The Instrument of the Book, the Instrument of the Internet: "Thinking" "Information" in Micronesia

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Abstract

This paper discusses the origin of reading and "education" in Micronesia – an origin that may be assumptive in nature via a genealogy beginning with the introduction of print texts into Micronesian societies by Protestant missionaries in the mid-1850s. Central, however, to understanding the cultural and societal nature of historical Micronesian adaptations to "reading" and to undoing its contemporary disconnect with related "thinking" within distinctive indigenous societies, is the idea of a "social infrastructure of reading" connected with the intellectual based technologies of the book, the map, the clock, and now the Internet. These tools of "information" require the acceptance of tool specific "intellectual ethics" which changed, have changed and continue to change the way that the mind "thinks" when using them. With indigenous adaptations to reading – and specifically indigenous Micronesian adaptations – relatively unexplored in historical and contemporary terms, it becomes relevant to consider basic connections between these instruments and "thinking" in order to better approach the question of origin and adaptation among the culturally and socially distinctive peoples of Micronesia.

Reading and "Education" in Micronesia

The connection between reading and "education" in Micronesia has a genealogy that goes back to the idea that reading is the result of protracted contact and administration by European powers. But how these powers were responsible for the introduction of reading and its inevitable association with "education" has only been touched upon in historical terms. Granted, American Protestant missionaries in the mid-1850s introduced self-generated texts through a small hand-me-down press from Hawai'i that frustrated all who used it (Lingenfelter, 1967). They believed that the ability of Micronesians to read the gospels in their languages (a significant adjustment made by these English-speaking missionaries) was fundamental to understanding and accepting Christ as their savior as was, ideally, individualism that might surmount the directed "socialism" of indigenous cultures. But coupled with this introduction was and is the equally unasked question of adaptation by Micronesian peoples.

If one accepts that the origin of contemporary reading is tied to this historical moment of the 1850s, there is the assumption that once reading, texts and, inevitably, "education" were introduced, an unbroken chain of influence led to the texts espoused today by "the library," school teachers, and public officials; texts that have now been impacted by the growing availability of the Internet in Micronesian societies. As Kupferman (2013) notes, this notion of origin, of historical beginnings, seeks out an authenticity for contemporary education that transcends time and space, strengthening ideas of an elongated presence and subsequently legitimizing education as it exists in Micronesia through this history. "A belief in the infallibility of the past as a vindication of the present and the ultimate predictor of the future," Kupferman writes, "represents a normalization of a particular approach to history that can be seen in the contemporary discourse of schooling in the islands" (Kupferman, 58).

The idea of indigenous adaptation – to place this at the core of our understanding of present day notions of reading and education in Micronesia – is incapacitated at the behest of the

more convenient and less intellectually taxing idea of a colonial, all encompassing, all traceable origin. The impact of reading and schools in Micronesia - whose origins Kupferman essentially traces to the recommendations of the U.S. sponsored 1963 "Solomon Report" to strengthen Americanization and acceptance of American rule by Micronesians – thus loses its indigenous based characteristics in favor a more historical, colonial construction of reading and education. This does not help us however to understand how contemporary ideas and means of accessing "information" in Micronesia operate within the social and cultural interpretative communities that give Micronesian peoples their distinction.

Representations of the isolated reader in European art of the 17th, 18th, and 19th centuries (Long, 1993) and colonial attempts – particularly after 1963 – to move those representations into practical applications in Micronesia make our understanding of a Micronesian context of reading dependent upon broad, theoretical constructions, rather than enabling this activity, as an integral part of an indigenous social base overseeing the moment, to function within indigenous sociocultural realms where this reading occurs. Elizabeth Long refers these realms as the "social infrastructure of reading" which reflects the fact that "reading must be taught, and that socialization into reading always takes place within specific social relationships" (Long, 191). Besides historic images of the solitary reader that have influenced contemporary visions of reading as a solitary activity bereft of a social world churning just outside the reader's room, illustrations of mothers showing children how to read from within inheritable social contexts also provide a means by which to conceptualize the social act of reading.

This "social infrastructure of reading" encompasses a conceptualization of "culture" and its practical applications which, as a social act, often relegates the word "culture" to a broad functional word that describes to outsiders what these inside actions represent – perhaps as "agriculture" might be used to describe the harvesting and consumption of fruits and vegetables.

