Raffles Institution
(Year 5-6)
Knowledge Skills Department

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Message from the Principal

The best GP essays written under examination conditions have three things in common. First, they reflect a well-read mind that is keenly interested in many of the issues that GP encompasses, with their various social, political, economic and cultural perspectives. Second, they contain arguments constructed in a logical manner with claims supported by evidence such as statistics, trends and examples, rather than random ideas woven in a "stream of consciousness" fashion. Third, they are written in grammatically correct sentences, clear and to the point. There is no need for embellishments and impressive vocabulary.

Working backwards, to get to the stage where you can confidently deal with a GP essay question, there are a few things I would like to suggest that you do. Read as much and as widely as you can and scribble useful facts, statistics, illustrations, examples and quotations in your notebook for future reference and use. Keep to an organisational structure that you can call up easily, each time you have to construct an argument. Your tutors would have taught you some. Write often so that grammatical structures and expressions flow naturally and easily from your head to your pen. Check the usual inconsistencies of concord, tenses, subject-verb agreement and leave time to proof-read and edit your work. Focus on the ideas you wish to express rather than the language and vocabulary you wish to flaunt. This way, you can be sure you are saying what you wish to say, in your own words.

Keep writing and have fun.

Lim Lai Cheng (Mrs)
Principal

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2012 Year 5 General Paper Promotion Examination

'The best education takes place outside of school.' Comment.

essay 1

Lee Jiemin Nicolette | 13A03C

Education today is seen as one of the most essential things people need in order to survive the highly-demanding, fast-paced 21st century. While it was perfectly normal to be illiterate or not have undergone schooling in the 18th century, such news would be shocking in the current era. Thus, a great emphasis is placed on formal education in schools nowadays. However, while highly important, education does not merely stem from school: in fact, the best form of learning may take place beyond such boundaries, or even involve a mix of both.

It is undeniable that education within school is crucial because it provides people with the foundation of learning. As a formal institution with a proper curriculum, students are taught sets of skills and knowledge that are required in today's world. For example, Singapore has made formal education compulsory for six years in primary school, entitling citizens to, at the very least, basic education to guide them towards future endeavours, as well as basic literacy skills and values. Schools are uniform platforms on which people are made to prepare themselves, and they provide a conducive and safe environment in which they can learn. Thus, the best education may be seen as that which takes place officially in schools.

Additionally, the education system within schools can be used as a means of evaluation, or as a way to effectively gauge one's standard of intellectual capability by comparing to other students within the cohort as well as through examinations. For example, in order to determine one's competency, students must take national examinations, such as Singapore's Primary School Leaving Examination (PSLE) and the Singapore-Cambridge GCE 'O' Levels as well as Singapore-Cambridge GCE 'A' Levels. Such large-scale examinations allow students to truly pit themselves against their peers, not only providing them with a chance to test their ability, but also to measure themselves against the expected standard, bringing about mandatory learning. This would be beneficial as examinations provide a reason to study. While only a short-term motivation, examinations propel students forward towards the later goals in life, such as moving on to tertiary education and the job opportunities available. Such examinations also provide them with academic qualifications to achieve greater success. Hence, education within schools serves the purpose of regulation and provides constant motivation, causing us to acknowledge that such education is good and important to society.

However, it can also be said that the best education takes place outside of school, as education outside is not restricted to certain boundaries, unlike structured school systems. In schools, the knowledge imparted may be rigid, static and limited in scope, and may not extend beyond what is required. Within schools, taboo topics may never be addressed, and sensitive issues never discussed. On the other hand, outside of schools, there is freedom of expression and of learning, with greater exposure beyond "sheltered" formal school environments. Learning from experience rather than textbooks may, in fact, be more effective and relevant to society. For example, one may have studied geography but be unable to apply it in school. Being exposed to

the world and experiencing landforms of many variations can provide a platform for application and concrete understanding of such knowledge. Essentially, learning from experience and past mistakes may be something that a proper school environment cannot provide or artificially simulate. Hence, education beyond school may prove to be "better" than within school.

Moreover, the education structure within school may not be the most effective for some individuals, as different people have varying working and learning styles. Unfortunately, schools are unable to provide specialised or personalised education formats for people, and instead follow a standardised form. While, as mentioned previously, the uniformity of the school system can be a merit, it can also be a flaw, as it may not cater well to everyone. While it is not in the education system's intention to leave anyone behind, some students may end up falling through the cracks as lessons are taught in ways that do not complement their styles of learning. In fact, the lack of individual attention given to these students leads to the idea that, while education within schools may actually be ideal and conducive for some, it may not be the best for many others.

Of course, it is unfair to comment that there is the existence of a best form of education. Both forms of learning – formal structured schooling and unstructured learning outside of school – are highly essential and needed for one to be truly well-educated. Education should involve a holistic exposure to both theory-based knowledge and content, and the opportunity to apply such knowledge in real-life, which would allow one to gain valuable experience. One without the other is incomplete; knowledge without the ability to use it would be defunct, while experience without discipline and structure can be chaotic. Education within and outside of school should, on the whole, go hand-in-hand in order for one to learn accordingly.

There is also the concept of lifelong learning – learning beyond schooling years. Truly, formal education can be seen as the concrete foundation for one to start on, while life after schooling allows one to apply the knowledge imparted via greater opportunities, and even propel one to learn further. One can be educated in the workplace, on the streets and even in interaction with others, gaining practical skills, social etiquette, "street-smartness" and more. In the end, education is a never-ending process that is not bound by location; the best education is achieved through an all-round exposure to everything.

Marker's Comments:

Good essay here, Nicolette. You've captured the essence of the merits and demerits of formal education, and appropriately linked these to the question of whether the best education takes place outside of school. You could have provided more detailed examples of these outside-of-school activities/types of learning that take place in order to make your essay more convincing.

Over the past decade, Singapore has practised an "open door" policy with regard to immigration, accepting many immigrants as new citizens or as permanent residents. The Government has practised this policy in order to make up for the falling birth rate in Singapore, but it has become increasingly unpopular for several reasons among the people of Singapore. One believes that Singapore should welcome immigrants to the extent that their presence would bring about more benefits, such as enhancing Singapore's population and contributing to the workforce, than detriments to Singapore society, such as social instability and increased competition.

The primary reason offered by the Singapore Government for welcoming large numbers of immigrants to Singapore is to boost Singapore's plummeting fertility rate. Since 1977, Singapore's fertility rate has been below the replacement level of 2.1, and currently stands at a desperately low level of 1.2. To make up for the shortfall in births, Singapore has to accept immigrants, or face a gradual decline in her population, which will have several unfavourable consequences. These include a shrinking workforce, which will make it increasingly challenging for Singapore to sustain her high rates of economic growth, and a decline in the elderly support ratio. This decline would mean a tougher task for the Government to balance the budgets with fewer taxpayers and higher social expenditures. Such adverse impacton Singapore could be avoided if the fall in the population was stemmed by increased immigration, and thus the shortfall in births is an important reason why Singapore should welcome immigrants.

Another reason for Singapore to welcome immigrants is to tap on the diverse experiences they bring with them when they enter the local workforce. Immigrants come from various societies and have diverse experiences, which is vital in today's globalised economy. Many companies in Singapore, whether local, such as DBS Bank or Capitaland, or foreign, such as Maybank or IKEA, have a global outlook, and the presence of immigrants in our workforce makes Singapore appear more competitive and thus more attractive to foreign companies. At a time when Singapore's economic growth is slowing down (as compared with the time when her economy doubled in size every nine years), such an advantage of having a globalised workforce with varied experience is vital. Furthermore, this would extend to the next generation, as the children of these immigrants would be able to interact with local students and share their wide range of experiences with them, again developing a greater global outlook amongst our children. Hence, Singapore should continue welcoming immigrants in order to harness the potential of their diverse experience.

However, welcoming immigrants also brings about ills of its own. These include the social instability that can be the result of welcoming too many immigrants to Singapore. Singapore is a young, multi-racial nation, having only gained independence in 1965. Her society is a patchwork of different races and religions, and the Government has spent decades trying to forge a Singaporean identity. However, before the social glue has had time to set, Singapore has flung her arms wide open and embraced hundreds of thousands of new immigrants. The very same diverse experiences that

were a boon to the workforce are now a bane, as there is now the issue of integrating these new immigrants into Singapore society. As these new immigrants lack a full understanding and appreciation of Singapore's history, culture, people, and way of life, it is a challenge to integrate them into Singapore society. Local Singaporeans may also lack an understanding of the culture of these new immigrants, and be offended as a result by certain behaviours. There was an incident involving a family from mainland China seeking mediation over their Singaporean Indian neighbours cooking curry, as they found the smell intolerable, and the family was advised to stop cooking curry. Although this was later revoked, it generated an uproar over the issue of immigration on social networking sites, and is proof of the social tensions that could result from increased immigration into an already multi-racial society. Immigration has been proven to generate considerable social tension elsewhere, such as in France, where there is considerable hostility between locals and immigrants. Hence, Singapore has to consider welcoming immigrants liberally very carefully, given that social instability is a possible result.

Furthermore, Singapore should also welcome immigrants very cautiously as welcoming too many immigrants can create increased competition for Singaporeans, hence generating resentment and driving the aforementioned social tension. The influx of immigrants has led to increased demand for housing in Singapore, raising the competition for housing and hence affordability. Property prices have skyrocketed in recent years, and have gone to such extremes that a Housing Development Board (HDB) maisonette has just been sold for a shocking $1 million, setting a new record for housing prices in Singapore. This has caused Singaporeans to be less able to afford housing, and one of the reasons commonly cited is the increased demand from immigrants. It has also been claimed that the increasing number of immigrants has led to greater competition in schools and for places in schools, especially in primary schools, where places in certain coveted schools have become harder to come by. This has fuelled resentment towards immigrants, and may have been a contributing factor to the poor performance of the pro-immigration ruling party, the People's Action Party (PAP), at the 2011 General Election where it only managed to garner 60.6% of the votes, its worst performance since Singapore gained independence in 1965. Such resentment could further drive the social tensions resulting from immigration as discussed above, and is another reason for Singapore not to welcome too many immigrants.

In the final analysis, welcoming immigrants has multiple costs and benefits. As discussed, while immigrants can supplement Singapore's declining population and build a more globalised workforce with the experience that they bring, an overly large presence of immigrants can also fuel social instability and create greater competition for housing and education for Singaporeans. Therefore, Singapore's immigration policy needs to be calibrated with appropriate government policies that minimise the problems brought about by immigrants, to ensure that the problems created by their presence do not outweigh the benefits that they bring to Singapore.

Marker's Comments:

Good essay on the whole; clean and well-structured, a concise read. Consider further development – the nature of the welcome, who welcomes them? Any selection criteria? This would qualify in nuance and precision the key term 'welcome'.

2012 Year 5 General Paper Promotion Examination

Discuss the view that too much faith is placed in scientific knowledge.

essay 3

Chen Haoxin | 13S06Q

The turn of the century has seen scientific knowledge progress exponentially. This newfound scientific knowledge has allowed us to explain many of the things that were previously unexplainable. The discovery of the "Higgs boson" particle, for example, is a crucial first step to explaining why things have mass, paving the way for scientists to probe the origin of life. Because of this ability of science to explain the many previously unexplainable phenomena, there has been an increasing reliance on scientific knowledge. Critics have claimed that too strong a belief has been placed in science and such belief could be misplaced since science is also susceptible to bias and uncertainties. However, although this might appear true, science is still undoubtedly the most reliable source of knowledge that we have, especially when compared to other sources such as religion, which is largely based on faith. As such, the faith placed in scientific knowledge is justifiable and not excessive.

A cursory examination of the issue at hand may lead one to conclude that scientific knowledge is unreliable since much of what we know today is based on theories and postulates, and thus cannot be objectively verified. As such, naively accepting what science tells us is putting too much faith in scientific knowledge. The basic premise of scientific research is in the formation of hypotheses, and although scientists seek to prove their hypotheses through experiments, many hypotheses cannot be objectively proven. This is mainly due to the fact that much of what science deals with is either the very large or the very small, and thus cannot be directly observed. However, despite this, we still have unflinching faith in science, often treating mere scientific theories as absolute facts. For example, J. J. Thomas merely postulated that electricity is conducted by electrons; till today, no one has actually been able to observe electrons conducting electricity. Despite this, schools still teach this theory as the absolute truth, without clarification that it is actually just a scientific model that scientists have devised. Scientific textbooks preach that electricity is conducted by electrons without any room for doubt. As such, it might seem that we might have excessive faith in scientific knowledge, unquestioningly accepting what scientific knowledge tells us.

However, although scientific knowledge is mainly made up of theories, this need not mean that science is unreliable. Scientific knowledge is built upon through consensus-seeking, and thus improving its reliability. As such, the faith we place in science need not be excessive since it is justifiable. Science is centred on discussions and debates, which allow scientists to come together to express their own opinions and experimental results. This process of consensus-building makes up for the subjectivity in science, since through this process, scientists can point out each other's blind spots, and reduce the subjectivity of theory that is formulated by a single person. For example, Darwin's Theory of Natural Selection and Gregor Mendel's Pea Experiment highlight different aspects of evolution. Although on the surface, they might seem to be conflicting theories, the process of consensus building managed to marry both together, resulting in Neo-Darwinism, which provides a more complete perspective on evolution. As such, it can be seen that the discussion process in the acquisition of scientific knowledge serves to make science more reliable. If the reliability

of science can be adequate, our faith in science is justifiable and should not be seen as excessive. Thus, we are not placing too much faith in scientific knowledge.

Additionally, the scientific method provides a dynamic and robust framework to ensure that experiment results are accurate and not fraudulent. This also justifies our faith in scientific knowledge since theories in scientific knowledge are often postulated from facts that are backed by experimental data. The scientific method requires the experiments conducted by scientists to be reproducible. This allows scientists to check on each other's work and thus improve the reliability of the data. This checking mechanism allows for frauds to be uncovered, thus preventing scientists from fabricating results and deceiving the public. For example, the infamous stem cell research by Korean scientist Hwang Woo Suk could not be reproduced. This resulted in investigations into his work and uncovered the fraud that he committed. Thus, this shows that the scientific method provides a sound framework for experiment data to be verified and thus allows for faith in scientific knowledge. As such, our faith in scientific knowledge is justifiable and thus not excessive.

Moreover, we do not blindly believe in scientific knowledge. There are instances where we judiciously question the theories put forward. This is especially evident in areas where no proof can be offered, such as cosmology. The Big Bang Theory, although formulated a long time ago, still remains a theory till today because there is no concrete, tangible proof. As such, most people still take the theory with a pinch of salt. Additionally, the fact that a theory can be disproven once new experimental results surface shows that we are not putting too much faith in science. In fact, most of the theories that we accept as truth nowadays have been around for a long time without being disproven. This shows that they are viable models for our world, and can thus be accepted as an accurate depiction of our world. However, once opposing results surface, the old model would then be discarded, and new models would be proposed to accommodate the new findings. The atomic model has been revised several times from the initial "plum pudding model" to reach the current electron orbital theory. The ease with which old models and theories can be discarded and replaced precisely shows that we are not putting too much faith in scientific knowledge. We are wary that scientific knowledge is always changing and revolving to accommodate new findings and provide a better representation of the world. Thus, we are also critical of scientific knowledge and not putting too much faith in it.

In conclusion, although it might seem that we are over-reliant on science in explaining the world, such faith in science is not misplaced as science is generally reliable. Also, we do maintain healthy scepticism for scientific theories, allowing them to be replaced if the need arises and thus ensuring that science continues to progress.

Marker's Comments:

Overall, this essay shows knowledgeability of very good depth of thought, with clear and cogent argumentation, well-backed up by apt and developed illustration.

However, the (philosophical) issues broached in the opposing view in paragraph 2 are not coherently presented, with several distinct points conflated.

Referring to paragraph 3, the counter-argument, while making a strong and valid point in its own right, does not quite provide a reply to the opposing view; rather it responds to a different problem: that of inaccuracy and bias.

Excellent focus on the question throughout – keep this up!

Discuss the view that too much faith is placed in scientific knowledge.

essay 4

Xu Hui | 13S06Q

"Religion can purify science from...false absolutes," warned Pope John Paul II. Scientific knowledge, being a body of knowledge attained through scientific inquiry that is constantly updated, was thought by the Pope to be imperfect. To some, this may seem to be a statement undermining the reliability of science. Ever since the Renaissance, science has proven its worth by purging our belief systems of numerous superstitions and finding cures for countless problems faced by human beings. As science becomes more widely understood, the more it benefits human well-being, the more faith people put in it, and the more the public believes in the potential of science to unleash the power of human beings to control their own fate. However, have people put too much faith in scientific knowledge, to an extent that is beyond the degree of reliability and trustworthiness of science? While science, as a noble pursuit of truth, deserves a certain degree of faith on the part of people, society as a whole tends to overestimate its credibility as well as its power to improve our lives.

It has to be acknowledged that the objectivity and meticulous procedure of scientific inquiry justify some faith that people put in scientific knowledge. Unlike the subjectivity and normative nature of religion, scientific knowledge is obtained through an objective and meticulously planned procedure. After acquiring a large pool of experimental data or observation, scientists analyse their empirical results and deduce patterns that most elegantly explain phenomena. The reliability of scientific knowledge can be further ensured by collaborative inquiry by the scientific community, where they question gaps in one another's findings. In today's world where advanced technology allows fast and efficient communication and sharing of results by scientists, the reliability of science has increased by the frequent cross-checking within the scientific community. Given this, and together with the vast benefits that science has already brought to society, it seems that scientific knowledge is worthy of the respect and trust people put in it to better understand the universe and provide a brighter future for us.

Nevertheless, people may place too much faith in science as it may contain false assumptions. New scientific knowledge is obtained through numerous trials and errors, and the initial theory may not be correct as it can contain false assumptions made during scientific inquiry. The damaging effect of the false assumptions of scientific knowledge is most evident in the biomedical field in which people have placed too much trust. The thalidomide disaster is one such example. Marketed as a mild sleeping pill, thalidomide was assumed to have no side effects on even pregnant women although there was no stringent drug testing to study this possibility. After authorities in Canada and twenty European countries approved the drug, the drug resulted in thousands of children being born with malformed limbs. This disaster shows clearly how dangerous unfounded scientific knowledge can be to society and the need for people to be wary of using products made by newly discovered scientific knowledge instead of trusting them entirely.

In addition, the need for society to examine the faith put in scientific knowledge becomes more pressing nowadays as scientific fraud becomes more prevalent.

Scientists are not perfect and some of them with weaker moral fibre might choose to pervert science to suit their own interests. Faced with the desire to publish papers in prestigious journals to earn fame and glory and pressured by funding organisations to do so, some scientists have fabricated or modified experimental data to suit their hypotheses. In a survey conducted on scientists, 2% acknowledged anonymously that they had intentionally manipulated experimental results. The cases of scientific fraud that are red-flagged are merely the tip of the iceberg. Therefore, it is reasonable to say that some people who are unaware of the dark side of the scientific community have placed too much faith in scientific knowledge.

Furthermore, many place so much faith in the power of scientific knowledge to change lives for the better that they neglect the equally important power of humanity. Humans will be no better than machines if we allow ourselves to be ruled by science and technology. In the study of genetic modification, for instance, many people are fascinated by the idea of improving our genes. This leads to the serious danger of eugenics, which can be traced back to the fanatical belief in the capacity of scientific knowledge to provide us with a better future. In fact, society will be altered beyond imagination if people, instead of striving to do their best and overcoming various challenges in life, turn to gene therapy for an easier way out. Hence, devoted believers in science indeed have to adopt a cautious attitude towards the promise of science and the extent to which science can improve human lives.

Another case to justify the point that placing too much faith in scientific knowledge will compromise human endeavour is the Green Revolution. While innovating new technology to improve crop yield is a possible way to tackle the issue of world hunger and food shortage, believers in scientific knowledge fail to understand that human effort may play a more significant role. While enhancing seeds appears to tackle the problem, putting in effort to achieve a more equal distribution of food is actually a better way to address the root cause. Since people sometimes trust the power of scientific knowledge while neglecting the power of collective human effort and turning to science to solve almost every problem, they have put too much faith in scientific knowledge.

All in all, although the objectivity and trustworthiness of scientific knowledge cannot be denied, people nowadays tend to place too much faith in the reliability of science as well as its power to improve human lives. A cautious attitude towards the role of scientific knowledge in our society has to be adopted so as to make scientific knowledge a blessing rather than a curse to mankind.

Marker's Comments:

Excellent clarity and focus on the question throughout with good breadth and some evidence of thoughtful application of ideas. Well done!

'A good government needs to make unpopular decisions.'
Do you agree?

essay 5

Koh Kit Shaun Tommy | 13A01B

With the conclusion of the Republican and Democrat electoral primaries, both candidates for the US presidency, Romney and the incumbent Obama, proceed to the next stage of campaigns which will ultimately see one of them elected into office. As both candidates strive to endear themselves to the American public and convince voters that they are the best for the job, there has been an alarming departure from rational, objective policies to more populist policies. The charting of such a direction in which the government is recoiling from making unpopular decisions is a concern not just looming over the US elections, but also over governments all around the world.

Some may argue that it is the very nature and basis of democracy for the government to be elected by the people, for the people. As an extension of this fundamental principle, they claim that governments should always make decisions that are popular with society as it is only then that a government can have the mandate of its people and represent their views. Such individuals point to unpopular decisions such as the raising of taxes in the United States or the tightening of government fiscal policy in the countries of Portugal and Ireland. For governments to fulfil their responsibility, individuals of this view believe that they should act in accordance with the majority's view in society.

