject. It has been demonstrated that senescence of yeast cells see Section 4. The frequency of introduction of newly propagated yeast into the brewery is a decision for the individual brewery since there are no immutable rules. A typical regime in a modern brewery built and operated to high standards of hygiene would be to introduce propagated yeast every generations. However, some breweries would consider this excessive and only allow generations to elapse before introducing new yeast. Two contrary points of view may be considered in this respect. First, a fermentation management decision may have been taken within a particular brewery, which makes it mandatory that new yeast cultures are introduced after a given number of generations. Typically in this scenario a number of different yeast lines, each of varying generational age, would be in use at any given time. Introduction of a new yeast line would be phased to replace a line that has reached the end of its operational lifetime. This method totally disregards the fermentation performance of that particular yeast line. Continuing to use yeast that is performing in a satisfactory manner has other advantages. There is an economic cost to propagation. Apart from the capital investment, the revenue costs are obviously proportional to the frequency of use. In addition, it is commonly observed that the first generation fermentation using newly propagated yeast is atypical. In consequence, the first generation beer has to be blended. Occasionally, the non-standard behaviour may be extended over the first few fermentations. Clearly, this would tend to mitigate against frequent propagation. The reasons for non-ideal behaviour in first fermentations are obscure. Hammond and Wenn reported the experiences of a

brewery where one newly propagated yeast strain produced slow fermentation performance for the first few generations. This was shown to be due to impaired ability of the strain to utilise maltotriose. The causes of the defect were not elucidated and the effect was somewhat transitory, disappearing after generations. Since this effect was seen only with a single yeast strain it suggests that the problem was not due to propagation per se, but was a feature of the particular yeast. Several reports have described yeast undergoing abrupt changes in flocculence and there is evidence to suggest that this is due to an inherent genetic instability see Section 4. Altered flocculence and defects in sugar assimilation may be related. Thus yeast that is not capable of utilising maltotriose would stop growing and flocculate before the cells comprising the normal population. Such variant cells could be selected for in cone cropping of fermenters. If such genetic variants can arise in fermenter, it follows that the same phenomenon could occur in propagator. It also follows that should such variants arise it would not be a reflection of propagator performance. In fact, it can be demonstrated that, provided the design and operation of the propagation plant is adequate, there is no fundamental reason why first-generation propagations should be different from later ones. It may also be surmised that the common contention that newly propagated yeast gives less than ideal performance is a consequence of poor propagator design and operation. In consequence, firstgeneration fermentation pitching rates are often inadequate and the yeast is in a stressed condition. The requirements of a propagator are summarised as follows: Since the propagator is to supply yeast for brewing it is essential that it is not a source of contamination. This is an obvious requirement of propagation but one that is not always adhered to. The process, therefore, has a long history and several distinct systems have been developed. Nevertheless, all propagation regimes basically consist of a sequence of yeast cultures of progressively increasing volume, starting in the laboratory and culminating in a terminal stage which contains sufficient yeast to pitch the first production scale fermentation. Variations on this theme are possible, such as semi-continuous systems, which maintain cultures at the small brewery scale and thereby reduce the requirement for repeated laboratory propagation. The aim of the laboratory phase of fermentation is to generate a pure yeast culture of sufficient size to provide an adequate pitching rate for the first stages of brewery propagation. The terminal laboratory culture must be held within a container, which will allow transfer to the brewery under conditions of asepsis, and there be transferred into the brewery propagation vessel under aseptic conditions. Laboratory propagation uses standard microbiological apparatus. It must be performed to the highest possible standards using skilled personnel. Initial stages may use artificial media such as yeast extract, peptone, glucose. Wort may be used for the terminal laboratory stage; however, it must be sterilised by autoclaving prior to use. A typical laboratory propagation regime is shown in Fig. The scheme shown is a suggestion only and several variations are possible. It is sensible to limit as far as possible the number of aseptic transfers, since these represent the points of greatest risk of contamination. In general, a volume scale-up factor of about 1: This consists of a heavy gauge stainless steel flask with a capacity of approximately 25 litres fitted with a number of ports passing through the top-plate assembly. The latter is removable for cleaning purposes. Before use the flask is filled with brewery wort and the flask and contents sterilised by autoclaving. If experience shows it to be necessary, antifoam may be added to the wort before sterilisation. After cooling and prior to inoculation, the wort should be aerated by sparging for at least 30 minutes with air or pure oxygen. Sterility is maintained by passing the gas through a microbiological quality gas filter. High rates of oxygen transfer are facilitated by passing the inflowing gas through a stainless steel candle. Inoculation is via a specific port that terminates in a male fitting, which is wrapped to maintain sterility. Immediately before inoculation the male fitting is joined, using appropriate aseptic precautions, to a matching female fitting, also wrapped, attached to the side-arm of the aspirator used for the 3 litre culture stage Fig. The inoculum culture is transferred by gravity after opening the relevant valves. After inoculation, the flask is aerated continually with air or pure oxygen. Oxygen transfer rates are further improved by constant agitation using a powerful magnetic stirrer and a follower in the flask. The exhaust gas is vented to atmosphere via another microbiological grade filter. If the gas flow rates are high it is advisable to locate a water condenser between the gas outlet port and the sterile filter. Aseptic sampling is possible via a tube, that extends to near to the bottom of the flask. The sample may be withdrawn by temporarily restricting the outlet gas line. It is convenient to mount the flask in a purpose-built trolley to facilitate transport. When the culture is