As Long emphasizes, "understanding the social infrastructure of reading demands reconsideration not just of reading itself, but of the ways we conceptualize culture and its impact on social change" (Long, 192). Texts themselves emerge from a process of interest and access in terms of how they are published, reviewed, purchased and circulated. In academic, cultural, or social contexts, texts are legitimized within and under a series of socially produced and approved standards that are themselves established and expressed in the context of specific "interpretative communities" (Fish, 1980).

Paradigms of values and expectations shift under external, hegemonic assertions upon the context of these paradigms and the inner changing networks within cultures themselves. Such latter changes are innate changes realized as a result of the gradual interventions of a variety of "forces" from the external pressures of Western acculturation to changing rituals, daily practices, or modes of expression that become almost esoteric within the inner structures of "culture." All of this serves to undermine a European, hegemonic representation of the solitary reader that has frequently conveyed reading as being a supreme act and source for transcending these social infrastructures into a singular nature of distinction that is, however, the antithesis of Micronesian social worlds.

Employing a Foucaultian power-knowledge circuit analytic to question the contemporary ontology of education that, rather than having roots in Spanish, German and/or Japanese colonial periods, is primarily the product of an American emphasis on "education" for Micronesian "development" (and American strategic interests) that generally coincides with the 1963 "Solomon Report," Kupferman traces the genealogy of an ontology of "education" and its implications in Micronesia. Fundamental to this genealogy is not only its conceptualization of a

purified Western notion of "development" but also its "production and legitimization of particular knowledges and the construction of subjectivities in order to remove those knowledges and subjectivities from the realm of contestation and contingency" (Kupferman, 39). The creation of an ontology of "education" involves a process of normalization within which the power of the colonizer over the colonized is supported by questions whose answers await their functionality as reasoned and reasonable resolutions. This ontology of "education" is also supported – indeed constructed – by knowledge as a "form of multiplicity" in the sense that these "subjectivities" become uncontestable – such as the upward, materialistic surge that serves as the foundation for "development" and the central role of the American modeled school and "information" in the pursuit of "development" for Micronesian states and societies.

We thus end up with an illusionary context of sorts from within which come contemporary proclamations of the value and necessity of reading that lack, however, the means by which a Micronesian "social infrastructure of reading" could engender a greater intimacy toward "culture" and subsequently a better understanding of the history of reading, "education," and adaptation in Micronesia. Given the fact that this history and its relation to reading and "education" in Micronesia has of course already happened and has been couched in supportive terms of origin, it would nevertheless behoove us to consider it again, at least as it relates not only to its privileged position today but more importantly in terms of this history's relationship to indigenous adaptation and perhaps even to a sort of indigenous self-determination of reading based on an indigenous "social infrastructure of reading." Recognizing how the instrument of the text – the book – influences thinking as have other instruments such as the map, the clock and now the Internet, is fundamental to reaching a more innate, holistic insight into Micronesian reading and "education" today.

The Presses

The first printing press in the Pacific arrived in February 1817 at Tahiti where a Christian mission had been established in 1797 by the London Missionary Society, two years after the Society's founding. Earlier efforts to transform the Tahitian language into written form, beginning with spelling books, had to depend upon printing presses in London, a process that took about three years. Missionary John Davies' 1808 manuscript was sent to England and didn't reach Tahiti in its printed form until 1811. The 700 copies of a spelling book were filled with errors because the author could not go to London to review the proofs. In 1813, one missionary did go to review the proofs of a collection of scriptures and hymns in Sydney, Australia before they were printed. Squabbling between missionaries in Tahiti and the captain of the Queen Charlotte and King Pomare II's desire to have the press at Tahiti proper, eventually led to the press being unloaded at Moorea where missionaries planned to print a spelling book, a catechism, and the gospel of Luke before moving it to the Leeward Islands of Tahiti. On the morning of the first printing in the Pacific on June 30, 1817, King Pomare, two chiefs and a train of attendants arrived at the specially constructed printing press hut. After the king and his two chiefs were admitted, the windows of the hut were blackened against the crowd outside so as to create a dignified moment when King Pomare pressed the handle that produced the first printed sheet.

In describing the moment, a missionary wrote:

> The king took up the sheet and having looked first at the paper and then at the types with attentive admiration, handed it to one of his chiefs, and expressed a wish to take another.