However, such a view is myopic as it does not consider the government's responsibility to its people to create and sustain a society that is not just agreeable to its people but one which is stable and secure. Considering how the public might not be fully in the know about threats that society faces or the considerations involved in changing government policy, a good government still needs to make unpopular decisions. In the midst of economic collapse, the governments of Germany, France and Italy have a duty to their citizens to make decisions that are in the best interest of the economy even if they are not popular. Merkel's German administration, the Christian Democratic Union, recently avoided committing to a combined undertaking of government-backed securities under a joint-Eurobond scheme due to local political pressure. The inability of governments to take the unpopular path is one reason why little improvement has been made in the European Financial Crisis. Hence, it is clear that to protect the interests of society, governments, which are privy to information that the public may not have, have the responsibility to make unpopular decisions that are in the interests of the nation.

Others argue that a good government needs to make popular decisions so that the interests of various groups of society are recognised and protected. These individuals claim that in illiberal regimes like Egypt and Libya in the past and in the continuing conflict in Syria involving Bashar Assad, the popular decision of handing power over to the rebels would be in the best interest of society as a whole. Even in democratic countries, proponents of this school of thought claim that there are various groups in the community being marginalised. Some advocacy groups in the United States protested the shooting of Trayvon Martin, a black teenager in Sanford, Florida, and

argued that the government did not consider the popular view of society, which was an increasingly inclusive and anti-racial one in the Sanford community.

However, it must be recognised that what is popular is not necessarily in the interests of all groups in society or society as a whole for that matter. Considering the Trayvon Martin case, while inclusiveness is popular in the Sanford community, there remains strong racial fault lines in the American Midwest where communities would much rather be purely white. We see a clear disparity between what different individuals consider popular and what is in society's best interest. For the simple reason that what is popular can never be fully determined, governments with the duty to be a guiding compass for the people should never base their decisions on popularity. In fact, we see how unpopular decisions made by governments have very often led to greater social inclusiveness. Under Julia Gillard's administration, Australia recognised the rights of the Aborigines and granted them ownership over the land that their ancestors lived on. While this might not have been the popular decision at that time, it was an important step forward in achieving greater social inclusiveness. Even in illiberal regimes, the popular decision in favour of democracy and independence from Western forces is not the panacea for peace and stability. Unstable and fractured early democracy in Egypt and Libya reflects how the same popular decision has led to stagnation in the political process. Perhaps, ironically, the unpopular decision to have Western forces to stay and support the creation of a stable society would have been better for these regimes.

Another claim supporting populist policies is that doing what is popular will often solve the problem quickly and prevent disagreements in society stemming from objection to government policy. The British media publicly ridiculed the British education system for not providing equal opportunities for students which, accompanied by a weak economy, contributed to widespread riots in London. The media argued that if the Brown and Cameron governments would legislate universal education and expand public sector jobs for the graduates, social order could be preserved and maintained. The popular decision in this case would arguably solve the problem and prevent further rioting or dissent.

However, we must recognise that governments have limited resources to meet unlimited wants. The channelling of additional resources to education will have the effect of diverting resources from somewhere else. The victim of a universal education bill or the expansion of the public service may well be the transport system or the National Health Service. Governments who persist with populism ultimately realise that the implementation of popular policies without consideration of sustainability results in the accumulation of debt that will be a burden society has to bear in the future. In the midst of the current economic recession, the consequences of popular policies like those concerning the welfare state and free healthcare in Britain have resulted in the British government being largely in debt with the extended impact of affecting unemployment and the standard of living as Britain tightens her fiscal policy. Countries with governments willing to make unpopular decisions on the economy such as Singapore and Switzerland have much better stability due to reserves that are kept by the government. While policies like proportionally lower government expenditure, as in the case of Singapore, may not be popular, the ability of these countries to maintain stability in the midst of global recessions has been beneficial to the public. Even in the Nordic states with an enviable model of welfare benefits and

social security, their high taxes were first met with social discontent and citizens only fully appreciated the policy after it was fully implemented. As such, due to the need to responsibly spend limited resources to ensure sustainability, good governments need to make unpopular decisions.

Additionally, good governments need to make unpopular decisions in the interest of the future development of society. Much akin to Singapore, residents of Hong Kong were initially up in arms about the widespread construction of the Hong Kong MTR. However, the government's willingness to take the unpopular path has reaped benefits for Hong Kong in the long run. The Hong Kong Mass Transit Railway now runs a reliable train service connecting residents of Lantau, Kowloon, the New Territories and Hong Kong Island. Society often does not appreciate the long-term impact of present-day changes and it is important for governments to make informed decisions for the future, to ensure that society is always developing and never remaining stagnant. In Singapore with the "do what is right and not what is popular" policy, the government has often taken a long-term view on societal development with policies like the Land Transport Masterplan or the Selective En-Bloc Redevelopment Scheme (SERS), ensuring that society is always advancing.

Good governments also need to make unpopular decisions when it comes to investment and industry. Especially in countries where there are strong political lobbies by various industries for government support and investment, governments need to ensure that it is not just the loudest or most popular industries which get the benefits. In the United States with a particularly strong oil and coal lobby, the government may need to make the unpopular decision to channel more resources to environmentally sustainable alternatives such as hydropower, wind power or natural gas. This may not be the most popular thing to do, but it allows for the government to tap on new developing industries and protect the environment at the same time. In fact, the reason for the unpopularity of such a decision, the loss of jobs in the oil and coal industry, may not be valid in the future especially since investment in new technology offers opportunities for skills upgrading and a more productive workforce.

Unpopular decisions are also made when it comes to the legislation of laws and social policy. In this area, good governments need to make unpopular decisions to ensure that society is stable and functioning. An example of this is the New York Metropolitan Transportation Authority's cleanup efforts in the '90s under the influence of William Bratton's broken windows theory. While the individuals who cheated on fares and drew graffiti on train carriages believed that these efforts were unnecessary and were just challenging what was social convention, reforms to the New York subway in those years were crucial in making the streets of New York safer for everyone.

Ultimately good governments have a responsibility to their people to act in a responsible manner to best meet their duty of care. In cases where what is in society's best interest may not be popular, it depends on the government's moral courage to take the path that it believes will bring about the best for citizens of that country. It must consider various perspectives, the short and long-term impact of policies and make a decision as to which direction is in the best interest of its people. While these unpopular decisions need to be responsible ones and cannot be oppressive such as those in illiberal regimes, it is more often than not that dissatisfaction with such decisions will end in the future once the benefits of a policy are seen. It is thus the government's responsibility and

the mark of a good government to make an unpopular decision today so the benefits will be enjoyed tomorrow.

As the American public closely follows the campaigns of Romney and Obama, perhaps it should not be the campaign promises which capture their attention but rather what is lacking from their agendas. Both candidates should be judged on their willingness to depart from a partiality to populism, to make hard decisions which may not be welcomed now but will be popular in the future. Maybe then will we reach a point where we can hope, a point where we can believe in change, a point where the future of America is brave and bright.

Marker's Comments:

Tommy, your impressive knowledge of current and political affairs makes this essay a pleasure to read. Good, well-considered arguments are clearly evident. However, the ending of content paragraphs with examples, and not a linking statement addressing the question, makes the transition to a new paragraph rather abrupt. Excellent command of the language.

2012 Year 5 General Paper Promotion Examination

'A good government needs to make unpopular decisions.'
Do you agree?

essay 6

Boh Ze Kai | 13A01B

Oscar Wilde famously remarked, "Democracy [is] the bludgeoning of the people by the people for the people." In an age of democracy, where popular opinion holds sway over the political mien of most countries, it is hard to refute that governments are often forced to make popular decisions over right decisions to ensure their place in the country. A prime example would undoubtedly be Japan, where voter margins are notoriously slim and a single unpopular decision would mean the loss of power, leading to an almost ludicrous rise and fall of politicians at almost the rate of one per year. A quick perusal of political history proffers a cornucopia of further examples, ranging from the fall of the Shah of Iran to the pendulum-esque right-left swing of Israeli politics. In such a situation, it may be argued that bad governments make popular decisions and conversely, it takes a good government to make the unpopular ones. However, ultimately, I believe that governments ought to make popular decisions, along with unpopular decisions, as long as they are the right decisions.

Firstly, it is impossible to refute that some governments do make popular decisions at the expense of the right decisions. While democracies are prime examples, even dictatorships and monarchies require the use of populist political instruments in order to rally society to its banner, affording it the political capital to effect its will. Often, this will merely mean staying in power, and it is an ineffective government which chooses to cling to dominance through populist appeasement. In 1973, during the Yom Kippur War in Israel, this was demonstrated clearly by the intentions of Anwar Sadat, Egypt's President, to stay in power in the face of economic crisis and mounting insurrection. Here, war was used as a populist political tool, galvanising the Egyptian masses under the pretext of irredentism and just war, giving them a public enemy on which to focus their woes. Ultimately, however, its pernicious role could not be ignored. Through ravage and devastation, each country suffered unspeakable casualties, and Egypt's economy further suffered from the growing military budget. Clearly, popular decisions are often influenced by the political capital one is able to derive from them, regardless of the destructive effect it may have on the country.

However, to take no heed of popular sentiment is arguably worse. Popular sentiment and opinion represent the needs of a population. To disregard them would be to impose one's misguided will on the people. Ultimately, the government exists to fulfil its social contract with the masses and it is only by providing for the wants and needs of the people that this can be achieved. In fact, to continuously disregard popular sentiment runs the risk of the government degenerating into a kleptocracy, where governments take from the people, often under the aegis of the "good of the nation" without giving back sufficiently. This was especially evident in China, where widespread repression and suppression caused a disregard for populist sentiment which manifested as a series of draconian laws and rules that were forced upon the people. This culminated in a saturnalia of government-sanctioned rapine known as the Five-Year Plan where the government's insatiable hunger for industrialisation led to the requisition of household metals to be melted unprofessionally into ultimately untenable and useless steel. This had the effect of destroying livelihoods, and even

causing a period of unparalleled death and malnutrition known as the Great Famine. Indeed, the government which does not function for the needs of its people, ignoring their cries and ululations, cannot be a good government.

In contrast, governments have demonstrated the ability to make informed decisions based on popular opinion. With appropriate consideration, taking heed of civilian feedback allows governments to enact efficient and relevant policies by targeting the specific needs of the community. Being closer to the epicentre of the impact, the general public is often able to offer insights into unforeseen circumstances. For instance, the British government was prepared to surrender the Falkland Islands back to Argentina, subjecting the inhabitants, who while ethnically Spanish had been British citizens for their entire lives, to a change of citizenship. While this proposal was initially approved in Britain, a subsequent referendum in the Falklands overturned this decision. Hence, the will of the people to not be subjected to foreign incursion and to not have their rights to citizenship removed was overlooked by the British government and only reaffirmed through the expression of public opinion. Clearly, making informed decisions requires information that the government may only be able to attain from the masses, necessitating the enactment of popular decisions in some instances.

Yet, history has shown that some of the best decisions were likely to be the most unpopular decisions ever made. Ultimately, while the public is a good source of information, it is by no means authoritative. Political decisions often require the absolute comprehension of a specific issue, be it economy or war, one which only experts may be allowed to give. Furthermore, a single decision may have far-reaching impact which may significantly outweigh the short-term impact which may appear far more serious on the surface. One example of this is William Gladstone, the British politician who began the end of British colonialism. Despite facing stiff opposition from the public, especially with regard to India, widely considered the Crown Jewel of the British empire then, Gladstone began a series of reforms to which we can now credit the independence of almost fifty nations worldwide. To a public blinded by imperial prestige and the myth of invincibility, this monumental decision, the ending of the unyielding tyranny of colonial power, was perceived as an affront to imperial dignity. As such, it certainly does take a courageous government with good insight into the true needs of the people to enact unpopular change.

Furthermore, to make a popular decision means bowing to the will of the majority. This conversely means a repression of the will of the minority through the tyranny of the masses. This alienation of a possibly significant portion of society means a disenfranchisement of a group of people, now subject to the vagaries of the majority. In France, for example, Francoise Hollande's scheme to close down Gypsy camps and repatriate members of the Roma community to Romania has met with some degree of approval. These Roma, many who speak French and have spent countless generations roaming France, have been persecuted and effectively exiled from what is truly their home. As a minority group, often poor and uneducated, they find few voices for their cause. The denial of representation of the minority may effectively emasculate them, rendering their needs and desires subordinate to those of the majority who benefits from popular decisions by the government. It is then that a good government must be prepared to make an unpopular decision for the good of these people.

It is thus evident that myopic dedication to any particularly inclination of popular opinion is ineffective. Ultimately, one cannot judge a good government by whether or not it makes popular decisions, but whether or not it is able to adequately weigh the pros and cons of making such a decision. Only by striking a clear balance is a government able to demonstrate its adroitness. Indeed, the need of a government to make unpopular decisions can in fact be influenced by a variety of factors which make such decisions unpopular, demonstrating the malleable fickleness of public opinion.

The education level of the citizens is one such important factor. A well-educated population is often more able to comprehend the dynamic interplay of political cause-and-effect and thus offer better advice and be generally more receptive to a good decision which has a seemingly pernicious short-term impact. Conversely, an uneducated populace tends to be filiopietistic, clinging to the vestiges of tradition and stymieing necessary change. For instance, in Bhutan, economic reform is blocked by countless uneducated peasants who fear its effect on their traditional lifestyle. As such, Bhutan remains a poor nation, and many of its citizens, while arguably happy, remain woefully in abject poverty. As such, the lack of education can be seen as a stumbling block to good governance, decreasing public support of correct, but often incomprehensible, policies to the masses.

Another factor is the politician himself. Often, whether or not a policy is well-received is independent of its real effectiveness and dependent on the personal charisma of the leader. An effective but unpopular leader will draw ire even with the most excellent of policies while a popular, charming leader is able to get support for any harebrained scheme he is able to concoct. One example of this is in Imperial Japan, where the cult of the emperor was strong enough to convince the Japanese people to declare war against the world in WWII, subjecting themselves to economic devastation and almost brutal massacre. Here, one is able to utilise popularity to make popular but bad decisions through the use of one's personal following.

The last, but by no means ultimate, factor is the media. As the herald of information, the manner in which this information is presented holds great sway over the minds of men. Indeed, the political slant of a certain newspaper or news network is often more than capable of supporting or preventing political decisions by influencing the public mindset. In the Russian Federation, previously Putin-slanted media outlets changed allegiance, resulting in a dramatic fall from a previously almost 80% approval rating. This further prevented Putin from effectively making some arguably good decisions, such as the effective arrest of Pussy Riot, a socially disruptive protest band. Clearly, the inclinations of the media do affect the inclinations of the people.

In conclusion, good governments must be prepared to make unpopular decisions. However, popular decisions still remain relevant and public opinion is unfortunately fickle and prone to bias. It may thus even be argued that a good government ought to be able to turn an unpopular decision into a popular one. Ultimately, however, due to the nature of global politics and the ever-increasing trend of the emphasis on civil liberties and public opinion, it may be hard for even good governments to make unpopular decisions, at least not on a quotidian basis. As Winston Churchill put it, "Democracy is the worst form of governance, except all those others that have been tried." Perhaps it is time we find a new system of governance more capable of blending public opinion and necessary action to serve our needs.

Marker's Comments:

Ze Kai, a well-considered response on the issue, with numerous examples cited that show your strong grasp of current (and historical) affairs. Nice use of quotations, and you also display a strong command of the language. However, do learn to provide qualified responses so that you do not contradict yourself when presenting opposing arguments.

2012 Year 5 General Paper Promotion Examination

'Above all, the arts teach us to be human.' Do you agree?

essay 7

Ting Shi Xun Gareth I 13S03F

To the pragmatist, the arts are something inherently useless with little value, and nothing more than an enjoyable pastime. However, as the modern world progresses far beyond seeking only economic pursuits, the arts have been given increasing attention by people all over the world. Oscar Wilde once said that the mundane, insignificant real world should model after art, because it is only in art that we can achieve beauty and perfection – and this 'beauty and perfection' can be seen not only through art's physical beauty, but its ability to teach us important values and principles at the core of being human. This is largely due to the ability of the arts to transcend man's emotional fetters to propagate important positive values, as well as reveal inherent truths about the human condition.

To some, the arts are completely worthless in this aspect – after all, how on earth can exhibits like tying a dog to a wall and leaving it to starve teach anything to anyone, let alone teach them to be human? Such extreme art forms by modern artists have been dubbed 'fringe art' by some for they are generally looked down upon by art critics. However, if we take a closer look at such artworks and try to understand the artist's intentions, we can see that even the most seemingly useless of artworks do have a thing or two to teach us about being human, too. The aforementioned exhibit by Guillerno Vargas, for instance, was explained to have revealed the underlying hypocrisy in humans because not one of the museum visitors who saw his exhibit bothered to call the authorities or police over the dog's supposed mistreatment, but was willing to upload photos of the exhibit online to criticise him. Such artworks thus reveal to us the flaws that we as humans possess, allowing us to realise the need to rectify them and try to be better people. Similarly, few would devise any learning points from viewing 'Piss Christ', a photo of a plastic crucifix submerged in a glass of urine, but upon closer inspection, reveals a decent representation of society and its gradual cheapening and commercialisation of Christian icons – which upon understanding, can encourage society to change its ways and treat religion with more respect.Thus, perhaps it is important to realise that at times, people are reluctant to accord the arts the value they deserve in teaching us to be human simply because they are presented in a manner that is too radical or extreme for viewers' tastes.

In addition to alerting us to the innate flaws in our human character so that we may strive to improve ourselves, the arts can also be an effective medium for propagating positive social values that are at the core of being human. For instance, Kevin Carter's Pulitzer Prize-winning photograph of a vulture lying in wait over a starving child in Sudan received much media attention because it brought to attention the desolate situation in third-world countries. The photograph evoked feelings of empathy in its audience, especially for people in poor countries. This is evidenced by how over hundreds of readers called The New York Times, which published the photograph, after seeing it, to inquire about the fate of the poor child. Their concern thus shows how the photograph was able to speak to people and propagate the positive human value of caring for the less fortunate.

Even in "shallower"art forms like pop music, the ability of the arts to teach us to be human is undeniable. Pop songs have often been used to address important social issues and encourage positive values such as equality for all. In the year 2011 alone, four major hits incorporating themes of homosexual rights were released. Kesha's 'We R Who We R' was written in the hopes of encouraging homosexuals to be comfortable with their sexuality. Lady Gaga's 'Born This Way' encouraged everyone to "rejoice and love yourselves today, 'cause baby, you were born this way' no matter if they were 'gay, straight or bi, lesbian, (or had a) transgendered life". Both P!nk and Katy Perry included a long scene of a gay kiss in their music videos for 'Raise Your Glass' and 'Firework' respectively, with the former telling them to "raise your glass because they were 'wrong in all the right ways'". The very fact that the arts, in this case music, are being used as a tool for positive social change is evidence in itself of their ability to teach us how to be human. Values like respecting differences and accepting one another for who we are are fundamental to humanity, as it is only through adopting these values that we may achieve progress for mankind as a whole. In fact, all the above four songs stayed on the Billboard Top 100 for more than two weeks each, suggesting that they received high radio airplay and would have been heard by many. Perhaps this is proof that not only do the arts teach us to be human, they are actually very potent tools for doing so.

Aside from encouraging positive values, the arts can also reveal to us startling truths about the human condition that are important for us to accept. Take for instance, Edward Munch's 'The Scream', an expressionist painting depicting a solitary figure clutching its face and screaming in agony. The art piece, while not having any significantly deep meaning or purpose, is a blunt expression of the existential horror and despair that we, as humans will constantly feel in our lives. Its popularity can be seen from its ubiquity in pop culture, adorning various mugs, T-shirts and posters, mostly due to how easily people can relate to it – everyone has felt the agony it expresses at some point in their lives. Another example is 'House of Leaves', an ergodic novel that took eleven years in the making by Mark Z. Danielevski. Its story of a young tattoo artist piecing together an unpolished book about a couple shifting into a seemingly haunted house with a corridor appearing out of nowhere, defying the laws of Physics, has the sense of being lost as an oft-repeated theme: the tattoo artist loses his sanity as he gets lost in piecing the story together due to his obsession with it; the husband, while exploring the labyrinthine corridor, gets physically lost in it, and the wife, in not communicating with her husband enough, becomes lost in her own insecurities. Even the ergodic nature of the book, which uses copious footnotes, appendices and strange typography, is designed to make the reader feel lost in reading the book. 'House of Leaves' thus reveals an inherent human condition – that we, as humans, tend to be lost in ourselves as we aimlessly go about life with our mundane, insignificant pursuits. Neither this nor what 'The Scream' shows about human nature is a flaw we can rectify, or a positive value we can adopt. Yet these are also important concepts, integral to understanding ourselves, which can very well be said to be the first step to being human.

However, despite all of these capabilities of the arts in teaching us to be human, some may still feel that appreciation of the arts is primarily accessible only to a select audience who are privy to the unique socio-historical context surrounding the creation of art pieces. Given this, they disagree that the arts have the ability to, above all, teach us to be human. However, what these critics fail to realise is that, despite all this, the

arts can still provide their audience opportunities to learn something about being human. For instance, viewers of Francisco Goya's 'Execution of the 3rd of May' will not randomly start feeling national pride, just as Goya intended, simply because not all viewers are Spanish or would have lived through the French Revolution. They can, however, through seeing the brutalities of war depicted in the painting, understand the benefits of peace and harmony and realise that all peace and harmony are what humans should seek to achieve. Thus, the arts do indeed teach us to be human, above all other things, because everyone will be able to derive insights from art works, regardless of their different cultural, social and historical backgrounds.

In conclusion, it is apparent that the arts do indeed teach us to be human above all. While the arts can be seen as a tool for advancing some other purposes, its one universal benefit that everyone can derive is to learn how to be human – either by realising flaws in our character that we can rectify, picking up positive human values, or learning inherent truths about the human condition. Perhaps this great benefit of the arts is an indication that governments all over the world should start paying attention to art development through subsidies or other means of support. While many look to the sciences for bringing us a better age, it may very well be the arts that do so – simply because they can teach us to be human.