ready the flask is disconnected from the gas inlet supply and transferred to the brewery. Connection to the brewery seed vessel is via a dedicated line, which terminates in a sterile wrapped fitting, which is designed to attach securely to the inlet point on the seed vessel. During transfer the culture should be agitated continuously using the magnetic stirrer. Transfer of the culture is achieved by applying top pressure via the gas exhaust line. It follows that the same conditions will also favour the growth of contaminants and, therefore, good hygienic design and operation is absolutely essential. Vessels are fabricated from stainless steel with particular attention being paid to interior finish and fittings to facilitate cleaning. Inlet and outlet gas lines are via microbiological grade steam-sterilisable filters. After cleaning, vessels are sterilised with steam. In operation, vessels require attemperation by the application of cooling. A means of introducing sterile air is provided. Traditionally, propagators are not usually agitated. Sample points must be of the steam sterilisable type.

DOWNLOAD PDF 2 PROPAGATION OF THE PHILOSOPHY.

Chapter 5 : Talk:International propagation of Salafism and Wahhabism - Wikipedia

quiz on plato Philosophy Jill Drouillard Learn with flashcards, games, and more â€" for free.

Quit arguing about what it is". In the late s, scientists were debating the nature of heat. The most popular theory at the time was the caloric theory of heat in which heat was a kind of fluid or weightless gas that flowed from hot objects to colder objects. The theory was pretty much falsified by an experiment involving a cannon and a horse in which a cannon barrel was immersed in water while a horse circled the setup which caused the cannon barrel to be bored. The water boiled after a few hours and continued to boil indefinitely. The experiment cast doubt on the theory that heat was a substance, because the supply of it appeared inexhaustible. Caloric theorists, unconstrained by a mathematical representation of their theory kind of absorbed the result into their own theory. An analytical theory of heat which defined a whole new mathematical method to explain the properties of heat flow without even attempting to explain what heat is. Essentially he modelled heat flow as a set of linear partial differential equations. To calculate the conduction of heat through a body , supply the temperatures of the boundaries of the body and solve his heat diffusion equation by expressing it as a sum of simpler trigonometric components known to any engineer as a Fourier series. Fourier fought for 15 years to get his paper published - his methods having been rejected by a committee that included the mathematician Joseph Lagrange , himself a committed caloric theorist until he died. He never postulated what heat was, in the same way that Newton never postulated what gravity was but he did say "Heat, like gravity, penetrates every substance of the universe, its rays occupy all parts of space. The object of our work is to set forth the mathematical laws which this element obeys. The theory of heat will hereafter form one of the most important branches of general physics. Who cares what gravity is? Who cares whether quarks are real or not? Who cares whether economic actors are really rational or not? Who cares how anti-depressants actually work? If the theory works, why worry? He believed preserving the heat in the body by wrapping it entirely in blankets was beneficial to health. Suitably wrapped up, he tripped and fell down his stairs to his death.

Chapter 6 : Education Philosophy

GATE VOLTAGE PROPAGATION DELAY IN POWER MOSFETS by DOCTOR OF PHILOSOPHY Approved Propagation of the gate signal down the.

Chapter 7 : The Origin and Propagation of Sin

This feature is not available right now. Please try again later.

Chapter 8 : David Hume (Stanford Encyclopedia of Philosophy)

Propagation, Detection and Containment of Mobile Malware by Abhijit Bose A dissertation submitted in partial fuli¬•llment of the requirements for the degree of.