> He printed two more; and while he was so engaged, the first sheet was shewned [sic] to the crowd without, who, when they saw it, raised one general shout of astonishment and joy (Lingenfelter, 8).

The missionary presumptuously continued that "there is no act of Pomare's life... that will be remembered with more grateful feeling than the circumstances of his printing the first page of the first book published in the South Sea Islands." Missionaries reported that the demand for these books far outstretched what the press was able to produce. The ink-balls, because of their long journey from England, would also start falling apart. Copies of the error laden London books and the Sydney books had been "exhausted." A missionary observed that "there is a call for double the number did our paper allow it. People are now daily coming from Tahiti for books but we are obliged to deny them. Some hundreds have thus been disappointed" (Lingenfelter, 9).

The printing press eventually came to Micronesia in 1856, four years after the schooner Caroline brought Benjamin G. Snow to Kosrae and Luther H. Gulick and Albert A. Sturges to Pohnpei along with their wives. All were members of the American Board of Commissioners for Foreign Missions based in Boston. The press had been packed away for several months until Sturges and Gulick set up the press and printed the first sheet at Ronkiti on Pohnpei, a broadside entitled *Kapakap En Jicuc* that contained the Lord's Prayer and a hymn.

Gulick wrote with pride to the mission board that he was enclosing "a specimen of the first printing ever performed on this island, bearing the date Oct 1856. Though no immediate results may take place, it is the opening of a new era for the island, & for Micronesia" (Lingenfelter, 98). The press was not without its problems however. It was referred to as "a miserable apology for a hand-press" in missionary letters back to the Board while the font material sent to Pohnpei from Hawai'i contained only letters used in the Hawaiian language. Sturges grew impatient with the press and handed printing duties off to Gulick who had to travel to Ronkiti from his missionary base at Shalong Point at the harbor of Metalanim on Pohnpei's eastern coast in order to use it. Gulick also gave up on the "miserable" press in May 1857 after completing a four-page translation of Isaac Watt's Four Catechisms for Children (*Puk en Peituk*) which was sewed together with two four-page primers printed in January and February 1857, actually forming the first book produced in Micronesia (Lingenfelter, 99).

Gulick was temporarily liberated from this "miserable apology for a hand-press" when a Hawaiian printer, Simeon Kanakaole, arrived on the missionary brig Morning Star, in September 1857. Kanakaole, however, quit after struggling with the press for only a year and after printing only two short books - a 12 page revised primer and a 55 page collection of narratives from the Old Testament along with a few broadsides. When
Gulick was left with the press again, he tried to recruit Pohnpeian girls to help with the work but with limited success. While Gulick managed to print a 12-page primer and a related broadside in 1858 for the new missions in the Marshall and Kiribati Islands,
Gulick found a temporary renewed sense of purpose for the press when Honolulu newspapers refused to publish a version of a letter he wrote entitled "To Christian
Owners of Whale Ships" that was widely published and circulated in the ports of New
England. The letter condemned the corrupting sexual escapades of sailors in Micronesia and included the names of relevant ships and their captains.

Gulick published a similarly themed four page letter entitled "To My Personal Friends, and to the Friends of Virtue" in August 1859 and distributed it wherever he could. But when Ephraim P. Roberts joined missionaries on Pohnpei, the mission returned to religious printing,

producing the first eight chapters of the gospel of Matthew in Pohnpeian. In October 1859 Gulick moved to Ebon in the Marshall Islands, bringing the press with him. Gulick however remained in the Marshall Islands for only a year before retiring to an administrative job in Hawai'i. Sturges borrowed the press back from the Marshall Islands three years later to print, after a great deal of struggle, the first nine chapters (24 pages) of the Book of Mark in 1863. The press was then sent back to the Marshalls on the Morning Star where the miserable apology for a hand-press caught fire and was destroyed before it could be used again.