Marker's Comments:

Well done! Your essay is organised and clear. Good clarification of what it means to be human. You can also think about how the arts teach us to be human – by showing, revealing, or shocking the audience.

2012 Year 5 General Paper Promotion Examination

'Above all, the arts teach us to be human.' Do you agree?

essay 8

Quek Qian Ying Jolene | 13A01C

In the preface to his novel, 'The Picture of Dorian Gray', Oscar Wilde commented that "all art is quite useless". In the pragmatic light of the 21st century, the arts have often come second-place to academia and technology, or simply been made use of as a tool to aid learning, to entertain or as artefacts of beauty. Amongst the various functions and purposes of art, I feel that the foremost and highest purpose of the arts is to teach us to be human. The arts, in its various forms such as literature, music, sculpture, paintings, dance and theatre, to name a few broad categories, have inculcated in us an appreciation for aesthetics and helped us to understand life and death, our roles in the grand scheme of things and made us think, thereby educating us on what it essentially means to live as a person.

Firstly, the arts, by portraying human nature and society, have taught us about who we are and what others are like, helping us understand each other. Literature, such as Harper Lee's 'To Kill a Mockingbird' and Elizabeth George Speare's 'The Witch of Blackbird Pond' have placed societal issues such as racial discrimination and minority persecution under the spotlight, enabling our understanding of the persecuted, and causing us to question our prejudices, thereby increasing our empathy for others who may appear different from ourselves and suffer as a result, while teaching us basic human kindness for other human beings. At a societal level, satirical plays such as Arthur Miller's 'The Crucible' have highlighted our ugly nature as a society in hunting down and destroying those who differ from us and whom we are afraid of. The ability of the arts to criticise, to touch us in places most raw and hidden, has enabled us to understand ourselves and our treatment of others, and in the process, led us to feel and empathise, concepts that are entirely human.

The arts have also taught us about life, our place in the universe and the brevity of our existence, and thus teaching us the very essence of our role on this Earth. Damien Hirst's 'For the Love of God', a diamond-encrusted skull, has been a famous sample from the genre of art known as memento mori, in which he juxtaposes the hardness and strength of man's glittering treasures and his own fragile state. Other genres such as Danse Macabre ('the dance of death') capture the constant progression of man towards our inevitable end. Shakespeare's 'Macbeth' warns us: 'Life's but a poor player who struts and frets his hour upon the stage, and then is heard no more.' The reminders of our vulnerability, of how prone we are to falling over the edge of time, make us aware of the preciousness of life, and the need to make our existence fulfilling and fruitful. By urging us to reexamine ourselves, and the things we hold dear in the light of the short span of our lives, the arts force us to come to terms with who we are, hence educating us on what it means to be human.

While the arts can remind us of our eventual and inescapable demise, they also teach us to celebrate life, and beauty. Vivaldi's 'Four Seasons' and Monet's paintings of light-dappled nature are testaments to the wonder of the natural world, and remind us of the things in life that are truly lovely and worthy of remembrance. Even the production of the arts itself teaches us about ourselves, as recognised by education

systems and governments all over the world. The American Grade Schools Act upholds the arts as necessary for the cultivation of the individual, and in just the past decade, Singapore has spent approximately S$1 billion investing in museums. The arts have long been cited as an outlet for expression, and its various modes such as dance are evidence of the capabilities of the human body to move in amazing ways. The various emphases on the arts by schools, governments and most people are proof that the arts are important to us, and the resulting aesthetic appreciation that we derive from many forms of the arts teaches us to find beauty in life, and hence help us to enjoy being human and being alive.

Some may argue that some forms of the arts are worthless, and are merely excuses to earn money while not contributing to culture, education or society. The arts have increasingly been seen by many as abstract, incomprehensible or merely random. This sentiment was summed up by an artist who spray painted a urinal and signed it 'R. Mutt', which sold for a large sum of money, in an attempt to convey how even art done hastily and without any real meaning can still be taken by many as part of a lofty concept or high ideal of 'art'. However, this is an irony, as he ultimately used art to convey his frustrations, and the work of art, which was intended as provocative or inspiring, ultimately did not reveal meaning. Perhaps this is the greatest value of art: to provoke thought, and teach us to find meaning, which are attributes of humanity that make us a distinctive race. The arts, as an expression of our most innate or superficial feelings, are valuable in teaching us to reflect. Rodin's sculpture of 'The Thinker' has been proven by scientists to actually inspire analytical thought, while Picasso's 'Guernica' has been used as a protest against the senseless and thoughtless killings brought about by war. The arts force us to think, to question and wonder and strive to understand, and this process makes us human. Furthermore, we cannot judge a piece of work simply by how it appears. Ernest Hemingway, known for his repertoire of many classics, considers his best work to be a story consisting of six words. The value of the arts lies in what each of us is able to find meaning in, which is its greatest purpose.

The arts matter to us in many ways. It allows expression. It provokes thought and helps us to remember who we are. Above all, the arts teach us to be human. To deny its role in shaping us as people, as a society and as a civilisation would be to do a great injustice to it.

Marker's Comments:

Jolene, this is an interesting read. Highly engaging. Obviously you have knowledge on the subject matter. Good choice to attempt this topic.

'Protecting our environment is a futile pursuit.' Discuss.

essay 9

Teo Hoong Chen | 13A03A

Former US President Jimmy Carter once said, "I want to make it clear,if there is ever a conflict (between environmental quality and economic growth), I will go for beauty, clean air, water, and landscape." Protecting the environment often comes at such economic cost that many consider that the benefits from protecting the environment do not outweigh the cost, and it is therefore futile. Political barriers and the fact that climate change is now irreversible are also reasons cited by detractors of environmental protection. However, this essay will argue that there are many ways to deal with the political barriers and that environmental protection can generate significant economic benefits and improve the quality of life, making it not a futile pursuit, despite the difficulties involved.

Divergent national agendas have led many to conclude that it is politically impossible for the world to agree on a binding environmental protection agreement. Without it, a tragedy of the commons would result and individual environmental protection efforts would prove futile. After the Kyoto Protocol expired, efforts to enact another greenhouse gas emissions limit among countries have come to naught. In a scene replayed at talks in Copenhagen, Durban and Cancun, developed and developing countries continue to disagree on who should be responsible for more of the cuts in greenhouse gas emissions. Given the stubborn refusal of many countries to yield on their position in order to reach an agreement, a tragedy of the commons is fast developing. The cost of pollution, in the form of rising global temperatures and sea levels as well as more extreme weather, such as droughts in the USA at the moment, is not borne fully by the polluters themselves but instead is a burden shared by the world. No single polluter has clear incentives to reduce their pollution, therefore pollution and environmental degradation continue unabated as the world suffers greater consequences. Due to the lack of international cooperation, many people feel that it is thus futile for individuals or even individual nations to protect the environment as the impact of pollution from others will continue to affect them, as well as the whole world.

Despite the political difficulties on the international level, individual nations and regional groupings can still make a significant contribution to environmental protection, allowing it to become a fruitful rather than futile attempt. According to Dr Eloi Laurent of Sciences Po Paris, European Union (EU) policy has influenced the world and created a global impact. Given its position as one of the world's largest and most wealthy consumer bases, the EU has taken advantage of this to roll out regulations on the efficiency of motor vehicles and their emissions. Carmakers seeking to enter the EU market must meet these requirements, so companies such as Toyota and Ford are forced to develop new technology to meet these regulations. Such environmentally-friendly technology is then applied to vehicles from the same manufacturer sold in other countries, for the sake of product consistency. Besides influencing environmental policies of other countries, the EU has, in a tangible way, reduced motor emissions worldwide through its unilateral action, without being bogged down in lengthy and often futile international negotiations. As we can see, if thoughtfully planned and

crafted, individual nations and regional groupings can achieve the goal of greater environmental protection through their own environmental policies. Environmental protection can therefore be a fruitful endeavour.

Critics of "tree-hugging" environmentalists also claim that it is too late for mankind to do anything about the onset of global warming and climate change. In such a scenario, many contend that a conservationist approach, where humans utilise natural resources to the fullest extent possible, would be the better option. Many of them would undoubtedly agree with the economist John Maynard Keynes' famous saying, "The long run is a misleading guide to current affairs. In the long run we are all dead." Given that the concentration of carbon in the atmosphere has already reached 393 ppm CO_2 as of April 2011, way beyond the safety threshold of 350ppm prescribed by scientists from the United Nations (UN) Intergovernmental Panel of Climate Change (IPCC), many scientists have likened this to a hurtling freight train, which would end in tragedy even if it is stopped immediately. Indeed, it is true that even if the world were to stop all carbon emissions immediately, ominous phenomenon such as sea level rise, melting Arctic ice and global warming would still continue. Many people baulk at the task of reducing carbon emissions given Al Gore's famous hockey-stick model showing exponentially rising emissions. The enormity of this task and the inevitability of environmental damage lead many people to conclude despondently that environmental efforts are futile even if attempted, because it is simply too late to effect any meaningful change.

However, on a small scale, it has been proven that conserving the environment can have immediate, tangible economic outcomes. While world leaders squabbled endlessly in climate talks, communities in Thailand have quietly taken things into their own hands. As Benjamin Franklin once said, "When the well is dry, we will know the worth of water." Depleting fish stocks in the mighty Mekong River severely affected the livelihoods of numerous Thai fishermen, driving home Franklin's point about scarcity, prompting them to stop taking the environment for granted. Together with non-governmental organisations, fourteen villages in Northern Thailand participated in the Thai Baan programme by setting up conservation zones around the Mekong. Villagers took turns to conduct night patrols, with hefty fines of thousands of Baht for poachers caught. Innovative methods such as having monks tie saffron robes to trees to ordain them were also used to deter loggers. Fishermen of villages like Ban Muang Choom observed that fishes were able to spawn inside the conservation zone, aided by the holistic protection of the surrounding ecosystem, resulting in significantly increased fish yields outside the conservation zone. Given the concrete economic benefits of environmental protection, the villagers are thoroughly convinced that it was a fruitful pursuit. This shows that while communities cannot play a significant role in reducing global carbon emissions and alleviating the problem of climate change, they can still make a tangible and significant improvement to their own communities.

On a national scale, given political will, countries can protect their environment and achieve economic outcomes while maintaining their standard of living. The small Himalayan nation of Bhutan has resisted the exploitation of its forest resources unlike nearby Nepal, requiring permits for any tree to be felled, even for firewood or religious purposes. It has aimed for a 'no net loss' policy towards forest cover, unlike rampant deforestation in Nepal and India. As a result, Bhutan has maintained a positive environment that has attracted many high value tourists, who must pay a levy in excess of US$200 per day. Not only has Bhutan gained significantly from

tourist income, it has also maintained its standard of living by preserving nature. To the Bhutanese people, environmental protection has been an immensely fruitful and meaningful pursuit. However, the unique position of Bhutan in having a stable political system, effective governance and policing as well as popular and political will to enact strict environmental laws may mean that not every country can do the same. Nevertheless, it is still an example of how achieving fruitful outcomes from environmental protection is possible on a national scale so long as certain conditions are present.

In conclusion, environmental protection need not be a futile pursuit if nations and communities avoid being bogged down by international politics and instead focus on effecting change within the limits of their ability and control. Political will and public support can make national environmental protection a fruitful pursuit. As former US President Ronald Reagan once said, "There are simple answers; they just are not easy ones." While environmental protection may be difficult, it can and will produce positive outcomes if we stop dwelling on what we cannot accomplish and instead channel our efforts towards what we can do.

Marker's Comments:

Hoong Chen, the value of your essay is not so much that you argue well and have a myriad examples to draw on –it is that you actually offer us insights into the issue of environmental protection. Keep this up!

2012 Year 5 General Paper Promotion Examination

'Technology has failed to simplify our lives.' To what extent is this true?

essay 10

Yew Ern Jeremy | 13A01B

"Please make a reservation for two at my favourite restaurant for tonight, Siri." 30 years ago, this would have appeared like a scene from a science-fiction novel; fast-forward to the 21st century, and it is an advertisement for the voice-activated virtual assistant featured in the iPhone 5, the latest flagship product in Apple's smartphone line. Indeed, such advanced technology in many smartphones today epitomises the ability of technology to simplify our everyday lives – to say that technology has failed to simplify our lives would be an exaggeration, to say the least. However, technology does not only include smartphones – advancements in other fields such as biotechnology, nuclear technology and the Internet have had direct impact on our lives, making life more complex or creating a host of new ethical dilemmas that make life more complicated. Hence, technology has simplified our lives in some aspects, but it has also brought about unprecedented complexities to other aspects.

Technological enthusiasts would point to communication and transport technology that has made connecting and commuting infinitely more convenient and effortless for everyone. Conversing face-to-face with a distant family member or loved one is as easy as a press or click of a button on Skype or Facetime; no longer do we have to go through the troublesome process of writing a letter or posting a telegram, like our forefathers did. Travelling between countries has not only been made quicker and safer due to recent improvements in aeronautical technology, even immigration has been made smoother with the advent of biometric passports, thumbprint and facial recognition technology, etc. Of course, many of these simplifications come at a cost, be it surrendering private information to third-party corporations or putting our lives in the hands of someone else – a sacrifice that most deem worthwhile. However, these are just a few examples of technology that have simplified our interaction with each other and commuting from place to place; there are many significant fields of technology that have instead made our lives complicated.

One aspect in which technology has complicated life is in its creation of unprecedented moral and ethical dilemmas, particularly in the field of biotechnology. Albert Einstein once remarked, "It has become appallingly obvious that science has exceeded our humanity." This was in an age where the advent of nuclear technology used in warfare was imminent; one wonders what Einstein would have to say if he lived in the 21st century, with all its possibilities in the fields of cloning, abortion, euthanasia and organ transplantation. His quaint notions of morality would seem outdated in today's context of rapid technological advancement, which has essentially given Man the power to play God. But with great power comes great responsibility, and responsibility has been stretched and challenged repeatedly by biotechnology – the ethical dilemma presented by the conflict between Pro-life and Pro-choice camps is an excellent manifestation of technology's complicating effects. Pro-choice proponents would argue that the mother's as well as the dying man's right to choose is sovereign; pro-life proponents would point out the sanctity of human life, and the threat of the "slippery slope" of euthanasia. I would point out the ambiguity of what is defined as "life"– is a baby considered alive at conception or a few weeks into development?

How many weeks (or months)? I would also point out the arbitrary qualifiers that different countries use to determine the eligibility of a euthanasia candidate – in 2011, the Netherlands amended its euthanasia law to include psychosocial factors such as "loneliness, lack of financial resources and social support network" in deciding if a patient is allowed to die. The cloning of humans is a theoretical possibility, invoking horrific visions of dystopian societies in which individuality and uniqueness are replaced with genetic engineering –"choice", if you will. Early detection of foetal abnormalities makes the married couple's life more complicated – abort, or live with the burden (and joy) of caring for a child with Down's syndrome? The patient with kidney failure faces the choice of being permanently attached to a dialysis machine, or seeking an organ transplant in China, conveniently oblivious to the source of the donated kidney. All these examples of complicated moral dilemmas that require a host of factors to be considered are far from simple, and it is precisely technology thathas put these choices in our lives.

Secondly, technology when used in an attempt to simplify our lives by solving a particular problem, can result in a host of new problems that further complicate our lives. For example, nuclear technology was seen as an alternative energy solution to meet the demands of the world's energy consumption – it resulted in the creation of the world's second most destructive weapon (the atomic bomb) and the development of the world's first (hydrogen bombs with the power of millions of atomic bombs). Indeed, the threat of nuclear warfare has left its indelible mark on global politics, in some cases fostering peace (theory of mutually assured destruction) and in some cases starting war (fears of Iraq stockpiling nuclear armaments). And of course, that is not the end of the story. Trust human creativity to pervert technology and invent a plethora of military weapons, from germ bombs, dirty bombs to hacker warfare and what you get is a range of very dangerous, very real threats that certainly do not make life any simpler. Another example would be genetically-modified organisms, particularly genetically-modified (GM) crops. They were meant to be the simplest solution to solving the world's perennial problem of food shortage and hunger – increase the output and efficiency of food harvests. Yet they introduced a host of complicating factors, in the form of the standard bio-technological agricultural industry model, for example Monsanto, in which patent rights for certain GM products clashed with farmers' practices of sharing crops. Let us not forget the many long-term health risks these "unnatural" foods can present. Hence technology is almost never the simplest solution – as George Bernard Shaw once remarked, "Science never solves a problem without creating ten more." These new problems have a direct impact on the lives of many people in third-world countries or countries at risk of war.

Lastly, proponents of technology would point to the Information Age, saying, "Look, the world is at your fingertips. Need to find out about a particular topic? Visit Wikipedia. Want to search for something? Google it." Indeed, the Information Age has made information more accessible, and this has made finding out about things infinitely simpler for us. But what we fail to remember is that the Information Age is built on the Internet, and the Internet is built on technology. Today, we are bombarded with all sorts of messages through a variety of new media – we receive constant updates, articles, tweets, posts, reports and more, all competing for our attention. All these threaten to overcomplicate our lives by filling our consciousness with an overload of information. For example, choosing where to eat is no longer a toss of a coin between friends – no, it is a research process, involving foodie blogs,

websites such as hungrygowhere.com and perusing food reviews before coming to a decision. One cannot simply say that technology has simplified one's life if one takes a longer time to consult a GPS-enabled map application and figure out how to use it, than someone who simply uses a paper map. Indeed, it is sometimes when we think technology has simplified out lives by supplying us with a wealth of information, that we realise that too much information complicates life.

In Aldous Huxley's 'Brave New World', a dystopian world in which technology provides all the answers and all the solutions, where fulfilling any desire is as easy as popping a pill to release "happy hormones" in your body – is this sort of simplicity something we are willing to pay for at the expense of free will? Life is complex, and technology can make it simpler or it can make it more convenient, depending on how we utilise it.

Marker's Comments:

Jeremy, commendable attempt; focused and addressing key terms of the question. You also provided salient examples that were impressive in range. The conclusion though could be crafted with more thought and care.

2012 Year 6 General Paper Preliminary Examination

'History is mostly a pack of lies.' Do you agree?

essay 11

Wang Yihua | 12A01C

In a debate with a Holocaust denier who accused Western historians of grossly inflating the number of Holocaust deaths in Europe, the eminent British historian Eric Hobsbawm betrayed a rare hint of anger and exasperation. He concedes the figure of 6 million was an overestimate, but asks, "Does the tragedy of the Holocaust diminish if 'only' five million were killed, or four, or even three?" History, a subject dedicated to the study and preservation of the past, is bound to get some, perhaps even many, details wrong due to the bias of historians, the prevailing political atmosphere or simply the sheer immensity of the subject. Nevertheless, I contend that history gets the important, larger picture right most of the time, and historians do on the whole endeavour to be as truthful as possible. Therefore, I disagree largely with the statement. History is often perceived by governments as a sensitive, political subject, and corresponding attempts to censor it has distorted and twisted the veracity of the subject. For example, due to the misleading and limited portrayals of World War II in Japanese textbooks, many Japanese students and even adults were falsely persuaded that Japan was the benevolent, misunderstood and even wronged party in the War – whereas in reality it was an imperialist aggressor that committed a wide range of atrocities. Meanwhile, the Chinese government suppressed all historical accounts of the Tiananmen Incident from the general public, leading to a surprisingly successful effort of wiping 4 June from the face of Chinese history. Misleading statements, suppression of facts or even outright lies have significantly diminished the truthfulness of history, leading many to view it as simply a bundle of government-approved lies.

It is also difficult for historians to be completely objective in their depiction of history, even when free from political pressure, leading to the further distortion and increasing misleading partisanship in history. For example, the contending schools of traditionalists, revisionists and post-revisionists in the study of the Cold War often portrayed the US as a hero selflessly guarding the free world, a villain suppressing the freedom movements of oppressed peoples worldwide, or an adept politics player that expertly safeguarded its own interests, respectively. The same event – the Cold War – led to so many and so widely differing views by historians who try to push their particular agenda to the reader, that history seems to have been rendered subjective and false.

Finally, history may have been a pack of lies simply because of the absolute impossibility of getting all the details of such a broad-ranging subject correct. History is the study of the world's past, an ambitious attempt to document over 5000 years – assuming history began only at the advent of written language – of human doings in the world. It covers the birth of civilisations, the rise and fall of empires, the intrigue, wars and general mayhem from which humanity has never extricated itself. At best, historians can only use estimates – themselves lies of the true figures to quantify normative and often controversial subjects. Stalin's industrial 5-year plans have caused some, or much, or debilitating suffering, but was either worth it or not worth it because the industrialised USSR played an important, a crucial or a peripheral role in repulsing the tide of fascism. Any combination of the above statement has been argued, and even

argued well, by different historians, notably E.H. Carr, the Communist sympathiser, or Gaddis, a traditionalist pro-Western historian. The failure of history to get miniscule but important facts correct and the difficulty of determining what these said facts meant – Carr once said that "statistics do not speak for themselves" and it was the historian's job to interpret these statistics for their readers – lend history its subjective nature and cause many to doubt its veracity, not least because figures can be untrue, or misleading even if true.

Nevertheless, as Hobsbawm notes, even if figures used in history are often wrong, the overall events history depicts are often right. By and large, history does manage to tell the tale of events which really happened, with historians trying to remain as objective as possible in their quest for, if not an absolute, then at least an aggregate truth.

History on the macro level is indeed largely true since the events that were described did happen, more or less as was described by history. For example, the Holocaust did happen, because Hitler sought to exterminate the Jewish people, and it had caused immense deaths and suffering – in such a way that makes it contemptible to dispute over the significance of 5 or 6 million victims. In 1812, Napoleon did make the fatal mistake of invading Russia, and Hitler did repeat this mistake over a hundred years later. The Chinese Communists were more effective than their Nationalist counterparts, and so triumphed in the civil war, while the Great Game between the US and the USSR had wreaked havoc on developing nations worldwide. The figures, causes and impact of these events may differ across historians, but the general picture recorded across the flow of history is more or less correct, in aggregate, and thusone would be mistaken to call it "mostly lies".