The Book and Other Instruments of Thinking

Given the profound changes that print brought to the Pacific, one could describe the first Pacific press in various profound-like leaning metaphors – perhaps as a glowing oracle in a ship's dark hold. It is possible that the printing press arrived at Guam in the late 1500's when Manila galleons carried a press across the Pacific to the Philippines. Ships were by then stopping regularly at Guam to replenish. Before the Spanish had any significant influence over the Mariana Islands, except for limited trade and the creation of a desire among Chamorros for iron, the ship carrying the press that would have an indelible impact on the otherwise oral means of communication on Guam and Micronesia, may have arrived at Guam after possibly passing by other Micronesian islands and then anchoring in Guam's Umatac or Hagåtña Bay, but its metaphorical glow stifled and not to return at least until the United States took possession of Guam in 1899 following the end of the Spanish-American War. Although Spanish Catholicism had become a significant factor in daily life, the printing press supported the Spanish administration of the Mariana Islands from Manila where printed materials would have been produced and regularly brought to the islands. Religious materials created by priests in the Marianas, sent to Manila, and returned in printed form to the Marianas did not become part of the Spanish hegemony until the 1860s. (Carolos Madrid, personal communication, July 20, 2013.) We can nevertheless look at the press in all its potential to come and then all of the questions that it left behind or rather the questions that it should have left behind or better yet, the questions that we should be asking today.

By considering even mere fragments in the development of the book we can perhaps also imagine for ourselves how Micronesians might have - or not have - adapted the book to their way of thinking and looking at the world. The emphasis here is on "thinking" because it is imperative that we understand that an instrument like the book - just like the clock or the map - had a profound influence on the way people thought about the world and not simply because of the ideas of the world that books convey. This imperative is the influence of the instrument of the book itself and how it changed a world of oral traditions - a concept that is central to the cultural identities of Micronesian peoples - and what this instrument and other instruments – and specifically the Internet - have done to our ways of thinking.

Socrates worried that substituting oral expression with written symbols – the invention of the printing press was still many centuries away - would deprive the mind of intellectual depth and lead us away from true wisdom and happiness. At the center of Socrates' concern was that writing would make us shallower thinkers - considering the fact "an intelligent word graven in the soul of the learner" was evident through dialogue (Carr, 2010, 54). Socrates acknowledged that writing with "external symbols" could have practical value such as providing "memorials against the forgetfulness of old age" but in his dialogue between the Egyptian god Theuth and Thamus a king of Egypt, Thamus counters Theuth' s extolling of the benefits of writing by

arguing that writing "will implant forgetfulness in their souls: they will cease to exercise memory because they rely on that which is written, calling things to remembrance no longer from within themselves, but by means of external marks." A word, when it is written, king Thamus continued, provides "a recipe not for memory, but for reminder. And it is no true wisdom that you offer your disciples, but only its semblance." Those who rely on reading for knowledge will appear to "know much, while for the most part they know nothing" (Carr, 54). The intimacy with which a scholar versed in orality had with the natural world simply could not compare with the distorted intimacy one would have when one read about the world through the written word.

Eventually and particularly in the Medieval Ages, the book often had a closer association with the heart than it did with the brain – the heart itself, beginning at least with the influences of Aristotle, was considered to be the central location of the innermost qualities of a human being including the origin of emotions and any sensations that the body was capable of having. The heart was also the place where one's conscience, memory and will power resided. (Jagar, 2000, xv). The heart was thought of as being at the very center of a person and it was from within the heart's vast tool chest of intelligence, soul, memory, spirit, and certainly passions that the authority of a written text originated. The book was of and about the heart. The brain served functions of perception and cognition but anything that you could feel and anything that made the slightest moral or emotional impact on either the writer or the reader came directly from the heart. The heart nurtured the brain.

Perhaps as a result of this foundation of thinking about where the written words that created a book came from, we still think of learning something "by heart" which is an ancient Medieval link between the presence of memory within the heart. The book in the Middle Ages became an upright symbol of truth and even the book as Scripture came to symbolize God Himself. As silent reading began to be practiced, the book with its origins from the heart also began to reflect the individual who sat with the book which as an object symbolized the interior nature of the person and that person's vast interior labyrinth of emotions and spirit. The symbolism and ultimately the expressive metaphors of the book (turning over a new leaf, taking a leaf out of someone else's book) became integral to the comprehended nature of books which were copied by handwriting and reproduced again and again, one book at a time. Perhaps the most direct reflection of the symbolic and practical importance of the heart for the creation of the book in the first place, was the production of books that were heart shaped. Holding such a book perhaps enabled one to draw a spiritual line from an inanimate object to the very center of one's being.

Writing and reading would of course become central to the recording and accumulation of knowledge. But this was not a natural phenomenon to occur in human history. When letters were committed to some sort of surface by early scribes, there were no spaces between the letters (Saenger, 1997, 14). All letters ran together in a long stream, somewhat like a young child typically does when he or she begins to learn to write. There were no individual words separated by spaces that we take for granted today. This is a reflection of the origin of words in language and its inevitable reflection in the first writings. When we speak, we do not hesitate between each word but we string words together in a single thought or in a multiple series of thoughts. It took some time and a mode of acceptance over time before these spaces began to appear along with a system of syntax so that these words, now separated by spaces, could be organized according to some acceptable standard of order. These spaces and word order standards were generally in place by the start of the thirteenth century.

One can perhaps thus imagine what related transformations, struggles, resistances, and acceptances must have gone on in the minds of Micronesians when they were first confronted with a tool - the book - that ran counter to the oral capacities and traditions from which they had functioned for countless generations. And of course the same would hold true for peoples around the world when social and cultural changes eventually brought the printed text to the forefront of communication.

This transition from orality to print involved a transformation of the mind itself. Our brain's natural state is to be distracted in a survivalist sense. We are instinctively programmed to maintain awareness of our environment and particularly toward movements and changes that we can rapidly respond to in order to survive. It is quite easy to think of our brains as something that exists in association with our modern times, as it were. But our brains are evolutionary in nature and scientists now know a great deal about the functionality and purpose of a range of the sections of our brains. One section responds like an alarm clock to charged or negative emotions produced by a miraculous myriad of neurons, signaling apparatuses, communication points, and chemicals. Another responds to the generation of adrenalin and dopamine that tightens up the immune system in preparation for either injury or flight from danger. The hippocampus lobe instantaneously decides on degrees of danger and appropriate survival responses, sometimes throwing us into a fight-or-flight mode of comprehension – even for the briefest of moments, causing us to feel strain and stress and prompting us to then draw upon our so-called inner strengths to calm ourselves. Another part of the brain, like all the others, responds from a survivalist, evolutionary basis, and warns you of danger – which comes in the form of emotional pain – when one feels rejected. This particular warning comes from the crucial need our ancestors had to find tribes or enclaves of populations into which they interjected themselves, naturally or otherwise, for the sake of protection and survival. Today, of course, rejection happens in rather different contexts but it was this survivalist need that nevertheless causes us the pain that was once nature's warning call. While each section of the brain evolved a long time ago to respond to threats and were responsible for the survival of our ancestors, the emotional pain we feel over these things were primarily warning signals and thus Mother Nature couldn't care less how they actually "feel" (Hanson, 2009).

And so the brain that we draw upon to read is not historically linear in nature or prone to focus on a single object to the exclusion of everything else - as is the case when one reads a book. Never mind for the moment that one is also concentrating on a writer's thoughts about a subject. Simply holding the book and focusing one's attention on it while any number of things are going on around a person - endless movements of people walking through the airport or a mall as one sits with a book and concentrating only on it. This is an unnatural state of mind which thousands of years ago could have gotten one killed.

But if you are to understand the actual words of a book, it is this unnatural frame of mind that one is required to call upon. Reading in the past was at first primarily a public event when someone would read out loud and those gathered around in a public square or in the more intimate surroundings of a room in a home could let their eyes wonder and be more aware of what was going on around them than could the reader. Eventually, and particularly when spaces began to appear between words and especially when the Gutenberg press of the near mid-1400s made mass production of books possible, people began to read by themselves, silently, almost meditatively. It was deep reading and from it knowledge began to become more frequently exchanged between readers.

Nicholas Carr refers to this new phenomenon as the "intellectual ethics" of a new tool, in this case, the book. "Every intellectual technology," Carr writes, "embodies an intellectual ethics; a set of assumptions about how the human mind works and should work" (Carr, 45). This means that another important new tool- the map - conveyed assumptions about how the mind should see space in a more abstract sense than one normally does when looking at space that is within view. And when one used that new sense of space to chart maps that help us accomplish a certain task, such as getting from Point A to B, abstract thinking increased.

Users of the book as a tool expect that knowledge can be better kept and communicated through words written on a surface than could be possible through verbal memory. One acquires self-knowledge through concentrated reading. One looks at words that make up this knowledge linearly and writers assume that readers will give them their undivided attention. This expectation has given authors a license to experiment with literary styles over the past several decades and create new styles because writers could count on devoted, patient, and undistracted readers.