Meanwhile, historians do try to minimise the degree of subjectivity by trying to be as objective as possible, to the best of their ability. This school, derived from Leopold von Ranke, the father of modern history, is largely predominant amongst contemporary historians, influencing them to write history as it is, and to notify readers in cases when they offer to give their subjective but professional interpretation of events. Such positivism in the subject is, contrary to given statement, both highly valued and widely shared by modern historians, who do try to tell the objective truth whenever it can be told. This can be most prominently seen in the case of Gaddis who, being of post-revisionist inclinations at first, revised his work in the light of Soviet archives opening in the 1990s, and concluding that many of his works were too biased against the West. He subsequently wrote 'We Now Know', an account upholding the integrity of the West in the face of Soviet expansionism. This willingness of Gaddis – shared by most historians – in accepting the tyranny of the facts, in being able to admit they could be wrong, in being amenable to change their opinions in the light of new evidence and not obstinately sticking to their original biases, speaks well of the veracity of history as a subject, since her most dedicated acolytes were men and women of integrity, and as a whole would sacrifice bias before the altar of Truth.

Finally, history is neither "just a pack of lies" nor wholly truth. This essay wishes to significantly emphasise the crucial point that the study of history provides much more benefits than the given statement would imply, and is a subject more nuanced and multi-faceted by far. History teaches us important lessons; as the popular saying goes, those who do not learn it well are doomed to repeat it. The furious onslaught of Russian winters, combined with hardy Russian patriotism, first repulsed the assault by

Teutonic Knights in 1342; after 570 years, Napoleon too was driven out in humiliation, his Grande Armee in tatters. Incomprehensibly, in 1946, Adolf Hitler refused to provide warm clothes to his troops in his drive to Moscow, thereby causing the end of the Third Reich. A little bit of hindsight, which could easily be derived from the study of history, could have spared a lot of people a lot of pain, signifying that history is much more significant than a simple compilation of either lies or facts. Moreover, history provides her students with a sense of perspective and humility, contextualising one's actions in the span of human existence. A famous economist paid this tribute to history: that studying it would allow us to see how modern beliefs and convictions have actually been tested again and again, resulting in utter failure, by our predecessors. Though used in the context of economic policies and paradigms, this remark can be applied with equal validity to other subjects, such as democracy, communism, human rights and liberalism. The impermanence of political systems – as exemplified by Absolutism in the 17th century, Republicanism in the 18th, the Metternich Reaction in the 19th, Fascism and Communism in the 20th and Liberal Democracy today – could allow many politicians and peoples the knowledge that human institutions, democratic, socialist or otherwise, cannot be made to last, and that what works well today may turn obsolete tomorrow. A little more open-mindedness and amenability to change, so amply demonstrated by historians, could serve modern society, especially in politics and economics, a great deal of good. History therefore not only makes students more knowledgeable, it may also make them better people.

Altogether, I conclude that while history may indeed be subject to many controversies and inaccuracies; saying that it is mostly lies is untrue, since history does get the larger picture right, is relatively objective, and has practical uses that range far beyond a simple compilation of facts. Taking the long term view, however, I believe that eventually "the truth will out" to quote from 'The Merchant of Venice'; facts cannot be suppressed forever and eventually the best-crafted falsehoods must fall apart before the march of time. A famous newspaper, The Economist, is founded on the principle that in a fair battle, truth has never been known to lose to falsehood; I contend that this is the case for the study of history as well.

Marker's Comments:

An impressive response that draws on many apt examples and features perspectives that thoroughly address the question and thoroughly supported with systematic, well-articulated elaboration. Excellent work!

Art is a human endeavour that dates back to before the very first civilisations. Today, archaeologists continue to uncover cave paintings that are a manifestation of our inherent need for creative expression. In the modern world, artists have a much more diverse array of tools with which to craft and distribute their works, thanks to the development of numerous technologies. Technology has certainly revolutionised the arts, in terms of form, subject matter and distribution. However, the underlying spirit of creation behind the artistic craft remains a constant quality that transcends art of different ages and forms.

Technological advances, especially those of the past century, have revolutionised the arts by giving rise to entirely new forms of artistic creation. In particular, advanced computing technology has enabled the creation of new genres of digital art and digital music, and it has redefined the animation movies industry. Advances in digital imaging technology continue to shape genres like digital art today by enabling graphic designers to generate increasingly detailed, realistic graphics and animation sequences. A tour of animated cartoons through the years highlights the transformation from cartoons like 'Mickey Mouse', made when animation technology was still in its nascent stage, to more recent movies like 'Wall-E' and 'Finding Nemo', which make use of the full range of modern digital imaging technology and animation software. This is not forgetting how the earliest cinematographic technologies formed the foundation for the creation of the entire movie and animation industry today. Apart from movies, technological advances have created new genres of art in music as well, giving rise to forms like "Techno", "Disco" and digitally generated music. Even in more traditional forms like jazz, technology redefines the boundaries of musical expression by enabling artists to use techniques like overdubbing in their recordings to create an even richer, more layered musical piece. Bill Evans' 'Conversations with Myself' is a modest example of how technological advances in digital manipulation have broadened the scope of musical expression for numerous artists. Today, examples of novel art forms that have arisen due to technological advances abound. Photography, animation and electronic music all stand testament to how technology has revolutionised the arts in terms of form and genre.

Besides revolutionising the arts in terms of form, technology also revolutionises the arts in terms of its subject matter, as it gives the artist a much wider range of material to base their works on. Throughout history, artists have continuously taken new technologies as the subject matter for their works, resulting in the expression of new and at times revolutionary ideals associated with the development of the new technology. A prime example in this respect would be Stanley Kubrick's film '2001: A Space Odyssey', based on Arthur C. Clarke's novel of the same title, which explores the rapid development of space technology and computing power in America during the 1960s and 1970s. Huge advances in space technology formed the basis of the film's portrayal of space exploration, while advances in computing technology resulted in the creation of the character HAL-9000, a supercomputer that ironically exhibited more human qualities than the rest of the human characters. Expanding our scope from this example,

the entire genre of science fiction is a manifestation of the revolutionary influence technology has exerted over artistic expression. Novels like Michael Crichton's 'Jurassic Park' explore the possibilities of future advances in modern DNA technology while Aldous Huxley's 'Brave New World' expounds on the dystopian consequences of rapid modern technological advancement. Even in the realm of fine arts, Pablo Picasso's 'Guernica' is a reflection of the intense violence in war made possible by modern military technology. Technology and its implications for society revolutionise the arts by providing artists with subject matter that was previously unheard of, through which they are able to express at times radical, revolutionary views with regard to the effects and consequences of such technology. Perhaps the greatest impact of technology on the arts, however, lies in the greater ease of distribution of artistic products and the wider appreciation of the arts by the masses. A few centuries back, the printing press revolutionised the literary art form by enabling the mass production and distribution of books, such that reading was no longer confined to an esoteric academic realm. The impact of the printing press was truly revolutionary for the arts, as it enabled mass distribution while giving birth to the concept of popular fiction. It enabled many writers like Dickens to compose novels that were distributed to the marketplace. Most importantly, the widely circulated material was exposed to a more diverse range of critics and readers, who collectively further shaped the literary art form through their opinions and differing interpretations. While the printing press was a revolutionary development in historical times, the Internet is playing a similar role in modern society, and with a much broader impact. The Internet provides a means for artists to distribute their works and express themselves at virtually no cost. The result has been a tremendous surge of artistic expression which is seen and heard through online platforms like deviantART.com. Online literary journals like the Quarterly Literary Review Singapore provide a platform for aspiring writers to be heard and are self-sustaining as the cost of publishing is obviated. Clearly, the advent of the Internet has enabled the expression of a much wider range of artistic voices than before, which has the unique opportunity of international cross-cultural exchange. This has formed the bedrock for the development of a new generation of artists who have achieved international fame via online means, such as 'Boyce Avenue', a band which uses YouTube to showcase its music. The idea that the Internet has revolutionised the development of the arts by opening a platform for a vast population of artists worldwide to connect and express themselves is undeniable.

However, even with how technology has revolutionised the way we think about the arts, and the forms and means by which artists express themselves, the arts at their core are still about the emotional and intellectual investment of an artist into his creation, to convey universal ideals that appeal to us as humans. Technology may have generated a whole range of new avenues and tools for artists, but the emotional ideas they convey about the human condition remain largely unchanged. 'Toy Story' may be produced using cutting-edge animation technology and features advanced space technology in its characters, but ultimately it is a story about friendship and childhood, ideas that have always been key human concerns. The performance of a Shakespearean play in his time might be very different from modern productions that feature the latest lighting techniques and acoustic manipulation, but it does not change the universal themes like love and power that are conveyed in the original work. Digital recording has revolutionised modern music by making it accessible to a vast audience, but it does not detract from the countless hours of practice put in by, say, an orchestra, prior to the recording.

Technology may have changed the way art is produced, and inevitably some artists have used technology to take shortcuts in artistic creation, through the use of "auto-tune" for musicians, to cite an example. Although some might argue that this cheapens art, it could simply be seen as a way by which technology has redefined the process of artistic creation. Digital editing, for example, to correct the imperfections in a recorded performance is becoming an art form in itself, and it largely does not detract from our enjoyment and appreciation of the musical piece.

In conclusion, the myriad of changes that technology has brought about for the arts can truly be considered revolutionary. However, despite the evolution of new forms of art and new processes of artistic creation, our response to the arts remains largely constant. We appreciate the arts because they are a reflection of our human emotions, our concerns, and also the intellectual and emotional investment of the artists. Across different time periods, artists continue to touch on the same universal themes and we continue to appreciate them, as is characteristic of the most enduring pieces which transcend the changes time and technology bring.

Marker's Comments:

Excellent piece of work with a good range of points and examples. Well-argued and focused on addressing the question fully. Language is fluent, elegant and superbly organised. Work on your personal voice a little more. Well done, nevertheless!

To what extent has technology revolutionised the arts?

essay 13

Low Jia Jin I 12S03M

The arts are a cultural landscape, commented Goethe in his seminal travel book, 'Italian Journey'. In it, Goethe posits that due to the unlimited hybridity in cultures and life experiences, the everyman has his own unique perspective that can add value to the artistic community. However, not every man has historically been an artist. In ancient Egypt, semi-precious stones like lapis lazuli were used as dyes for visual art, but remained financially out of reach for most. In the Hellenistic Greek period, writing and reading was a luxury for the wealthy as an army of scribes had to be employed to reproduce text by hand. But over the years, technology has played a significant role, not just in the creation of new art forms. More pertinently, technology has revolutionised art due to its democratising influence, making the creation and distribution of art available to the masses.

First, let us examine how written art was allowed to proliferate with the aid of technology. Following the invention of Gutenberg's printing press, the creation of publishing houses led to the automated reproduction of texts in speeds way beyond what was possible with manual scribes. Writing moved from the exclusive domain of kings and lords into the upper-middle class. Consequently, it is germane to argue that this democratisation of art increased its variety as well; the upper-middle class were not as preoccupied with recording and glorifying the exploits of their rulers as the rulers themselves were. Thus, the sudden preponderance of philosophical musings to business guides in that era can be traced back to the way technology empowered greater numbers of people in lower socioeconomic strata to write. Today, the trend continues with the Internet Age and its fair share of blogging avenues such as Wordpress and Twitter. While the extent to which online blogs may be considered "artistic expression" is contestable, the expansion of the possibility of artistic expression to anyone with a desire to do so is indubitable. Hence, on the grounds of empowering content-creators to express their vision, and the widening of accessibility of art forms, art has indeed been revolutionised by technology.

Moreover, the evolution of technology has also allowed the synchronous development of art forms. In visual art, the continued invention of better canvas primers and oil-based dyes facilitated the rise of painting styles such as Sfumato and Fresco, which defined painters like Leonardo da Vinci. And with the invention of film and then digital sensors, the art form of photography was born, spawning a generation of influential photojournalists such as Henri-Cartier Bresson. The invention of movie-capable consumer cameras, led by the runaway hit, Canon's EOS 5D MkII, even allowed the art of filmmaking to move into the hands of willing amateurs. This is significant not just in the sheer quantity of new art created, but also because new art forms often express one's artistic perspective in new ways never before possible. The metamorphosis of the still image to the moving image is testament to how different forms of media allow the variegated expression of artistic sentiment in ways never before seen, thus revolutionising art.

Furthermore, art has not only evolved within its existing functions, it has also transcended those functions into newer applications with the help of technology. A case in point: visual art was more concerned with being an idealised form of world events rather than as artifice as pioneers like Zenxis would have imagined, up till the invention of film. And while contemporary photographers like Richard Aredon continue to use photography as an avenue for the distillation of visual ideals as it has been done for centuries past, others like Joe McNally have coupled photography with journalism for magazines like Life and National Geographic. This expansion of roles banked on the newfound ability of photography to freeze in time with a visual precision and speed above what even the most skilled painter can achieve. Thus we can say that technology has revolutionised art by allowing its growth into new fields, and allowing greater ability for artistic expression alongside desired function in these fields.

However, critics of the democratisation of art posit that art has not been revolutionised simply because not all new content can be considered as art. In his capacity as a judge for Vimeo's video awards, Pulitzer Prize-winning videographer Vincent Laforet lamented that while the digital single lens reflex camera (DSLR) revolution has led to a great influx of submissions, a great number of these entries barely qualify as art. And for every case of 'Like Crazy' – Drake Doremus' feature film that secured widespread theatre release after gathering acclaim as a DSLR film at Sundance – there exist thousands of arguably meaningless videos of mundane things on the web. YouTube comedian NigaHiga was known for parodying the preponderance of "everything from cats to your last meal" in his collaborative video 'YOMYOMF', and he is not done in realising this trend. Indeed, Google itself has made clear its intention to rebrand YouTube as a more curated environment of user-submitted videos akin to Vimeo to stem the flow of trivial videologs posted by its community. And while user and shareholder outcry has put that plan on an indefinite hiatus, the recognition that not every new contribution has artistic value should not be understated.

Nevertheless, art in its purest form is a deeply personal venture, and today's trivial videolog could be tomorrow's seminal social commentary. Michael Ondaatje wrote 'The English Patient' as a purely personal piece to vent his frustrations on war and fundamentalist nationalism, yet it became a period piece on nationalism following its subsequent discovery and publication. The question here is, who are we to apply a blanket value judgment onto the artistic value of the works of others? If beauty is truly in the eye of the beholder, and most art only appreciates in value long after their creation, is our dismissal of many such amateur "art" facile? It could be said that there lies an Almásy, the eponymous English patient, deep within the hearts of the many undiscovered writers of tomorrow. Technology is then the path to free these thoughts into published art for appreciation. Hence, since we cannot judge the artistic value of any purported piece of art at present, and we cannot be sure that we are not denying the production of notable art, we cannot cogently conclude that technology has no significant contribution to art.

In conclusion, technology has revolutionised art by opening new mediums of expression and avenues for consumption. And while some forms of art remain largely unchanged today, due to appreciation of historical sentiment, many others had evolved greatly into new roles enabled by these new mediums. Today, we see online musical artists like Avery experimenting with the iPhone as an instrument, even as Gustavo Dudamel

leads the Berlin orchestra in an invitational piece. Technology revolutionises art not because it has made old artistic mediums obsolete (and by definition, ensuring "revolutionary change"), but because it has allowed anyone to express what they want, however they want. If Goethe is to be believed, that is perhaps the greatest age of artistic empowerment that can be achieved. In facilitating such, I believe that it is salient to say that technology has indeedrevolutionised the arts.

Marker's Comments:

Insightful, original and well-argued. Impressive range of examples! Great work! Excellent command of the language; effective use of vocabulary and rhetorical questions,where appropriate.

'An educated people can be easily governed.' Is this a valid statement?

essay 14

Soh Wen Shi Micole I 12A01C

Karl Marx once said that "religion is the opiate of the masses". In the context of his time, religion indeed had the ability of fostering a politically acquiescent populace that easily submitted to the tyrannies of the government. In the modern day context, that while the number of autocracies has decreased, some can now say that education has emerged as a means to easy governance. An educated populace would be expected to have greater intellectual maturity, a greater awareness of the context of the society they live in, as well as a greater ability to understand the decisions of the government. These features can all lead to easy governance as the people are likely to be more pliant, mature and understanding. Though I do agree that this might seem to be the case, I believe that in the long run, an educated population is not easily governed, but in fact, is likely to make the job of governance more difficult.

Democracy, the political system embraced by most countries in the world today, emphasises the importance of an educated people. In order for the right people to be voted into power and for the right decisions to be made by the government, the people have to be educated and informed so as to be able to carry out such an onerous task. Democracy literally means "the rule of the people". Therefore, truly democratic countries believe in the importance of heightening the education levels of their people to ensure that every individual is able to understand the democratic process and make wise, informed decisions. Education, therefore, is essential to this system of governance. Additionally, as the people themselves are the ones vested with this autonomy, those put in the position of governance – often the politicians – then supposedly act according to the wishes of the people who have elected them. Governance thus functions on the basis of the Social Contract as espoused by Rousseau, whereby the people give up certain individual rights to pursue greater social good. The government thus has the legitimacy and ability to act and fulfil the wants and needs of the populace that has voted them in. Education facilitates this entire mechanism as individuals, firstly, feel empowered and involved in this decision-making, and, secondly, are more able to make the right decisions. Both factors therefore enable easy governance as the educated populace invests its trust in the government that they have voted in.

Education is also powerful in that it can be used to inculcate certain values or beliefs espoused by the government that can lead to easy governance. In this case, education is not a means of broadening the worldview of individuals, but instead purely a means to be employed by the government to facilitate governance. Products of the education system therefore are more likely to be pliant and subconsciously subscribe to the beliefs of the state. An extreme example of this would be North Korea, where children are brought up to worship and idolise their leaders. Such a mentality leads to an unquestioning acceptance of what the state does. The degree of subservience can be seen in how children compete to take part in the yearly Mass Games held in Pyongyang. They willingly train in the cold of winter just to have a chance to perform in front of Kim Jong Un. Even in Singapore, there is a certain element of propaganda within the education system. National Education has taught children from as young as

six that Singapore remains susceptible to foreign invasions and individuals thus have to accept and embrace policies the government implements to ensure our continued survival. Such a siege mentality does to a certain degree encourage the acceptance of our high defence budget, without which Singapore would lose political clout. Products of the education system therefore are not necessarily more liberal. While they definitely do have the intellectual maturity and ability to think, the way in which they have been educated might have encouraged easy governance.

However, it has to be questioned if education really does lead to sustained easy governance. In both instances outlined above, education might seem to have led to the acceptance of the actions of the state and the educated population grows to believe in the primacy of state. Yet, education fundamentally is a liberalising mechanism. When the needs and wants of the people are not met with good and proper governance, education, in fact, becomes the trigger for revolt. People become more aware of the incongruence between their aspirations and their inability to fulfil them, and this awareness fuelled by education in turn sparks off demands for changes to the current government.

In the long run, education leads to an increased awareness on the part of the individual to see what is wrong in his society. When the educated populace is disenfranchised due to the inability of the government to provide for the needs of the people, its people do not remain obedient and pliant. The Arab Spring revolts are testament to the potential of education in overturning current structures. Research has shown that many of those who revolted in the streets and attempted to topple autocracies are educated youth who are unemployed. They were exposed to radical ideologies in their schooling years and understood what good governance means. Yet, they did not see this translating into everyday life. The failures of governance were made more stark in contrast to the alternative systems in the US where freedom was allowed to flourish and people could demand responsibility of their governments. Education broadened their horizons and led to greater pent-up dissent. Education thus functioned as a catalyst for change and led instead to a population that was much harder to govern and satisfy.

It is not only the disenfranchised and deprived educated youth who have led to increasingly difficult governance. Education has also driven some towards radical ideologies and they have sought radical means to satisfy their unfulfilled demands. Education has led to increased dissatisfaction and criticism of the government which, in the view of radicalised individuals, have failed. We therefore see the rise of self-radicalised individuals who are neither uneducated nor impoverished. Instead, they are individuals who, precisely because of their education, develop their own opinions and world view. In their definition of the world, their governments have failed them. Therefore, radical means such as terrorism have to be employed to achieve the society they desire. A recent example would be the Colorado killings. The killer, a student, reported to be bright and gifted in the sciences, went on a killing spree during the premier of 'The Dark Knight'. Similarly, Anders Breivik killed 77 people in Oslo because he was deeply resentful of the multiculturalism that was flourishing in Norway. In his opinion, racial purity had to be maintained, and in the event that the government had failed to maintain this purity, individuals had the responsibility of ensuring the fulfillment of such ideas. Education, in these cases, has not encouraged tolerance and

diversity, but has instead led to the increase of deviant ideologies that have threatened states and societies and made them harder to govern and satisfy.

Education in the twenty-first century has been thoroughly transformed. Indoctrination and propaganda by the state have become less likely. Instead, individuals are now able to source for their own alternate forms of media and come up with their own perceptions of what the world should be like. Coupled with the failings of governance and education systems themselves, individuals who have a certain degree of basic education to start with become resentful and dissatisfied with their current situation. In countries like the US where the education system itself is seen to be extremely flawed, people have risen to agitate for reform. Davis Guggenheim's film 'Waiting for 'Superman'' is one such example. In the US education system, half of the primary school cohort drops out by the time they reach tertiary education. People have come to realise that there is something seriously wrong and uncorrected in society if such social anomalies are allowed to flourish. Even in Singapore, a country infamous for its politically apathetic people, we have seen in recent years the increase in dissent and unhappiness. With more online platforms available for people to voice their unhappiness, governance has become increasingly difficult as governments now have to consider a multitude of viewpoints. Much of the anti-government rhetoric, however, is interestingly from individuals who have received an elite education. Online websites like The Online Citizen and Very Fine Commentary have been set up by ex-JC or university students. This is mirrored even in history where dissent in repressed Burma was led by the students of Rangoon University. Evidently, education has provided dissenters with credible and able leaders who are aware of what can be improved in society. Their views are then propagated to the masses and have led to an increasingly restless society that is hard to please.

Education is indeed a powerful catalyst for change. While in the short run it might be used as a tool for suppression and indoctrination, in the long run, an educated population is definitely not easy to govern. The very nature of education necessitates questioning and curiosity, and in the case where the educated masses do not have their needs fulfilled, it has led to increased dissent and cracks in society. Governments thus have to be accountable to their educated masses for they present a threat to their survival if they fail.

Marker's Comments:

An excellent response to the question! Arguments are written with conviction and are very persuasive; examples are employed to good effect. More attention could have been put into showing how education (the liberalised Western type) can galvanise citizens to play an active role in looking into certain social problems, thus rendering them easily governed; or that education ensures a certain level of skill needed to be economically functional and hence brings about stability.

'Advertising reflects the values of society but does not influence them.' (David Ogilvy) What are your views?

essay 15

Soh Ming Li Emily | 12S03K

The primary function of advertisements is to market a particular product to a specific audience to generate consumerism. Advertisements do not only communicate hard facts about the product, such as durability, benefits and cost; rather, these hard facts are packaged in a manner that is intended to appeal to a particular group of consumers. For example, advertisements promoting the consumption of weight-loss pills either show pictures of consumers before and after they consume the product to demonstrate the effectiveness of the product or invite celebrities who are often already toned and slim to endorse the product. This projects an ideal image that appeals to potential consumers' subconscious such that they instinctively relate the use of the weight-loss product to the outcome of having a slim and sculpted body. The advertising industry is one that is driven by profit and therefore it can be logically extended that advertisements seek to create a desire for a product to enhance its marketability and appeal to the audience. In this respect, advertising does influence the values of society, such that it provides a conducive environment in which the product can be optimally marketed.

To an appreciable extent, advertising does reflect the values of society to allow consumers to establish a personal relationship with the advertisements. For advertisements to be effective in marketing a product, they must first be relatable to the audience such that the audience will be drawn to the advertisements. When advertisements espouse a value system that is congruous with the consumers, the consumers naturally feel inclined to pay more attention to the advertised product. Consumers construe that the product is possibly suitable for them and will be able to help them achieve their ideals. For example, consumers who tout the benefits of consuming organic food are more likely to be attracted to an advertisement regarding the newest organic food store in town as compared to an advertisement promoting affordable fast-food deals. The pertinence of values in people's lives is something that advertising companies capitalise on. Many of our actions and beliefs are undergirded by our values. Thus, psychologically, the most effective manner of appealing to a person's interests and preferences is to primarily show that the effect of using the product and the consumers' ideals are established upon compatible and reconcilable value systems, subtly influencing consumers with the message that the use of the product is not only likely to be suitable for them but even more crucially, it is able to further their interests and help achieve their ideals. Hence, in this respect, advertisements do need to reflect the values of a society to ensure that consumers are likely to take to the product and purchase it.

Now, we also need to examine the perennial and omnipresent existence of advertisements in today's world. In an epoch of unprecedented technological advancements, advertising companies are hot on the heels of adopting avant-garde technology to create advertisements that are set apart from the banal and insipid methods of advertising of the past and to appeal to the multi-sensory experience of the consumers. Advertisements are no longer limited to spreads in the newspapers and magazines that readers can conveniently overlook and turn a blind eye to as well

as hurried clips jammed between television programmes that have been infamously dubbed "toilet breaks" by programme-watchers. The proliferation of advertisements on the Internet has now made them an indubitable presence in our lives. Our streets are bombarded with posters to advertise the latest movies and to tout the latest healthcare products; even public transport vehicles are exploited for advertising purposes. The recent online outrage about the advertisements that are tagged to most YouTube videos again illustrates how advertisements have claimed a strong foothold in our lives. In a society where advertisements are so integral, it is too naïve to reject the possibility that these advertisements affect our subconscious and subliminally influence our mindsets as well as the values we espouse. In the instance when we can no longer conclusively determine whether our values are borne of our interaction with our community and our inherent nature or the numerous advertisements we have been exposed to, we cannot say that advertising merely reflects the values of society and has no stake in moulding or crafting them. Hence, the extent of this influence that advertisements have on our values should not be downplayed.

As a result, even if advertisements do reflect the values of society so as to endear itself to the consumer market, these values are ultimately crafted by the advertisements that we have been exposed to. This is a crucial marketing strategy of many advertising companies: to play on the inherent values of the consumers and generate desire and consumerism. To win over the hearts of consumers, the products need to be distinct from previous products and shown to perform the same functions better in addition to having new functions. Two decades ago, large mobile handsets that facilitated on-the-go communication were deemed the pinnacle of communications technology. Today, those handsets are contextually archaic and obsolete and no longer serve the needs of society. So what exactly are the needs of society today? Society today is characterised by hectic lifestyles and working even while being out of the office has been made possible, even crucial, with the invention of smart-phones like the iPhone and Blackberry. People are driven by social pressure to stay connected constantly and smart-phones with convenient access to the Internet precisely serve this wish to keep in touch with business contacts and friends on social networking sites. While this desire for increased work productivity and connection with people around the world is a corollary of globalisation that has taken place at an unprecedented pace in the past decade, it is arguably the invention of smart-phones and the packaging of them as being "needs", not "wants", in our society that incites a flurry of consumers to purchase smart-phones. Handy laptops could well serve the purpose of providing convenient access to the Internet, but smart-phones are advertised as paragons of efficiency, mobility, convenience and productivity. As such, aside from businessmen, housewives too acquire smart-phones precisely because they have been marketed as necessities in our society.

Advertisements best serve the purpose of marketing a product when a desire is generated amongst the hoi polloi. By playing on the innate value systems of society, advertising companies create products that ostensibly and spuriously illustrate a manifestation of these values. Beauty and a general quest for betterment are values that are upheld in virtually all societies. Companies play on the desire for beauty by projecting an image of beauty as being associated with slim silhouettes, sexuality and physical attractiveness. Perfumes are often endorsed by celebrities who appear scantily dressed in advertisements. Consumers make the mental connection that the use of a perfume is likely to result in enhanced sexuality and physical appeal, but

often commit a logical fallacy because perfumes are not in fact necessary for physical appeal. Crudely put, while perfumes appeal to olfactory senses, physical attractiveness appeals to sight. In this manner, advertisements create the impression that beauty and excellence can only be achieved by attaining physical attractiveness, which paves the way for more sensory-stimulating advertisements to encroach on the values and judgements of consumers. The value of beauty is reduced to an appreciation of physical appeal and this illustrates how advertisements contort the value systems of society. Advertisements create a benchmark for comparison and people refer to this benchmark to justify their social worth. By creating the illusion that the product is necessary to promote a certain societal value, advertisements achieve their purpose of creating a deep desire for a product that may otherwise merely be regarded as a want.

While it is true that advertisements must first reflect the values of society to ensure that consumers take to the marketed product, it is ultimately foolish to construe that advertisements do not influence societal values. It is paramount that as discerning consumers, we are not only cognisant of advertisements' primary purpose, which is to market a product in an appealing manner, but also the values that advertisements try to promote to improve their product marketability.

Marker's Comments:

Emily, you've made an intelligent evaluation of the psychology of persuasion seen in advertising. The essay was well-organised and your ideas were most appropriately analysed to make your points, which were intelligently insightful. You now have to create an authentic personal voice, sans the depictions of ideas that come across as pretentious. All the best! The argument was sometimes flat, but the ideas were expressed systematically and clearly.

2012 Year 6 General Paper Preliminary Examination

'International sporting events no longer serve their intended purpose.'
Do you agree?

essay 16

Tham Yan Ping | 12S06L

As the 2012 Olympic Games in London drew to a close in a spectacular ceremony full of laughter, warm handshakes and partying amongst athletes from all over the world, millions more people back in their own houses watched as their national athletes mingled with other nationalities on screen. This is one of the intended purposes of international sporting events: to promote cordiality between nations through the interaction of athletes, who serve as ambassadors of their countries. Another purpose of such sporting events would be to recognise the excellence of athletes. However, many would cynically point out that international sporting events no longer serve their intended purpose and are instead tools for political manipulation, as well as tainted by commercialism and unethical behaviour of the athletes. While such concerns are valid, I would still say that their original purpose has still been served in spite of these fringe implications and problems.

International sporting events often seem to fail in serving their intended aims because political groups tend to make use of them to promote their own agenda. As media publicity is hijacked by such groups, there seems to be a loss of focus on the athletes themselves, whose sporting excellence the events are supposed to celebrate. Moreover, the use of such events as a political tool can directly destroy the purpose of promoting cordial relations between athletes and countries. Take for example the 2008 Olympic Games in Beijing. Leading up to the Games, many Free Tibet protestors made use of the international focus on Beijing to promote their cause of liberating Tibetans from what they saw as an intensifying military campaign in their motherland by the Chinese Government. In addition, international activists, particularly from the US and European nations, strained their countries' relations with China by touting the 2008 Olympics as the "Genocide Olympics" in criticism of China's foreign policy with regard to the Sudanese government, which had supported the Janjaweed militia responsible for the Darfur genocide. The backlash from Chinese citizens was significant and evoked responses from the Chinese Foreign Minister, expressing his disappointment that the Games had been hijacked as a political tool. As such, when international sporting events are manipulated to promote a political agenda, they appear to detract from their original purpose. However, while sporting events have been tainted by attempts by political groups to promote their own interests by making use of the international coverage of such events, they are at best, fringe implications. Nobody would say they were not awed by the beauty of a Chinese or Russian gymnast at the 2008 Olympics just because of the prior events. Ultimately, people still value international sporting events as they do serve their intended purposes.

It is also often said that international sporting events no longer fulfil their intended objectives because of the distraction of commercialisation. Due to all the effort put into making the events successful money-making opportunities, the focus on recognising and celebrating the athletes' excellence appears to be lost. For example, every game in the World Cup tournament is surrounded by endorsements by major brands, all of which want a portion of the spotlight. Back at home, television network operators, like Starhub and Singtel in Singapore, outbid each other for the exclusive

rights of broadcast, following which they can use their monopoly power to charge soccer enthusiasts exorbitant prices. However, simply because such sporting events are made commercially profitable does not mean that they no longer fulfil their purpose of recognising athletic excellence and promoting cordial international relations. In fact, such commercialisation is the very lifeblood that sustains the expensive operating costs of organising events, thereby enabling the events to achieve their purpose. Moreover, with the intense media coverage and international broadcasting systems of today, public viewership of these events is rising rapidly. This brings more attention to the athletes' performance and heightens the public's awareness of the commonality of people from all nationalities in striving to perform well in their niche areas of sports, thereby advancing the aim of promoting cordial relations between nations.

A final criticism to be addressed is that international sporting events veer from their intended purpose of promoting and recognising sporting excellence because of the high incidence of unethical behaviour by athletes. Athletes are often seen as role models and ambassadors of their country; yet, many resort to underhand tactics like doping to perform better at these events, causing much disillusionment amongst the public. Just a week ago, to the great disappointment of Lance Armstrong's fans, he was stripped of his seven Tour de France titles under the charges of doping. Similarly, many world-record holders in swimming and track events have been found to be guilty of taking drugs to boost their performance abilities. Such cases arise because of the incessant pressure athletes are under to perform in an increasingly competitive arena. Thus, the unethical behaviour of some athletes seems to prevent international events from attaining their aim of promoting sporting excellence. However, the fact that such cases of cheating incite so much international furore and widespread disappointment each time, however, goes to show that people still very much value the integrity of such sporting event, and put much expectation and focus on the well-deserved accomplishments of athletes. Moreover, such athletes are in the minority; it would be a letdown to all other athletes to deride the platform upon which they are able to exhibit their sporting skills, simply because of the regrettable actions of a few others.

International sporting events serve the intended purpose of recognising sporting excellence because athletes are celebrated for their achievements by the millions of people watching their performances on television. When Michael Phelps displayed yet another splendid performance by sweeping a few more gold medals in his swimming events, people not just from America, but from all over the globe were in admiration of him. In a similar way, we all celebrate as we see Usain Bolt convincingly take the 100 metres and 200 metres sprint titles and strike his signature poses before the cameras. Even for Singapore, in spite of the tension arising from the fact that our table tennis players are not born Singaporean, most were still proud to see them put up a thrilling match against South Korea to clinch the bronze medal. It is through such high-profile events that athletes get the international recognition they deserve, while bringing much pride to citizens of their nations. This is true in spite of the fact that there may be some distractions in the form of politics and cases of unethical behaviour. Hence, international events still succeed in serving their original purpose.

Furthermore, such events are still able to serve the aims of promoting cordial international relations especially because of the worldwide media coverage of such events, as discussed earlier. Even for citizens of nations with a history of rivalry, there is

something that moves us when we see the faces of other athletes, the disappointment of a poor high-jump attempt or the joy of performing beyond their expectations for a long-distance run. There is something in all that which we recognise as human, just as we are. As we witness the friendly interactions between athletes of our own country and others, the perception that we should strive for harmonious relations with other countries in this global village is promoted. To some extent, this does impact political diplomacy, even at the highest levels. This was true of the Ping-Pong diplomacy between the US and China in the 1970s that led to the thawing of relations; I believe it continues to hold true today.

International sporting events have never been ideal. Even today, they are far from it, being prone to political manipulation, disappointing underhanded behaviour of a few athletes and sometimes appearing to be inundated by commercial interests. However, these are but minor distractions and it has been shown that commercialisation is vital for sustaining international competition. It is in spite of all these distractions that we continue to value the heart of these events – sporting excellence and cordiality between nations, as we saw in the successful London Olympics Games this year (2012). Perhaps, instead of lamenting how these transgressions have caused international sporting events to deviate from their intended purposes, we should recognise that for the most part, whether they succeed in serving their intended purposes is ultimately determined by our – the audience's – response.

Marker's Comments:

Para 2: Consider this, Orwell and others have said that sports and sport events are "war by proxy", "Big scale sports itself...merely another effect of the causes that have produced nationalism."

Para 3: Even when considering commercialisation as an antithesis, why would anyone claim that sporting excellence and international good will be seriously undermined by commercialism?

Otherwise, good job.

2012 Year 6 General Paper Preliminary Examination

Consider the view that modern technology is the only answer to world hunger.

essay 17

Tay Ee May | 12S06S

A poignant advertisement airing on Mediacorp's Channel 5 features several local celebrities staring back at audiences with a stoic expression while captions stream across the television screen: "Every 4 seconds, a child dies of hunger." World hunger has become an especially pressing issue in modern times, given a burgeoning world population and an increasingly erratic climate conditions. While it cannot be denied that modern technology offers what is by far the most reliable solution to world hunger, we cannot ignore the fact that these same solutions offered by modern technology are easily and often stifled by fundamental political and social flaws present in the way countries and organisations manage world hunger.

The advent of genetically modified (GM) food crops a few decades ago appeared to usher in the world's most effective solution to world hunger. Disease and weather resistant food crops allowed poor subsistence farmers in African countries, especially, to enjoy relatively stable and abundant harvests when previously,these crops were easily destroyed by plagues, insects and harsh weather conditions. Some GM food crops were even enriched with essential vitamins such as Vitamin B3 (key to ensuring healthy cell growth and repair) in view of the fact that most African children lacked proper nutrition and suffered from malnourishment. Other recent technologies also include novel drainage and sprinkling systems to mechanise the way farmers manage their food crops. This solution in particular allows farmers in developed countries such as the United States to expand their crop yields since they are relieved of the need to micro-manage their crop yields through the processes of seeding to watering. For a while, it was thought that increased food crop production due to the harnessing of modern technology would be the crucial and final solution the world would need to alleviate and eradicate world hunger.

Unfortunately, that was not to be. For a start, it was found that the private enterprises involved in introducing and spreading the use of farming technologies had their own profit maximising motives that corrupted the whole process. For instance, Monsanto, one of the world's most valuable agricultural and biotechnology firms, owned patents for their GM seeds and engineered crops to be infertile such that it became necessary for farmers to continually purchase batches of seeds and pay royalties for each harvest. A New York Times article in 2005 highlighted an unfortunate trend of increased farmer suicides in India that were linked to these patented GM seeds. As it turned out, too many farmers allowed themselves to be deeply mired in debt while desperately clinging on to the hope of making tremendous profits as they had been made to believe by companies like Monsanto. For most, that day never came, and farmers who saw no way out of their escalating debts committed suicide in despair. This clearly demonstrates the evils of profit maximisation and that the issue of world hunger cannot be solved simply by technology designed to increase food supply.

Furthermore, besides the self-interests of corporations, politicians and officials often succumb to corruption. It is estimated that on average, 40% of food aid to impoverished regions where hunger is most prevalent is siphoned off in some way

by various officials who manage various overly bureaucratic processes overseeing aid distribution. This percentage climbs as high as 70% in certain African regions. As such, even when technology, or the funds required to harness technology are given free-of-charge to farmers, there is a very real possibility of corruption sabotaging such goodwill efforts. It is these barriers that separate the "giver" and the "needy" that unfortunately thwart the promise of technology and exacerbate world hunger. Sometimes, it is the political barriers that exist that make the eradication of world hunger almost impossible. North Korea, a reclusive military country that houses a significant portion of the world's malnourished population, continues to face the pressing issue of hunger and poverty due to its resistance to foreign aid on top of various trade embargoes imposed on it due to political fallouts with other countries. In such situations, the unfortunate result is that world hunger persists, and this further proves that modern technology alone is unable to help.

Of course, we should not adopt a fatalistic attitude towards the adoption of technology to alleviate world hunger. Rather, it is important to realise that the isolated use of technology provides merely symptomatic and simplistic solutions to the lack of sufficient food stocks for the world's needy. It is key that fundamental flaws in the aid and technology distribution system be corrected. International organisations such as the World Trade Organisation could step in more to provide point-to-point checks and ensure that most of the aid donated safely reaches its destination and beneficiaries. Social entrepreneurship firms could help set up training programmes to educate members on impoverished communities on sustainable ways to harness modern technology to improve harvests. One good example is that of Backpack Farm, a social enterprise that sells small-scale Kenyan farmers "backpacks" of agricultural supplies and equipment, and conducts training sessions to promote sustainable and efficient agricultural practices. It is the combination of complementary solutions applied across scientific, social and political contexts that provides the most promise to the eradication of world hunger.

This is particularly crucial because recent years have also seen the problem of world hunger exacerbating due to various wide-ranging problems occurring simultaneously. Climate change has seen increasingly erratic weather patterns that have ruined crops in Southeast Asia and China, and dramatically reduced the available global food stock. Most importantly, the world's population is also rising steeply and reaching unprecedented numbers, hence escalating the demand for food to feed more babies. This problem could be worse than expected if we consider that our burgeoning global population is at the same time accompanied by slowing population growth figures in developed countries such as the United States. It is clear then that there is a critical situation of skyrocketing population growth in the least developed countries most plagued by hunger. A necessary part of the solution required to solve world hunger hence lies in comprehensive population measures. Introducing or improving modern technology can at best only increase crop production and even so, there is no guarantee that food crop yields can catch up with the rapid pace of population growth in impoverished regions.

In addition, a closer look at the underlying reasons for rapid population growth would reveal reasons such as the low usage of contraceptives due to religious or cultural beliefs. An article in The Economist once studied the disparity in fertility rates between developing and developed countries. It reported that in several African communities,

people believed that children were blessings from God and the use of contraceptives to determine the number of babies each household wanted was akin to murder. This resulted in high birth rates of up to 7 children per woman in these communities. The study thus highlights the complexity of managing population growth, which is a crucial part of the solution to managing world hunger. It is clear then that the answer to world hunger does not lie solely with employing modern technology to boost food production, but with effective management of population policies, which is much more difficult to implement.

In conclusion, advances in modern technology have allowed for greater yields and better ways to grow high quality and nutritious crops. However, the promise of technology as the only answer to world hunger is limited by how its isolated use merely provides symptomatic solutions that are unable to tackle the multi-faceted and complex reasons for the persistence of this problem. What is needed is for technology to be complemented by support on political and social fronts, such that damage inflicted by climate change can be mitigated by increased food production, swift transportation of aid supplies to the most needy regions, and effective management of burgeoning populations through well-managed population policies.

Marker's Comments:

A sensible and mature approach to the question. Balanced, substantiated and well-argued. However, paragraph structure can be cleaner, particularly in paragraphs 5 and 6, to ensure that your arguments are clearly fleshed out.

'Success is determined by one's intelligence.' Discuss.

essay 18

Tan Zi Xiang | 12S06D

The capitalist society we live in unabashedly rewards each individual with vastly disparate amounts of monetary remuneration, honour and fame – conventional yardsticks of "success" – and very often, meritocracy, or the idea that individuals should be rewarded according to their merit and contributions, has perpetuated the notion that individuals can achieve success because of intelligence. Granted, while this is true to a limited extent, it is the thesis of this essay to pierce through this myth of meritocracy and show that such a definition of success does not take into account the multifarious and diverse facets to success and neglects the roles that sheer hard work and plain, dumb luck play in any individual's success.