With the development of maps our sense of space changed. Space became represented beyond what we could actually see in both precise and abstract ways – we saw and thought about the world differently and eventually used maps to express ideas about the world such as population growth or decline, battle field strategies, and of course distance calculations between points that lay far beyond our ability to see. The reality of the world could be compacted, carried in a pocket, and taken out whenever necessary to engage in what was abstract but at the same time realistic thinking about the world or smaller parts of the world that were, in terms of space representation, accurately conveyed on the piece of paper held in the hands. One's mind expanded beyond the horizon. It could know the forces, shapes, and distances that existed beyond a specific place but which nevertheless impacted your life and you were able to comprehend much more of the world than you would have otherwise. This instrument - the map - also had its "intellectual ethics." It required an ability to think abstractly – to trust in the instrument and thus to imagine - but realistically so - a part of the world, however small or large, on a piece of paper.

Another intellectual ethic - the ability to see the passage of time in specific divisions and within divisions of divisions - occurred with the initial development of the clock by monks in monasteries of the Middle Ages. Meant to provide the means of meeting several daily prayer obligations, an instrument that accurately divided the day into specific time slots became attractive not only to the higher echelons of society and thus more innate and elaborate in design but the instrument of the clock began to also regulate time and the performance of duties for society at large. Before the clock, time was known through the natural world — the rising and the setting of the sun and its positions during the day, the phases of the moon, and the movement of the stars (here, of course, one thinks of the ancient and contemporary navigators of Micronesia). Sundials marked the passage of time through the shadows that the sun would cast during the day and at various times in the seasons. But now time became divided and known, as Lewis Mumford described it in 1934, as "an independent world of mathematically measureable sequences… [an] abstract framework of divided time - the point of reference for both action and thought" which actually helped to usher in the scientific mind and the development of a wide range of sciences (Mumford, 1963, 15).

Consequences

The point of all of this is that the instruments we have been profoundly influenced by over the centuries - the book, the map, the clock, and now the instrument whose profound influence certainly matches at least that of the book - the Internet - all of them require us to think in certain ways and to change the ways in which our brains function.

Contrary to early concepts by philosophers and psychologists that the mind and by association, one's personality, are securely established in childhood, researchers now largely agree that the mind possesses a great degree of plasticity - flexibility and

adaptability - through which new instruments can essentially determine, perhaps even dictate, through the "intellectual ethics" of the instrument, the way in which we look at the world around us.

Now that the Internet has become commonplace, books that began to emanate through the world from Gutenberg's printing press, including the missionary attempts to produce printed materials for Kosraeans, Pohnpeians, and Marshallese in the mid-1800s, are being pushed not away, but to the sidelines and transformed in ways that Gutenberg or the Christian missionaries Sturges and Gulick could not have imagined. Science fiction writer Cory Doctorow describes the Internet as an "ecosystem of interruption technologies." (Carr, 91). As we read an Internet "page" on the computer screen, alerts for email messages, Facebook messages, and if we select the right options, news updates and sudden interruptions by friends who want to chat pop up. We can turn off the chat option and so forth but connected with the Internet page we are on, is typically a network of connections to other sites, other documents, other pictures that constantly beckon and compete for our attention. The Internet provides a massive means of access to this phenomenon of "information" and that is of course one of the main reasons people are drawn to the Internet in the first place. And before the Internet came into existence, the media, particularly in the form of news, was in a fragmentary form with one version of the news available from various stations made accessible by the radio instrument and then latter, from limited television channels or a combination of both.

The ease of the Internet, characterized by ever-present and ever-increasing links and the ability to jump from one information source to another far faster than was ever possible with the book or any other printed material, not only allows us to engage in periods of short-time concentration but is perhaps, as Carr describes it, the reason why "we don't see the forest when we search Web. We don't even see the trees. We see twigs and leaves" (Carr, 91). Because of this ease and accessibility, the impact of the

Internet on our reading of the book is already profound. And not only could future

Internet networking opportunities lead to the production of pseudo books with interactive pasting and cutting, the distracting reading disincentives of the Internet - the Facebook chat notifications, the related links, the ads, and so forth - may lead us not to a singular, concentrating effort toward the book's pages that the book demands of us but rather to a practice of reading pages of the book in the haphazard ways that we read and browse through magazines and newspapers.