In few other fields is intelligence prized as highly as in academia. The quality of the theses one expands on, the scientific research one conducts and, finally, the hallowed benchmark of success in academia in the form of the number of citations one receives, are all arguably functions of one's intelligence. Few would doubt that to be a successful historian, physicist or economist, intellectual wherewithal is the be-all and end-all. One needs to look no further than the most famous scientist of all time: Albert Einstein. His story is an oft-told classic. Despite lacking the formal educational attainments in the relevant scientific fields, while working as a clerk in the Swiss patent office, Einstein singlehandedly wrote groundbreaking postulations on the physical nature of the world around us and pioneered the development of two major spheres of knowledge in modern physics – relativity and quantum mechanics. The ingenuity of his work was instantly recognised and once experiments fully and solidly proved his hypotheses, he was catapulted into mainstream media attention worldwide. The honour he received was far more than the millions of dollars' worth of Nobel prizes. In fact, the best indicator of his success is arguably his ability to captivate the public's imagination and give flesh and blood to the societal stereotype of the eccentric genius, even till this day. He was the very embodiment of intelligence and his success was almost entirely credited to his intellect. As such, one might conclude that success is in fact determined by one's intelligence.

This consideration can be seen beyond academia and is found in the field of business as well. The prescience of Bill Gates in developing operating system software in computers or the prescience Steve Jobs exhibited in spearheading the use of touchscreens and appealing user interface in the runaway hit that is the iPhone are just a few examples of intelligence displayed by business honchos in the world of commerce. Employers are constantly on the lookout for the "best and the brightest" and "the cream of the crop", founded upon the belief that the capacity to think critically, assess complex situations and innovate is an essential quality of a productive employee. It is no coincidence that investment banks often advertise their employment opportunities at Ivy League institutions across the United States, in the hope of attracting intelligent college graduates to join their ranks.

Indeed, critics of the thesis might argue that intelligence is less important in the field of business and point to people like Li Ka-Shing who barely received an education or

to the fact that Bill Gates and Steve Jobs are both university dropouts. Prima facie, this argument seems ostensibly true, but in fact it confuses formal education, which is no doubt one indicator of intelligence, with actual intelligence. That Bill Gates chose not to complete his education in Harvard does not portend his stupidity, but rather should be viewed as evidence of his perspicacity and determination to start his own company such that he was willing to forego tertiary education. A more qualified concession would be that the field of business requires a different kind of intelligence, not the mental horsepower to solve complex equations unlike in academia, but a kind of practical wisdom, strategic thinking and ineffable ability to make the right judgments. This is a different type of intelligence, perhaps, but it is nevertheless still intelligence, which is a major ingredient in successful business stories.

That being said, I believe that the deterministic view posed by the question is hamstrung by its parochial perception of success and its oversight of other factors equally instrumental to success.

The athletic achievement of renowned Chinese hurdler, Liu Xiang, before his more recent fall from grace, encapsulates these criticisms. Surely, his world records in the 110 metres hurdles for men is a success by most measures, much less the fame and lucrative endorsements he received in the wake of his athletic accomplishment. But like most sporting achievements, his intellect played but a minimal role in his success, which boiled down to two aspects: tenacious effort to perfect his hurdling routine and natural physical endowments. Stories of his gruelling training regime leave sporting fans with no doubt that Liu is a hurdler who earned his place on the podium by toiling tirelessly on the field. Certainly his tall, sturdy build and high proportion of "twitch muscles", essential for athletes who rely on sharp bursts of speed like sprinters and hurdlers, are significant contributors to his success. However, the extent of celebrity Liu achieved in China cannot be explained by his athletic feats alone. The reason behind China's obsession with Liu in particular, despite China's general sporting dominance, can be found in the backdrop of the Chinese's dismal track and field record. Partially due to the inherent genetic make-up of Asians, partly due to the ubiquity and saturation of the sport, the Chinese have historically never excelled in this event and when Liu Xiang was placed first in hurdles at the Athens Olympics, he did more than "merely" win the gold medal; he was vanquishing the stereotype that the Chinese cannot excel in track and field. This was why the Chinese public adored him and this explains the extent of his success beyond the track.

The idea that one's success depends very much on broader, societal context and plain, dumb luck, permeates far beyond the sporting sphere. Beyond their intelligence, what else do Bill Gates and Steve Jobs have in common? Firstly, both are Americans and, secondly, both were born in the late sixties to early seventies. As I shall show, these are significant facts highly material to their success.

Far more than the entrepreneurial drive Americans are known for, the computer revolution that took place in Silicon Valley is a widely known fact. The radical success informatics technology has had in reshaping our lives and generating wealth is attributed to not just the innovations of software engineers there, but also to the robust American patent systems that are able to safeguard these innovations and allow these talented individuals to profit from them. Likewise, the network effect of concentrating these firms in the same geographical location increases the rate of

knowledge flow and allows greater cooperation, contributing to the eventual success of the industry.

Also, the shockingly rapid wealth accumulation of Bill Gates and Steve Jobs should not be divorced from factors like their age. At the point when they first entered the workforce, the computer revolution was in its infancy and as adventurous young men with few responsibilities, they were well-situated to enter this risky line of work. If they were middle-aged with a family to look after and mouths waiting to be fed back home, it would have been much less likely for them to succeed as wildly as they did. In interviews, Bill Gates himself acknowledged the disproportionate role luck played in his success and is under no illusion that he is the sole cause of his own success.

In conclusion, the point consistently belaboured throughout this essay is clear: intelligence is definitely a useful trait found in successful individuals, but it is neither a necessary nor sufficient condition to precipitate success. Often, determination and effort play an equally important role and, most of all, societal context and the capricious wind of fortune are the key determinants as to whether and how far one does succeed. The broader implications of such a realisation are significant. The fact that we cannot seize whole credit for our success and that our success is inextricably linked to the society we live in hugely undermines the libertarian thinking that we get what we deserve as well as the meritocratic ideal that individuals should be rewarded based on their contributions. As seen, the extent of one's contributions and one's remuneration depends largely on factors beyond their control and the successful indeed have an obligation to their less successful counterparts. Such a liberal, egalitarian framework for thinking about society is underpinned by American philosopher, John Rawls, who famously wrote in his magnum opus, 'A Theory of Justice', "the natural distribution [of talent and propensity to work hard are] neither just nor unjust; nor is it unjust that persons are born into society in some particular position. These are simply natural facts. What is just or unjust is the way institutions deal with these facts." With this stirring quotation by Rawls in mind, we must surely concede that success is scarcely a function of one's intelligence and ponder the deeper ramifications of this fact.

Marker's Comments:

Zi Xiang, an intelligent expose that managed to assimilate all the nuances of the arguments to the multifaceted nature of success. Your examples and their subsequent analyses were intelligently evaluated.

Is the pace of life in your society too fast for its own good?

essay 19

Chu Lee Voon | 12S03L

From a small, undeveloped, sleepy port, Singapore has advanced rapidly over the past few decades to become the cosmopolitan hub she is today, abuzz with activity. As we become more and more interconnected with the rest of the world, engaging in the trade of goods and services as well as adopting the latest technology to boost production, our pace of life has inevitably become much faster than before. With the increasing emphasis on efficiency and productivity, many have begun to wonder if our pace of life is too fast for our own good. I am of the opinion that although this increased efficiency has undoubtedly resulted in astounding economic growth for Singapore and that we, arguably, cannot afford to slow down in the face of numerous changes occurring in our highly volatile world today, our fast pace of life has compromised other more important aspects of life such as social relationships. It has also resulted in high stress levels, poor health and an increasingly ungracious society. It is in this light that I agree with the statement that the pace of life in Singapore is too fast for its own good.

Proponents of the stand that our pace of life is in fact not too fast are quick to point to how our emphasis on efficiency has spurred much economic growth over the years. They claim that in this aspect, it can be said that our pace of life is not too fast. I acknowledge that our astronomical growth rates can be largely attributed to our fast pace of life. Over the years of nation-building, our government has always devised methods to boost productivity by purchasing the newest machinery or investing in the development of human capital. In recent years, the government has set aside a handsome sum of money for the Skills Development Fund, which aims to retrain workers and upgrade their skills. All our pursuits of higher efficiency have evidently produced results: Singapore has recently been ranked the country with the highest Gross Domestic Product per capita in the world. This high efficiency directly benefits Singaporeans due to the increase in household incomes over the years, leading to higher material standards of living. Our businessmen grab business opportunities quickly and our swiftness attracts investment from all over the world, thus fuelling our rapid economic growth which trickles down to the basic building blocks of society – the households. As such, it may be claimed that our pace of life has helped us to achieve economic growth and higher incomes, allowing us to enjoy a higher material standard of living and our fast pace of life is in fact good for us.

Others claim that our pace of life is not too fast for our own good and should be maintained simply because we cannot afford to slow down today, given the rapid development of the rest of the world. As our world becomes increasingly globalised, minute changes in one economy can have gargantuan effects on our own economy, as evidenced by how the global financial crises blazed through the world's economies, leaving many large economies in temporary turmoil or even stasis. Technology is developing at an accelerated pace with countries adopting each other's production methods and the newest technologies to produce popular goods such as smart-phones and plasma television sets. Novel inventions are constantly being created as firms and researchers worldwide are constantly on the go. Should Singapore slow down, we may

be left behind in the waves of globalisation. This is because we have no hinterland and there is a dearth of natural resources or raw materials in our country. Our small population – and thus limited human resources - further aggravates this problem. To compensate for this lack of resources, Singapore has no choice but to acquire new skills, resources and knowledge from other countries and this necessitates a fast pace of life to a very large extent. Thus, it may be said that our rapid pace of life is necessary and not too fast for our own good.

Having said that, let us take a step back and observe that the above arguments are in fact rather myopic as they focus only on economic progress and fail to consider the impact our efficiency has on other aspects of life which are arguably more important.

Many Singaporeans find the pace of life too fast because it compromises social relationships. With the advent of technology making video-conferencing and instant messaging possible, people are able to communicate with one another regardless of where they are or what time zone they are in. While this brings about manifold benefits in terms of allowing separated relatives to keep in touch with one another, it has simultaneously further accentuated our desire for efficiency and instant gratification. People find themselves spending more time replying to electronic mail (e-mail) than talking to their friends or families since the accessibility of e-mail allows them to remain contactable 24/7. Studies have shown that smart-phone owners are more likely to go to bed with their smart-phones than their spouses. This shows how our fast pace of life has affected our quality time with loved ones. The flourishing of Short Message Service (SMS) attests to the alluring nature of brevity and quick, prompt responses. Rather than having a face-to-face conversation, people are growing increasingly accustomed to and comfortable with messaging, littered with various abbreviations that were inconceivable in the twentieth century. In Singapore, on public transport such as trains or buses, teenagers and adults alike can be seen fiddling with their telephone and iPads rather than engaging in conversation with one another. It is evident that the influence of a fast-paced lifestyle is pervasive in Singaporean society and has resulted in social relationships being compromised.

Our pace of life can also be deemed as too fast due to the negative effects it has on our stress levels and health. As Singaporeans constantly – and even mindlessly – strive for efficiency in the rat race, many people lose track of the need for time to unwind and relax, or find their precious recreation time eroded due to never-ending demands from their superiors. Our government can spend an inordinate sum on nature reserves, parks and entertainment centres but all these would have no positive effect on society if Singaporeans simply do not have the time to engage in recreational activities. According to the annual report by the Institute of Mental Health, there has been an increasing trend in the cases of high anxiety and depression among young adults and working adults. Apart from mental health, physical health is also a concern in Singapore. Fast-food outlets like McDonald's or Kentucky Fried Chicken are never short of customers; many people resort to such unhealthy diets simply because it is the most efficient way to settle a meal. In such a case, eating is perceived as merely a task to replenish one's energy for the demands of the rest of the day and people thus crave this convenience. The result? A rising trend in obesity among young children as well as cardiovascular-related problems in adults. This shows that our obsession with efficiency and productivity has taken a toll on our health. As such, it would be preposterous to claim that this fast pace of life is good for us; it is too fast for our own good.

Finally, the pace of life in Singapore has resulted in a more ungracious and uncaring society and is clearly too fast for our own good. Due to our preoccupation with achieving our goals quickly at all costs, we have invariably done so at the expense of others. Gone is the traditional 'gotongroyong' spirit in which neighbours and friends were ever willing to lend each other a helping hand voluntarily in spite of inconveniencing themselves; it has been replaced with rudeness and self-centredness. This phenomenon manifests itself in daily occurrences such as pushing and shoving one another on trains or reserving seats at hawker centres with packets of tissue paper. Even on roads, drivers honk at each other incessantly at the slightest irritation or inconvenience and let out profanities when others overtake them in their lane. It has come to a point where the Singapore government has to constantly remind Singaporeans to be gracious. Popular local artistes like Gurmit Singh and the Dimsum Dollies have their images plastered on train carriages and platforms to remind Singaporeans to make way for those alighting. The government has also introduced a scheme to promote good road etiquette. In my opinion, this is humiliating and very unbecoming of a developed and educated country like Singapore. Thus, I feel that the fast pace of life in Singapore has resulted in a loss of social etiquette and society becoming more ungracious, and is certainly not good for us.

In conclusion, I feel that despite the economic progress brought about by efficiency and the necessity to stay ahead to remain competitive, our fast pace of life has resulted in more severe costs to our society in terms of the decreased quality of relationships, health as well as graciousness. Although it must be acknowledged that what is good for society depends on what the society prioritises as most important, I would like to proffer the view that in the light of Singapore's current strong economy, it is unwise for society to pursue efficiency at the expense of other more important aspects of life which ultimately have a bearing on our economic progress in the long run. An unhealthy society cannot maximise its potential, and an ungracious society will not make foreigners feel welcome. Hence, I am of the opinion that the pace of life in Singapore is too fast for our own good.

Marker's Comments:

An enjoyable read that shows a good grasp of local issues and sensible connections between trends (attitudes, behaviour) and the main points of your arguments. Good job! Ideas are sensible and well-argued.

'The only sensible way to live in this world is without rules.' How far do you agree with this?

essay 20

Wong Kwang Ik | 12S06E

Man lives in a world governed by his own rules. Whether it is the houses we sleep in or the places we work, every aspect of our lives seems to be governed by an overarching set of guidelines and regulations, spoken or unspoken. We stand behind the yellow line, stop at red lights and walk on the left side of the pavement. Often rules can seem arbitrary and even nonsensical, leading some to claim that a world without rules is the only sensible world to live in. Though this claim is a seductive one, I feel that such a world is not only unattainable but also undesirable.

Proponents of life without rules make the claim that rules are constraining, even harmful, for creativity and human life – much like a plant being bound too tightly to guide-posts and dying instead of blooming. Indeed, anyone who has had to face a Traffic Police officer after going through a red light at an empty intersection might sympathise. Rules set by society should not be necessary in today's world, where men are sufficiently enlightened by moralists such as Bentham and Kant to know the difference between right and wrong, and mature and self-controlled enough to act on that knowledge. The decision of what to do should be left up to the man, the adaptable, organic, creative thinker, rather than the lifeless and insensible letter of the law. Indeed, the judicial systems of many states already reflect this by allowing one man – the judge – to use his judgement in matters of great moral weight, when it is clear that the law will provide no satisfactory answers. Such provisions as the creation of the self-defence clause in the Hebrew code of law show that this was understood even when codified rules were a new thing in human society, and the evidence of extenuating circumstances as a defense in modern courts show that this lesson has not been forgotten. Even now, it is clear that while the law does not recognise the difference between a crime committed in cold blood and one committed under extraordinary pressure, the human judge does, and is willing to set aside the sentence recommended under the law for a more fitting one. How long, ask the anarchists, until we extend this power of judgement to every individual, and do away with the rules entirely? It seems that this would be the only sensible option, more so in a world which has embraced moral relativism to a great extent. Good and evil differ from man to man, so should it not be ridiculous in the extreme to judge them all by one set of rules? Man should not need rules to compel him to act correctly.

Yet the evidence for this claim is lacking, as is the basis on which it is made. It is a naïve and fatuous claim to make that man does not need rules, that man can live without the strict supervision of a moral code. A cursory examination reveals the truth: once the rules are taken away, the moral fabric of a society is torn and trodden underfoot. The collapse of the rule of law in Haiti, following a catastrophic earthquake, led directly to outbreaks of looting and fighting. As Thomas Hobbes observed, the life of an ungoverned man is nasty, brutish and short – a claim which experience is yet to overthrow. Nor are prior discipline and knowledge of right and wrong a guarantee that man will act correctly even in the absence of rules. During the conquest of Eurasia, Genghis Khan instructed his men to be merciful to those who surrendered quickly and with little resistance. Yet once the Mongol hordes were unleashed on the wider world

and safely out of their leader's reach, they promptly began the slaughter and rape for which they were so well-known. We have seen, again and again, that man is far too fickle in his moral convictions and strength of will, far too selfish, and far too wicked to live without rules. Man needs rules to set down and enforce moral standards, and society cannot function otherwise.

This judgment may seem like an overly pessimistic appraisal of the human condition. Surely, some would say, this is a harsh judgment of many based on the actions of a few? Not all people are warlords or looters after all. Indeed, there are people who do display goodness and selflessness even without rules compelling them to do so – for example, the survivors of the Fukushima tsunami and nuclear leak who shared food and shelter instead of fighting over it, or the many tribal peoples of the world who manage to get along without a written code of law.

However, considering such cases reveals a more important fact about human nature: we can never live without rules because we create them when none exist. Such rules need not be spoken or codified; they are the implicit guidelines that rule much of our lives. Nowhere in any modern book of law is it written that we should treat our parents with respect or be kind to the less fortunate, yet the outrage one will face when one quite legally evicts parents from the family home easily exceeds that faced when the offence in question is parking on a double-yellow line. Indeed, such rules formed the basis of legal systems and written laws. The ancient laws of Hammurabi, created to govern a kingdom a thousand years ago, included simple statutes such as the prohibition of theft, murder and incest. Strikingly, very similar laws are found in cultures worldwide, many of which have never heard of Hammurabi – the Chinese, for instance, and Native Americans. Each independently derived a moral code. There are, then, undeniable and inescapable moral absolutes even in a world of moral relativism, and try how we may, we cannot live without these rules. Even in an anarchist society, these rules would govern human behaviour. Far from being absent in a sensible world, rules are essential to its functioning, whether we acknowledge and codify them or not.

Conversely, without rules, who is to say what determines right and wrong? My personal moral code may allow me to rape and pillage; yours might compel you to give away all you own to the poor. In the absence of rules, nothing separates these moral codes, yet it should be very clear that there is a difference, a clear and morally grounded difference; and the basis of that difference is a moral rule. It is inescapable; men need rules to keep them from being animals. Living as we do in a world packed shoulder to shoulder with our fellow men, it is only sensible that we somehow come to a consensus on what is allowed and what is not. To do otherwise would only add to the sum of human misery that already exists in part due to the breakdown of rules.

In conclusion, the greatest concession that we can give to those who wish to live without rules is to agree with their observations. It is true that there are rules which are foolish or outdated, rules which are unjust, rules which are unnecessary. Our approach towards these rules should not be to tear down the entire construct of the rule of law, for doing so would be akin to destroying the rock on which a civilisation is built, for the sake of an unpainted wall. Instead, it would take comparatively little effort to improve and revise the rules of the world we live in, to make them serve everyone's interest. In contrast, to do away with rules entirely and expect society to sort itself out

with minimum harm is wishful thinking in the greatest extreme. History has shown us time and again that any hope placed in ungoverned men to act justly, kindly, even decently, towards one another is a false one. The selfish and greedy nature of men must be kept strictly in check for society to function, and by any reasonable standard, it is rules that must perform this function.

Marker's Comments:

Superior ideas, awareness and examples wielded well with choice language; interesting material presented with concision!

essay 21

'The only sensible way to live in this world is without rules.' How far do you agree with this?

Cheng Jingjie I 12S03M

In every aspect of our lives, we are governed by rules, whether written or unspoken, from the economic sphere to the ethical. It is difficult to imagine an anarchic world where all individuals are free to act as they please, and with good reason. While a world without restrictions, laws and behavioural norms may seem plausible and even desirable to the freedom-seeking individual, the fact remains that, as individuals, we are unable to provide for all our own needs and, hence, must submit ourselves to be part of a larger community or society. The collective nature of such societies necessitates the establishment of general norms and rules in order to function as a productive entity. Rule-bound lives, to a certain extent, are then the more sensible way to live in a society, and perhaps allow for a more meaningful life for the individual as well.

The most obvious manifestation of such rules that govern the lives of almost everyone in this world would be the law, be it national or international law. Since Roman times, there has been documentation of law systems in every civilised society. In fact, British law as we know it today stems from the principles of Roman law. The long history of this establishment is a testament to the necessity of laws in every society if it were to function and prosper. When a group of humans live together sharing the same space and resources, it is inevitable that conflicting interests will result, sometimes with disruptive effects to society as a whole. Take the most recent Thomson Medical Centre case in Singapore for example. The couple who sought in-vitro fertilisation services from the centre realised that the sperm that fathered the child was not actually the intended "father's", but that of a stranger. The mother thus demanded that the centre pay the child's maintenance fees until he can support himself, because that was not the child she had asked for. The law is required to arbitrate and determine the best resolution under the laws of the country. Without such rules, it is impossible for such disputes to reach a resolution with sufficient authority to placate both sides, and future cases may threaten both the safety of medical treatments in Singapore and trigger anger in society. Moreover, the laws of a country are meant to reflect general societal sentiment so that any individual willing to be part of society must abide by the morality of the "common man" in that society in order to be made into valid law. This sentiment of the majority thus ensures that the law conforms to the average member of society and thus, the average individual does find validity and meaning in it. Down to the most mundane of human transactions, such as contracts, everyday business dealings and even the right to paste advertisements at bus stops, the law is necessary to ensure that all parties, all members of society behave according to the same accepted code. Law and rules are thus needed to organise society into a sensibly functioning entity.

Even on the international stage, similar rules are required to ensure productive relationships among countries, each with their own vested interests. International law is required to resolve disputes such as the conflict over island ownership between China and Japan as well as Japan and South Korea. The conflicts have gone so far that Japanese embassies have been targeted in China, and bilateral relations between Japan

and the two countries have been affected. Without the objective judgment of the international court, it is impossible for the countries to reach an agreement at this point. Furthermore, international relations are also governed by treaties and agreements, such as extradition treaties between various countries and military cooperation. All international relationships must be accompanied by careful documents that govern the relationship, both as a means to agree on common grounds as well as something to fall back on should disputes arise. Thus, the interests of individuals necessitate rules within a society while the interests of countries necessitate rules across the globe.

Beyond the law, rules, perhaps unspoken, also govern how we behave and treat one another. The relentless study of ethics and morality reflects a human need to establish rules and norms that make our human relationships meaningful. From utilitarianism to Kantian deontology to ethical relativism, the search for what makes a "good" life has been present since Aristotelian times. Indeed, ethical rules are not only meaningful to the individual, but also sensible to society as a whole. Ethics and morality provide guides on how to treat other people and are mostly founded upon the premise that morality is inextricably linked to our place in society (of course, there are many theories of morality, including those that advocate self-interest – but these are usually discussed in the extreme philosophical field and are not regarded as general morality). For example, the serial killer Ted Bundy infamously claimed that he was not violating any moral code by killing all his victims, but merely following "his own morality". This, of course, outraged the public who generally subscribed to the ethical rule that one should not kill the innocent. Indeed, such "individual morality" threatens societal structure. If all individuals subscribed to their "own morality", society would collapse and no individual would be able to live sensibly. Thus, consensus on general moral principles is important to ensure the proper functioning of society and its members.

Yet, Ted Bundy's claim also throws light on a possible reason why living without rules might be sensible to the individual. As entities with independent minds, humans prize the freedom that they perceive they possess. In fact, many societies, such as American society, prize the right to individual freedom. The liberty to do anything we want to provides us with a sense of agency and autonomy and, thus, the freedom to give our own lives meaning. Existentialist philosophers such as Sartre and Camus hold that Man has no immanent purpose and by extension, it is up to us to create meaning in our lives – something that rules seem to impede. Ralph Waldo Emerson's famous quote, "to be yourself in a world that is constantly trying to make you something else is the greatest accomplishment," seems to suggest likewise. But these ideas, when brought to the extreme of each of us following our own arbitrary "rules", are out of context. As mentioned earlier, the fact remains that – to borrow a cliché – "no man is an island", and we must necessarily belong to a larger entity to fulfil our modern needs. In fact, there can be no luxury of individual freedom without a functional society. The freedom that we desire above and beyond what a functioning society provides must not conflict with societal rule. We remain free to embark on personal adventures and take risks, but only as far as we do not threaten the entire structure of society. Intellectual freedom, too, remains something society cannot take away. Of course, social rules may change, as can be seen by the world's experiment with Communism or a previously conservative society opening up to liberalism, but these changes are gradual and carried out after much collective analysis and evaluation by those affected. At any point in time, rules still exist and govern societal interaction, and it is sensible to abide by these rules.

Indeed, the idea of the social contract is paramount to the functioning of any society. We give up some of our rights to a governing body in exchange for protection and provision for our well-being. The rules that this governing body sets thus constrains all members of the community, and it is precisely these very rules that provide us with the safety and basic needs we require. Hence, the importance of these rules is substantial. The rules also govern the very people who rule us, and thus the very process of electing them into power. Thus, rules also give us a sense of fairness and impartiality.

On a personal level, religion, tradition and culture can also present us with a set of rules that we are obliged to follow as part of that community. Many look to religion as a moral compass to guide their spiritual lives and to aid them in becoming "good people". Indeed, all religions preach certain virtues, many of which are in line with secular morality regarding the treatment of those around us. Thus, such rules, whether derived from religion or secular thought, not only aid the functioning of a productive society but help the individual to lead a more meaningful life as well. The apparent increase in religiosity throughout developed nations has been attributed to a greater need for spiritual fulfilment through religion. Additionally, culture and tradition give us a sense of identity – by abiding by the cultures and norms of a group that we belong to, we acquire a sense of solidarity with the people who think and behave in the same way as we do. This need is evident in the observation that diasporas all over the world do remain adherent to their home countries' customs, such as the "Chinatowns" across Europe and the United States. Our willingness to submit ourselves to such rules proves that, sometimes, rules are indeed desirable as they help one to lead a more meaningful life and provide a sense of identity.

It is thus curious to say that a world without rules is the only sensible way to live because whether on the global, national, societal or individual scale, some form of conformity and rules are necessary both for the productive advancement of mankind and personal fulfilment. As social animals, rules ensure harmony among independent minds with their own vested interests.

Marker's Comments:

A mature, sensitive, balanced approach to the question. The choice of two of your examples, however, does no justice to the quality of your arguments in those content paragraphs. Impressive grasp of the issues involved nonetheless. Good work!Excellent linguistic ability. A joy to read indeed!

General Paper Class Assignments

Is there still a place for public libraries in your society?

essay 22

Dylan Han Yong Ding | 12S03G

A sanctuary for avid bookworms and a haven for bored Singaporeans seeking a reprieve from the humid tropical climate on a Saturday afternoon; these are contrasting views on the role that public libraries should fulfil in society. The former is seen to be idealistic to say the least, because in the increasingly fast-paced society that we live in, who, really, would choose to idle his or her time away browsing through dense novels and brushing the dust off the most voluminous edition of the Star Wars series? Moreover, with the development of modern technology, the notion of even taking a bus down to the nearest public library or walking down the extensive aisles while scanning through the reference numbers on the adjacent shelves in search of one's favourite book seems completely superfluous. After all, the latest book release is just one tap away, with Apple releasing various applications on products like the iPad, which have made the purchase of electronic books so much easier and preferable. However, the latter view that Singaporeans do not regard reading as highly as other national pastimes may also be an over-generalisation, because the increase in government spending on public library construction and the overwhelming crowds on some weekends or public holidays seem to suggest otherwise. Despite the many contrasting views on the importance of public libraries in our society, I am of the firm belief that public libraries still have a place in Singapore.

Of course, detractors of my stand would argue that public libraries are a waste of taxpayers' money and an unnecessary burden on the government with regard to maintenance-related works. As mentioned earlier, technological improvements have greatly increased the accessibility of books to the general masses, causing a paradigm shift in the whole concept of appreciating literature. With the availability of a wide range of literature ranging from Shakespearean works to more contemporary pieces by famed authors like J.R.R. Tolkien or Mitch Albom on our mobile devices, we no longer have to travel out of our homes in search of reading material. Moreover, reference books or other non-fiction material in the library simply are not necessary when powerful search engines like Google or online encyclopaedias like Wikipedia provide the same information that we seek, but at a much faster rate. The onslaught of information that has accompanied the rise of technology and constantly bombards us on a daily basis has even made the transition back to books arduous. Chances are, most people on the MRT or buses nowadays are more likely to be sliding their fingers on their smartphones or receiving visual and audio input through videos played on their mobile devices. However, to say that technology can replace books and ultimately libraries is highly parochial. A statement to this effect would be equivalent to the verbal marginalisation of the lower income group of our society, most of whom are unable to afford these expensive electronic gadgets or do not have the luxury of making frequent online purchases. Moreover, one should not forget the less tech-savvy individuals in our society, be it the elderly or otherwise. Public libraries also serve as more than literary resources and these other purposes will be explored as well in this essay.

Discuss the developments of the literary scene in the past few years and one prime example of these events would be the closure of the Borders chain of bookstores in

Singapore. Many Singaporeans would reminisce and recall all their fond memories spent in these bookstores, whiling away a rainy afternoon nestled on the carpeted floor with a good book in hand. However, the recent decline in bookstores has made public libraries all the more important in our society. The entire concept of a library revolves around "free borrowing" which makes reading an affordable pursuit for the average Joe, or the average Ah Beng, to bring this into the local context. Public libraries have empowered the voiceless in society, because it provides the less privileged with the same opportunities as their wealthier counterparts, the same access to reading materials and other resources, all with the use of an EZ-link card or identification card. Besides, with the closure of several bookstores in recent years, public libraries have become ever more important in serving as the bastions of our local culture, since amidst the thousands of books in a library nestle many local authors' works, not only in English but in other ethnic languages of Singapore like Mandarin, Malay and Tamil. Hence, public libraries play a role in our society in filling in for the vanishing book retailers, as well as holding their own as free cultural resources.

Also, public libraries have evolved from being merely buildings that provide free book-borrowing services to become lifestyle hubs. A check with most public libraries nowadays would reveal state-of-the-art facilities, from computers equipped with fast core processors to photocopying shops within the libraries that provide cheaper rates and almost instantaneous printing services. Public libraries have also diversified by providing various types of materials, from DVDs for the latest film release offerings, to magazines and newspapers. For those less inclined to visual input, public libraries in Singapore even offer audio recordings of many different books from various genres, including the famed Harry Potter series by J.K. Rowling. Our public libraries, which come under the National Library Board (NLB), have even expanded into other side ventures, especially in the food and beverages sector. Most public libraries now house cafes or eateries within their premises, which allow visitors to enjoy their books while sipping a cup of coffee. The sheer range of services provided by public libraries have further entrenched their place in society, as hubs that cater to the ever-changing tastes and preferences of Singaporeans while providing them with the original privilege of borrowing books freely.

Our public libraries have been greatly modified to cater to the various needs of the general public, but ultimately, the most important feature of these libraries is the vast reading resources available. In multicultural Singapore, the importance of being bilingual and linguistically fluent is oft-heard. To keep up with our business partners worldwide and retain our cultural identity, we need to utilise the resources that are afforded by our public libraries and continually polish our linguistic proficiency. Moreover, these public libraries essentially serve as common space, which is a key tenet of social cohesion and even racial harmony. All Singaporeans are provided the same opportunities in venues like public libraries and it is these places that serve as a meeting point, or crossroads, for people from different backgrounds, regardless of race or religion. As such, public libraries still serve as a place to reinforce not only our cultural identity, but more importantly, our national identity.

In conclusion, the significance public libraries have cannot be overlooked nor underestimated. As our country flourishes and the landscape of our society changes, we are able to stay in touch with our cultural roots and build a sense of community with such facilities. Many are aware of the cultural significance of public libraries and

the influence of books on the psyche of an individual, which in collective force can change the face of societies permanently. Thus, public libraries are here to stay in Singapore, for now and forever.

Marker's Comments:

A well-written, considered and enjoyable read! Your essay shows keen awareness of the social and cultural significance of public libraries in Singapore. Excellent work, Dylan!

'Inequality is a fact of life.' To what extent should we accept this?

Inequality has afflicted humanity since the dawn of civilisation. Two millennia ago, Roman masters made use of slaves to do their bidding. Now, Indian tycoons in Bangalore live next door to slums that serve as homes for the poor. Whilst many believe that greater equality is desirable, I find that we must embrace inequality as a fact of life. Historical trends have shown that it is indeed possible to push for and attain greater levels of equality, but it is important to recognise that it is only because of the existence of the haves and the have-nots that those who have can have what they have. I believe that we need not completely accept that inequality is a fact of life as doing so would slow or even impede the push for greater equality. However, that being said, it is necessary to keep in mind that complete inequality is largely impossible, and accept that inequality is an unavoidable fact of life.

One reason why we should not accept inequality is that refusal to embrace inequality has led to many historical examples of movements for equality, which ultimately helped to empower and grant greater status to those who were underprivileged. The French Revolution was sparked by the large income inequality between the rich and the poor in France. The feminist movement was caused by the disparity in rights and treatment of men and women. The black equality movement in 1950s and 60s America was aimed at seeking greater equality between the whites and the blacks. In all these cases, the plight of those who were at the losing end was ameliorated, and the push for equality led to better lives for them, as well as social development and the improvement of human rights. In such cases it would be better not to accept that the inequality between one group and the other is a fact of life, for the simple reason that it need not be. It is the refusal to accept inequality that drives the push for change, change that is often for the better and helps nations and societies move forward into a better future.

One area where we should not accept inequality is the area of rights. All men and women deserve equal rights and opportunities, and the examples of the feminist movement and the black equality movement given in the previous paragraph are examples of groups of people fighting for greater rights and eventually attaining them. Equal rights and treatment would serve to benefit society, as each member of society could then work to his or her full potential. Consider the issue of female scientists. Before the 1900s, most prominent scientists were men. This is due to the fact that women were not given the opportunity to contribute to science; it is not a reflection of the fact that women had little to contribute to science. Greater rights, treatment, and opportunities for women led to more equality, and female scientists like Marie Curie emerged. Equality allows a previously marginalised group to contribute better to society in more fulfilling ways, and thus for the sake of their rights, fair treatment, and opportunity, we should not settle for or condone inequality, for seeking equality would be beneficial to society.

One area, however, in which we should accept some levels of inequality, is that of income. While large levels of income inequality are not welcome as they may have

a destabilising effect on society, complete equality is undesirable as well. Different workers will do a different amount of work in an economy, for every individual is unique and does what they are capable of. A skilled politician may work harder than a cleaner in a hawker centre. Should perfect income equality exist, what incentive has he to continue working harder? In the materialistic and consumerist world that we inhabit, the monetary incentive is a significant one. People enrol themselves in universities so that they may draw better incomes when they start working. Should there be income equality, the incentive to work harder or to contribute more to society would be diminished if not eliminated. Income inequality is necessary for a society to function. Equality is not only undesirable; it would be detrimental as well. In recognition of this, we should accept that some inequality is a fact of life and we should not seek to change it.

Another area in which inequality is necessary is that of inequality between communities. Many communities exist in this world, some more prosperous than others. It is impossible for all communities to enjoy the same wealth. For every bustling metropolis like Hong Kong, there must exist farmers to cultivate its food, miners to mine the materials it needs, and so on. It is only because of other supporting societies that some communities may prosper. For every developed country with a financial and service-based economy, there must be a developing country with a large agricultural sector working to support it. Different levels must exist in order to reflect differences in function. As such, inequality is to some extent unavoidable and we should accept it as a fact of life.

Yet another area where inequality is necessary is that of status. Not everybody can be of equal status; it is necessary for some to be above others. Herds of animals each have an alpha male that leads the animals along as they forage for food or shelter. Society is no different. In order for society to function as a coherent whole, some citizens must submit to others and grant them the right to rule. Within a corporation, the bosses are needed to determine the direction of and make decisions regarding the company. In an army, a General is needed in order to lead the soldiers and coordinate attacks. For any form of organisation, there must be a pecking order, a hierarchy that places some individuals above others. This is due to the fact that a large group of people would require oversight and coordination in order to function effectively as a coherent whole. In the case of unequal status in organisations and society, some inequality is definitely necessary.

In conclusion, we should refuse to accept inequality as doing so leads us to push for greater equality. However, we must keep in mind that perfect equality is undesirable, and that some inequality is always necessary for society to function. Thus, we must acknowledge small degrees of inequality as a fact of life, for perfect equality would not only disrupt the workings of society but also echo the society of Communist Russia and the dystopian worlds of '1984' and 'A Wrinkle in Time'.

Marker's Comments:

Thorough development of ideas within paragraphs. Keep it up! Sensible arguments that feature a balance of philosophical ideas and real world considerations.

There is a Member of Parliament coming to my estate. The management figured it would be a good idea to show him that we were a community of extremely patriotic people, and proceeded to erect national flags, one for every two metres.

I must explain the context here – I live in a very old, very overgrown, very large estate near MacRitchie Reservoir. You can probably find about a thousand two-metre segments in which to erect your flags. And the meticulous management did so. Faithfully. Not missing a single one.

Before the day ended, they had amassed fourteen complaints – seven indignant, six confused, one screaming threats about decreased resale value.

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Good afternoon ladies and gentlemen. This is the last speech I get to do that is thoroughly up to my personal creativity, and I want to talk about national pride. I hope this doesn't bore you. I hope you don't see me as a political stooge. I hope you'll listen, because this means a lot to me.

I was walking home around four-thirty on Monday afternoon, listening to music and looking down. I felt fabric brush my cheek. I looked straight up into a billowing sea of red. You know where this is leading; I'd walked straight into a flag. My first instinct was "Who puts flags in the middle of pavements?" but then something stopped the thought and I found myself, for the first time, looking very intently at a flag at close range.

I was in the Girl Guides in secondary school, which meant flag-raising and therefore close contact with the flag, but flag raising unfortunately entails the flag moving away from you. And yes, I did draw flags in primary school, but that meant awkward banana-shaped moons and wonky stars that I remember arranging once, in one of my creative moments, in the shape of a heart. It took a long time for my teacher to convince me that yes, it was a nice flag, yes, it was pretty, but no, it was not the Singapore flag. Redraw.

So when I get my chance to see my country's flag up close, I don't see just a crescent moon and five stars arranged in their proper positions. I see a whole video reeling before my eyes – primary school social studies textbooks, my primary school forcing us to memorise songs such as My People, My Home, and then Chan Mali Chan. I think about the way National Day Parade skits make me wince a little with characters that, well, to me, might be trying a little too hard. I guess what all this means is that National Education has been exceptionally well integrated into the curriculum.

When I look at the flag I don't see my family and my friends, though, it would be too much like an NDP 2012 commercial for that to be happening. But I see what I know

of our forefathers fighting for independence, building our nation. And that's what a flag is to me – a symbol of everyone who has come before you and how hard all of them have worked. You can't always feel for infrastructure and symbols, but I think you can always feel for people.

It's funny, isn't it, when you think about what exactly a flag is, just a piece of fabric attached to a pole? And yet when a flag is billowing on the peak of Mount Everest, can we really call it nothing more than cloth?

A flag to me is a sign of welcome, a sign of familiarity. I won't go so far as to say it is the blanket under which all citizens sleep safely, because... that's probably misuse of the flag. Another incident happened with the flag recently – a thirteen year old girl, probably meaning no harm, set fire to it at a void deck. It's just cloth, yes, but I can promise all of you that if you see a flag burning you'll realise that attachment to a flag goes much deeper than you think.

And yet what does burn in you, when you hear National Day songs? The old ones, I might hasten to add, as I'm not so sure what the new ones are trying to get at. I think the old songs pull up emotion in even the most hardened, cynical haters. That emotion isn't based on how successful your country is – how high its GDP, how glittering its shopping belts. Neither should it be based on how much it gives you in scholarships and education. I think national pride is about saying I've grown up here, or I have friends here, and I am attached to this place simply because... The way you would love your family without thinking, is the way you should be proud of your country; how could you not be proud of such an integral part of you?

National pride doesn't mean agreeing with everything the ruling party says, or always following every rule (come on, own up, we've all broken the chewing gum ban at some point, surely) – but I think it means instinctively knowing and celebrating our connection to our past, and therefore a responsibility in our own way, to our future.

And if it has to mean a thousand flags flying in unison smack in the middle of pavements in housing estates – much overkill, but if that's your national pride, then really, who's complaining?

2012 Year 5 Knowledge and Inquiry Promotion Examination

'The progress of Science has shown that scientific theories and laws can never describe nature itself but only our observations of nature.' Comment.

essay 25

Mark Keat Kay Daniel | 13S060

'The progress of science has shown that scientific theories and laws can never describe nature itself but only our observations of nature.' This statement puts forth that our knowledge of the physical world is not reflective of the objective physical world, but of our subjective interpretations of it, subjective in the sense that it is observer-dependent, not necessarily in the sense that it is individual-dependent. It implies that not only are we unable to overcome our subjective distortions of our observations of nature itself in our theory construction to get a true picture of nature, but that there is a significant difference between the two: our perceptions of nature do not accurately reflect nature itself. I agree with the fact that we can never overcome our subjective distortions, examining positivist and Popperian accounts of science, and their thoughts on the matter, and culminating in Thomas Kuhn's work on paradigms, which examines historical evidence of the progress of science to argue for sociological theory structures which organise our scientific practice. However, I disagree that the difference between the two is large, and I argue that our observations of nature are adequate reflections of nature itself.

Verificationism was put forth by the Logical Positivists in an effort to grant science a secure logical foundation. It argues that science is structured in such a way that theoretical laws are deduced, which combined with correspondence rules to link theoretical terms with experimental terms, as well as experimental conditions, deductively yield experimental predictions. The theoretical laws are derived inductively from empirical evidence, so that the experiments can 'speak for themselves' necessarily (through induction) yielding a theory that synthesises all the specific experimental results into a general law. Here, we see that the Positivists would refute the opening statement on the grounds that there is no difference between nature itself and our observations of it. The theories come out 'naturally' from the data and thus are seen to be perfect representations of nature.

However, several problems exist about the Positivist account. Firstly, there is the problem of induction, put forth by Hume. It states that inductive reasoning itself is justified on the basis that inductive reasoning has always worked and yielded good results in the past and thus, it is reasonable to take it that inductive reasoning will work in the future. In other words, inductive reasoning is justified via inductive reasoning. This is clearly circular reasoning and thus brings into question the entire positivist enterprise of science. It also has implications on the opening statement, as it questions our ability to go from specific experimental observations to general laws describing nature itself.

Another problem of the positivist account is that the criterion for an inductive account is vague. Attempts to specify it often face the problem of not providing an adequate rational basis of why it should constitute good science. For example, requiring that a good inductive argument is one in which many data points are taken yields a problem when we take note that repeated measurements of a well-established phenomenon does nothing towards increasing our certainty of it. Requiring that a good inductive

argument never have disconfirming cases excludes many instances of scientific knowledge which have known anomalies. The Positivists had difficulty specifying what exactly constitutes a good argument and were unable to formalise induction in the scientific method, which thus calls into question the adequacy of the Positivist account of science.

We next move on to the Popperian account of science. It states that science does not establish knowledge by induction, but rather by a Modus Tollens form of deduction. Scientists use their creativity to posit scientific hypotheses in an attempt to account for known phenomena in nature. These hypotheses are then used to generate specific experimental predictions, which can then be compared with empirical data. If the data refutes the prediction, the hypothesis is deemed false. If it agrees with the hypothesis, the hypothesis is corroborated and further experimentation is done to attempt to falsify it. Accepted scientific hypotheses are ones that have survived a battery of tests and thus far remain unfalsified. In this way, science proceeds exclusively deductively with Modus Tollens reasoning, only establishing negative knowledge of what does not work and never positive knowledge of what does work. The implications of their views on the opening statement are that if we assume that one and only one hypothesis will emerge from our battery of tests unscathed, then that surviving hypothesis is taken to be true and an accurate depiction of nature. The naive falsificationist would then reject the statement.

However, the Duhem-Quine thesis has shown that this view is in fact untenable. It states that a scientific hypothesis can never be tested in isolation, but must be looked at in the context of the web of beliefs that went into constructing the specific prediction under test. These beliefs may be theoretical assumptions, for example, assumptions about the Moon's orbit, or experimental assumptions, for example, assuming that an experiment is adequate for the phenomena under test. Under seemingly disconfirming evidence, the choice lies with the practitioner on whether he should reject the hypothesis or any of the background assumptions. For example, Newton's theory of gravity initially was falsified when comparing predictions of the Moon's orbit and experimental data. However, Newton chose the reject the assumption of the distance of the moon from the Earth and chose to retain his theory. Later, it was shown that the distance had been misjudged and further modifications yielded agreement with experiments. As another example, Hertz believed his experiment to be adequate to measure the deflection of cathode rays by charged plates. He observed no deflection and chose to reject the deflection hypothesis. J. J. Thomson instead chose to take it that Hertz' experiment was inadequate and improved upon vacuum chamber technology, demonstrating deflection of cathode rays with a better vacuum chamber. These instances show that what has subsequently been accepted were initially falsified in light of disconfirming evidence, but was salvaged by the rejection of auxiliary hypotheses.

Another way of looking at the Duhem-Quine thesis is that theories are underdetermined; in the sense that given the empirical evidence, there is no way that we are able to distinguish between competing hypotheses. Thus, we may be faced the choice of two different hypothesis and the choice is left to the practitioner. There is no rational means of deciding between competing hypotheses. What this implies is that our theories may not be good reflection of nature. Recall that hypotheses are created by practitioners' ingenuity. Any number of means can be employed here. For example, Kekule hypothesised that structure of benzene after a dream about a snake eating its

tail. The way we construct hypotheses is subjective, contingent on our own personal experiences, and if we do not have a way of empirically choosing between hypotheses, we are forced to choose the one that is intuitively more appealing. In this way, the theories that we choose are not merely reflective of nature itself, but also in how we believe nature should be organised, factors which influence our theory choice. For example, the famous physicist Chandrasekhar expounded on the importance of beauty in choosing our theory. His personal emphasis on beauty coloured his own theory choice, and thus, because he perceived nature to be structured in a beautiful way, he chose to adopt 'beautiful theories'. Thus the sophisticated falsificationist would agree with the opening statement.

We next turn to Kuhn, who developed a conception of science as organised by sociological theory-structures called 'paradigms'. He argued that science progresses in leaps and at a given point in time, the body of knowledge in a field of science is organised and systematised into a coherent paradigm. Practitioners work within a paradigm, which fixes the fundamental principles, as well as how science should be conducted. Kuhn famously pointed out that in conducting experiments and interpreting experimental data, practitioners' views are coloured by the background theory they are working in. This is a phenomenon he termed 'theory ladeness'. For example, when observing that substances that were combusted had increased in weight, traditional chemists viewed it as 'dephlogistonated' and concluded that phlogistons, emitted in combustion, had negative mass. Lavoisier, on the other hand, viewed it as the reaction between oxygen and the combusted substance and concluded that the chemical addition of oxygen was responsible for combustion. Different practitioners view natural processes around them differently and would tend to organise their experiences to fit within their perceptions. In this way, our knowledge of the world is coloured by our perceptions, and thus, our subsequent laws may only be representative of a distorted view of the world, filtered by our perceptions. Kuhnians would thus agree with the opening statement, armed with a wealth of historical evidence, such as the phlogiston-oxygen matter outlined above.

Lastly, I want to discuss the distinctions between our observations of nature and nature itself. Is there a significant difference? Undeniably, our observations deviate slightly form nature in itself, as discussed above. However, I argue that this deviation is often exaggerated. Science is the study of nature, and thus, there is a strong sense that the outcomes of science are determined by nature. It was because the physical world is the way it is that Hertz' experiment yielded no deflection of cathode rays while Thomson's did; to a large extent, natural differences constitute a large part of our observed experimental outcomes. We cannot influence outcomes to conform to our expectations, but we can only modify our theories to accommodate observed outcomes. While I have discussed the ways in which our observations of nature can be distorted, I believe that to a very large extent, our observations are determined by how nature is in itself. The distortions brought about by various factors, be it theory choice in underdetermination or theory ladeness, represent a small fraction of what we subsequently call scientific theories and laws. Thus, while I do agree with the statement that we cannot overcome the distortions brought about, and thus our scientific knowledge is contingent on our perspective, I do not believe the difference to be as significant as often construed.

'Ethical Reasoning boils down to justifying rather than prescribing decisions.' Discuss with reference to the nature of knowledge in Ethics.

essay 26

Foo Yunn Shee Cheryl | 12A01A

'The hand of compassion moves faster than the calculus of reason.' With regard to Ethics, an area of knowledge where emotions and moral sense are intrinsically coupled to, this statement rings true. Normative ethics such as Divine Command Theory (DCT), utilitarianism, Kantian deontological ethics and virtue ethics are then relegated more as a means to justify our actions rather than to prescribe them.

The DCT suggests that ethical decisions be made based on what an omnipotent and all virtuous divine being says about them. For example, homosexuality is ethically wrong to Christians because the Bible, the word of God condemns such behavior. The problem with DCT is illustrated by Euthyphro's dilemma, where the following dialectic is presented: is an act good because God says so or does God say so because it is good? The objectivity of an ethics based on the divine word is put to question, and if the latter half of the statement is true, it seems that there is a morality independent of the DCT normative ethical theory. What God does himself then is not prescribe the goodness of the act, but merely formalises it. Furthermore, with the use of DCT alone, it seems to suggest that those who do not follow the word of God, will not be inclined to do good, ethical things. That is clearly counter-intuitive, as we do not need to presuppose a God or believe in one to be moral. This suggests that there is a morality that lies beyond the word of God that we are intuitively in tune with, one that religion merely formalizes. The 10 commandments with their imperative 'Thou shalt not's' only seem prescriptive because it is written to be so. However, without the 10 commandments, it is likely to suggest that murder will still be considered horrific, that it will still be morally wrong to kill. We merely use the Bible to justify certain actions or against certain actions, in hope that the law of God, or a divine being can provide sufficient explanation for our natural distaste for it.

Utilitarianism and consequentialism is part of teleological ethics where the outcomes of an act are considered to be most significant in determining if an act is morally right or wrong. Utilitarianism defines a moral act as one which provides the greatest amount of happiness while consequentialism defines a moral act as one where the outcome is most beneficial. However there are some contradictions that do not sit well with regard to these normative theories. For example, in law a failed attempt at murder is punished less severely than a successful attempt. This is consistent with consequentialism, however, surely the motive to kill, whether the outcome is ultimately successful or not is enough to warrant the act as morally wrong and be equally punished? Teleological ethics similarly provides us with a justification out of things, and people seldom use it to direct their actions. If it was prescriptive, everybody might think it is morally right to tell lies because more people might be happier not knowing the truth. However, an innate sense tells us that lying is wrong.

Kantian ethics states that it is morally right if it is our duty to do something. While there are technical problems in deciding which duty takes precedence over another, for example duty to provide for your very poor family or a duty not to steal, the main problem of such a theory lies in the coldness of its rational function. For example, we

would like to think it is more virtuous and moral if a husband takes care of his dying wife out of love rather than out of duty to the marriage. Reasoning and rationalizing what our duty is and which duty to take composes a large part of this ethical theory, and the moral sense that is so inherent in ethical decision making is forgone. However, in the reality of the situation, it is the 'hand of compassion' that compels you to act and while at the specific moment you are incapable of understanding why, reflection on the moral decision brings in these normative theories to help explain why you did and helps us get closer to understanding the innate moral sense we have.

The existence of an innate moral sense is evident in the ambiguous virtue ethics. Virtue ethics prescribe us to act in a way that makes you a good person. However, the good action that is predicated on the good person begs the question. It seems as if we already know what makes a good person. To use such a normative theory to direct a good act is circular and therefore cannot be prescriptive.

To engage in a single ethical theory to prescribe our actions might lead to some contradictory results. For example, while utilitarianism might justify lying, deontological ethics will condemn it. The mutual incompatibility of the theories suggests that it will be very hard for all of them to work at once and prescribe our actions. Furthermore, if we used one theory for a situation and another theory to prescribe another action, the inconsistency already reveals that each theory is used to justify our natural inclinations as morally right or wrong. Nietzsche said that normative ethical theory was the 'desire of the heart made abstract.' In morality, conscience, the moral sense of right and wrong plays a more than significant role, and hence, if theses normative theories were in fact prescriptive, and we had to follow them to determine a right or wrong act before acting, the rational function of our minds takes on a superior position to the intuitive and innate sense of moral goodness we seem to have.

The normative theories can have contradictory outcomes of moral right and wrong depending on which one is used in what situation and hence cannot be prescriptive. We wind up not knowing which one to use, and what action to take if we allow it to be prescriptive. The intuition of a moral right and wrong compels us to act or not to act and only after acting do we try to make sense of the act and how it was morally right or wrong. This is when normative ethics come to play, justifying our actions according to how we want to see it.

Ethics continues to be a very complex area and it is indefinite how much our rationality takes part in our moral decision (at the instant of the act). The conscience and the bodily knowledge of staying away from what seems wrong and doing what seems right dictate a large part of the way we act and why we fear certain acts. While one cannot be anymore precise than the subject allows it, especially with one that hinges on the shady and imperceptible feelings of 'conscience', normative ethical theories are important as a navigational tool to understand why we act the way we do.

'Mathematics can only be described as true when it is abstract. While it is applied to and useful in understanding the real world, we have no reason to believe the latter is mathematical.' Discuss.

Huynh Cong Bang I 12A06K

I disagree with the statement for its wrong assumption which inevitably leads to a conclusion too absurd to be accepted. In this essay, I will argue that the notion of truth in mathematics arises from the dynamic equilibrium between mathematical knowledge for its own sake and the demand to seek understanding of the real world. This is to say that when applied to the physical world, mathematics produces truth, and hence preserving its mathematical nature, not out of a coincidence but because the real world induces it to do so.

First and foremost, the statement implies that the application of mathematics to, along with its usefulness in the real world is only single-directional: from mathematics to the real world. This notion has indeed prevailed for a very long time, since the ancient mathematicians began to lay the foundation of mathematics, and it arises again because people are used to, and so only aware of the coherence internal to the knowledge field with its many stringent rules and logical necessities. This allows one to automatically enrich his mathematical knowledge from the basic, foundational axioms he can easily acquire just by inspection and intuition. Due to this rapid internal development, mathematics is soon well known for its absolute truth that can only be derived a priori, without any reference to the external world. However, many thinkers are clouded by this glory, and are thus committing themselves to believing that this is the only way mathematics builds itself up: via the use of abstract concepts connected to one another by pure logical reasoning and strict rules without many relations to the external world.

We shall explore this apparent tension a bit more. The world, as existing independent of our awareness and our thinking, can only be known a posteriori in that there has to be sense data acquired through the senses of the observers, where the latter are always in a passive position, for they can only receive without altering and manipulating. Many will thus be puzzled before a seemingly radical claim, "mathematical knowledge can mirror the physical world," for the former is the product of pure thinking, whereas the latter exists outside and independent of the mind. If we can think whatever we wish, if there is no restriction on our thoughts and reasoning, we cannot be certain that what our mind conceives will follow the world. And hence, the problematic statement.

This, however, is not entirely true. Mathematical knowledge, despite its own powerful development, still originates from the real world. This is to say that, part of mathematics arises from the need to understand the world – from the problems of the world itself. The real world in which mathematicians live inspires, motivates, as well as provides them with the fundamental ideas as 'seeds' for them to grow their 'trees' (giant 'trees' indeed) of mathematical knowledge. Consider the concept of a line. Where do we get this from? One may posit that mathematicians derived the concept of a line from the abstract objective world of 'forms' as described by Plato, and then used it to approximate line-like structures in the real world. However, this is unnecessarily complicated, for the world of 'forms' is an elusive hypothesis nobody has ever been able to prove (or disprove). A simpler way of looking at it

is to say that, ancient mathematicians perceived line-like structures in reality, and then theorised their concept of a line in the ideal form. Afterwards they applied this idealised concept back to the physical world. The success of such a concept in providing understanding can be simply explained: the concept originates from the world, so it has to bear resemblance to the world;whatever truth that has been developed in the conceptualisation process must be translatable to the physical world too, so as for the concepts to be valid.

And then, the concepts may continue to develop on their own through logic and rules, but they must always be kept in check with reality. We can see one entire abstract branch of mathematics – calculus – being developed this way. An untrained person may forcefully claim that the ideas of differentiation, integration and limits are purely abstract and theoretical, that it is only coincidental for them to be able to provide understanding when applied to the physical world. However, he fails to realise that those concepts were motivated by the need to find out how fast an object is moving at any instance, how much space an irregularly-shaped object occupies, and so on. These problems are essential in our daily life, and since we want to grapple with them, we use our analytical thinking to devise mathematical ideas, which, of course, must be sound and consistent. They themselves can be extended to produce more knowledge, and this can take place only in the abstract world, to arrive at new notions that may not have found real-life applications yet (thinking about a differential equation of the twentieth order). This illustrates how mathematics advances: it is inspired by reality, so it has to be effective in providing knowledge of the world. This effectiveness stems from the fact that the world has a role to play in the development of mathematics, and so any applied knowledge back to reality must also be mathematical.

This consideration also allows us to address another issue raised by the statement: does mathematical truth exist in the real world? This question now seems trivial, because mathematics is no longer considered to be completely detached from the real world. It serves as a tool for us to carefully quantify and analytically examine what we can perceive in the real world. In the process we have merged the truth of the world together with the truth in mathematics to provide and enhance our insight. Without the real world, mathematics is non-existent because there would be no place for mathematical knowledge to be initiated from, as well as to ground in; but without mathematics, we cannot systematically study the real world to fulfil our quest for understanding. Truth in mathematics no longer has to reside only in the abstract world.

2012 Knowledge and Inquiry Preliminary Examination

'Claims of objectivity inevitably invite objections.' Discuss with reference to knowledge in Ethics or Aesthetics.

essay 28

Yeow Pei Zhuang | 12S03N

If I should point at the Mona Lisa and say, "That is a terrible piece of art. It tells us nothing and passes no message to us," I think I should be prepared for an uproar from the artistic world. They would surely disagree with my interpretation and my views, and would probably be out for my blood (I should give a disclaimer now: I do actually think the Mona Lisa is absolutely beautiful. Please be appeased, dear art critics). They might say that I have misunderstood the point of art; not all art has to have a message. Or they might say that I have not grasped the true, underlying meaning of the piece of art. Or they might just disagree for the sake of debate. Whatever the case is, there are three reasons why objective claims are so unwelcome in the art world immediately apparent to us: firstly, that there is a problem with the definitions of the terms discussed in aesthetics; secondly, that there is necessarily a subjective element to an aesthetic experience that precludes the possibility of objective judgment; and thirdly, that dissent has an intellectual role and is critical to progress in the art world.

"Art", and its attendant concepts like "beauty", have always remained infuriatingly elusive in terms of definition. Till date, there exists no clear single definition of art that is accepted by the art world. For instance, the scientific community can agree that a "transition element" in Chemistry is a "d-block element that is capable of forming one or more stable ions with half-filled d-subshells". There are clear conditions that something must fulfill in order to be a "transition element", and there are simple ways of testing if something does indeed fulfill these conditions. But this is not the case with Art. Philosopher of art, George Dickie, proposed a list of five criteria that a work must fulfill in order to be considered "art". As expected, much debate ensued, and eventually the list was expanded to include a further two criteria, including the rather fuzzy "Art is whatever the art world, or its representatives, deem as art". Unlike transition elements that exist independently of humans, and thus have characteristics independent of us, art is purely a product of our reactions to our human experiences, and thus does not have objective characteristics for us to determine. Instead, we determine art, and in doing so, determine the way it is defined.

It does not help, then, that much of art is reactionary art. Each art movement is a reaction to the art movement preceding it, forcing the art world to constantly expand its definition of art. Just when it seemed that art could be defined as a reproduction of forms seen in life (think portraits, landscapes, Firth's 'Paddington Station'), Impressionism happened, and art was no longer expected to be faithful to what was observed. Just as the art world reconciled itself to the notion that art was simply a representation (whether faithful or not) of something, Expressionism happened, and bursts of colour and lines communicated energy and emotions rather than people, places, and things. Finally, Dadaism-- a reaction to art itself-- brought with it its readymades and Marcel Duchamp's "Fountain", a porcelain urinal signed "R. Mutt". Up till today, the art world remains split on whether readymades can be considered "art". With the definition of what "art" is constantly in flux and constantly being challenged by the very objects it seeks to define, the question "what is art?" can have no objective answer.

Furthermore, art is more than the physical manifestation of an article. This comes through clearer in considerations of music. Where is the artwork in music? Is it the musical score which tells the musician which notes to play at what times? Is it the music that the musician produces upon reading the score? Is it the memory of the performance in the mind of the listener? Expressionists like the writer Leo Tolstoy would say that the third option is the most significant. It is the listener who, upon hearing the music, has an "aesthetic experience", where he feels emotions invoked in him by the music. This joins him emotionally with the musician, who is conveying the emotions; with the composer, who expressed the emotion; and with the rest of the audience, past, present and future, who have had such an emotion invoked in them at one time or another.

However, if Tolstoy is right in his claim, then art can necessarily have no objectivity because it is inherently subjective. Art arouses emotions in the audience; it is a subjective engagement on their part with the artwork. Tolstoy believes that a work of art will communicate the same message to all its viewers or listeners, but this is perhaps too idealistic on his part. For instance, Beethoven's famous Moonlight Sonata: to some, it arouses feelings of sorrow over a forbidden love. The subtitle of the Sonata reads: "Der Gräfin Giulietta Guicciardi gewidmet"- dedicated to the Countess Giulietta Guicciardi, a student of Beethoven's that he had fallen for, but was unable to marry due to the objections of her parents. To others, it arouses feelings of grief over death. Some say that Beethoven wrote it to mourn the sudden death of a close friend, with the final chords of the first movement recalling the tolling of a funeral bell. To more, it recalls the beauty and serenity of moonlight glistening off Lake Lucerne, which was incidentally how it got its nickname. Beethoven himself rejected the third interpretation; it was given the nickname 'Moonlight Sonata' by a contemporary of his. Yet it is undeniable that there was something in the music that aroused such an association in the mind of his contemporary. In fact, it is one of the least popular pieces amongst piano teachers today: because of its fame, everyone has heard it and has a different subjective opinion of how the piece should be played, making it a trying piece to teach.

Art gains power through its ability to arouse feelings or emotions in its audience. However, because everyone has a different set of experiences, they will inevitably associate different things with the same artwork. One, suffering from the pangs of heartbreak, might hear the strains of sadness in Moonlight Sonata, while another, dealing with the death of a close one, may hear the funeral bells permeating the piece. These subjective appeals to the listener are what make us cry, sob, laugh, or smile in recognition of a familiar emotion in the piece, but also preclude any objective judgment of the form "This artwork is about X."

Continuing on in this vein, the multiplicity of interpretations possible in art is an asset. Some say that the purpose of art is to enable us to have experiences that we would otherwise not have. In peacetime, we can gaze upon the twisted and chaotic scenes in Picasso's 'Guernica', and have some ideas about what it is like to experience war. Or I may pick up a novel by Jane Austen, and imagine that I am the beautiful, witty, heroine, who is going to fall in love with a charming and suave young man. Art, especially fiction, provides a portal for us to experience other lives from our own, which can be somewhat full and boring if you are not in fact an Austenesque heroine.

Yet if we acknowledge that art, to some extent, depends on the resonance of what we perceive in the artwork with something that we already have knowledge of, then our experience of the artwork would be limited. Like that optical illusion where we see a young woman with her back to us, it takes someone to point out, "Why, that is the face of an old hag," and perhaps trace out the curve of her nose, before we see the face of an old woman staring at us.

Discourse in the art world is thus essential for greater insights into a piece of art. In the play 'Hedda Gabler', the heroine Hedda makes reference to another character, Lovborg, as having "vine leaves in his hair". Readers unfamiliar with Greek mythology, as I was, might not see the reference to Dionysus, Greek god of the vine, who was believed to inspire his followers with creativity. They might even have had another interpretation of the symbolism of the vine leaves. Discourse and disagreement is the finger that traces out the nose of the old woman, allowing us to shift the way we look at things, and perhaps gain a new perspective on the meaning of a piece of work.

In fact, this is probably necessary for progress in art. As mentioned in the first point, art is reactionary-- it forms new movements in reaction to the old. In order for this to happen, a certain degree of reflexiveness is required; the characteristics of the old movement must be identified, discussed, objected to, and turned on their head, before the new movement is ushered in. This source of creative renewal for art is what keeps it alive. A joke gets boring after you have heard it ten times, but when you look at an artwork for the eleventh time, you may have a sudden new flash of insight, given the new experiences you have accumulated between the tenth and eleventh viewings. Or the art world might have silently revolted between then and now, giving you a whole new piece of art and a whole new genre to look at. It is because of this source of subjective renewal that art endures. We love art and take pleasure in viewing art, not because of the certainty with which we can proclaim that "X is a work of art," or that "X is the meaning of this work of art," but for the thrill and the intellectual challenge that art provides. There is no objectivity in art, but that is why it is art.

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