As a result, the extensive literary style achievements of the past several decades, represented by writers such as Faulkner, Hemingway, James Joyce and many others may no longer be possible because writers will no longer have the captive, patient audiences that they once had through which they could develop these styles. The potential impact of this is not only in the potential creation of a single standard literary style that can hold the attention of readers already shaped by experiences of reading on the Internet but more seriously, in the degrees of

depth - or not - to which the world is examined by the majority of people. Writers may also renege on their personal commitments to quality and instead resign themselves to meeting the demands of Internet search engines so as to position their works with words that make their writings rank higher in Google' s search results.

As the distracting incentives of the Internet - or as Amazon.com's CEO describes it, the computer's "ecology of interruption technologies" (Carr, 108) - help reshape our minds back to the time when attention toward distractions around us was the primary means by which we managed to live in the world, we may find that more and more people no longer engage in quiet, internal deep reading. Instead, the social networking characteristics of the Internet may make reading a group-like experience in which a desire to belong makes the creation and expressions of literary style secondary to the easy and sharable expression of social issues. "Writing," as Carr puts it, "will become a means for recording chatter" (Carr, 107). This all marks a "fundamental shift taking place in society's attitudes toward intellectual achievement" (Carr, 112) within which a long book like Tolstoy's *War and Peace* is not only placed on a shelf of contemporary irrelevance but made an impossible and utterly impractical task akin to climbing a seemingly impossible mountain.

Several years ago I wrote an article (Goetzfridt, 2005) - for a journal on the Internet by the way - that tried to express my concern about this latter point, drawing from a Steve Talbott entry in his Netfuture website entitled "Automobiles: On the Road to Nowhere" (Talbott, 2000). Talbott drew parallels between the uncritical manner in which we accept all forms and uses of the Internet with the l950s development of city suburbs - suburbs that had no cultural or societal foundations but which instead developed themselves around a need to accommodate the automobile. Presumably people who were going to buy houses in developing suburbs would drive into the city for work and that necessitated being concerned about a smooth flow of traffic for X number of households as they went to work, came home, went shopping, and on weekends took drives out into the country.

Where were those cars going to be parked and how could you get people in and out of these concentrated communities without adding to commuter gridlock? The structures of suburban roads and the placement of houses centered on this issue. Nothing else really formed the basic structural foundation of suburbs.

In the same way, I expressed my concern over how the Internet might affect the quality of public education, particularly in the way that standards, quality, and ideas of intellectual depth could be established if the instrument we relied upon to establish benchmarks was the Internet and the less than in-depth ways in which we are encouraged to snatch information from it. What are the foundations upon which educational policies and schools integrate the Internet into the curriculum? Is the Internet seen as another tool in the overall goal of educating the whole person? Or is it simply from a state of awe over the multiplicity of access points to this phenomenon called "Information" without thought really being given to what constitutes depth of understanding? And more worrying, at least to myself, was the prospect that at some future date educators and educational policy makers may not really appreciate what I am talking about and that there will be only a relatively few crusty scholars and critics – perhaps myself included — who remember and lament the large gap between deep reading and the interruptible experience of the Internet and, more ominously, what constitutes a deep and thoughtful response to the world as opposed to the lower levels of comprehension that the Internet, as the foundation to learning, will eventually establish as a new standard that becomes accepted without question. "Will the automobile of our age - the Internet –" I wrote, "have thus driven itself to nowhere?"

We could perhaps find a simple linkage between this idea and the efforts that the missionaries Luther Gulick and Albert Sturges made to convert Pohnpeians not only to Christianity but to the book as well. Their working assumption was that reading print was ultimately necessary for conveying the word of God and that simply relying on the Pohnpeians' oral methods of communicating thoughts and information would not do. Although printing itself was certainly not new - it had been going on since the 15th century in Europe - it was new to Micronesia and it thus provided what the missionaries thought of as an enormously important tool for changing the thinking and spiritual beliefs of Micronesians. The printed word was perhaps as awe inspiring in that historical context as the Internet is in our day.

Finally however, I would like to point out that some scholarly approaches to reading texts - i.e. how does the reader interpret a writer's ideas and how does the reader express those ideas - examine the fact that reading has much communal influence to it as well. In other words, the community and the environment in which the reader lives have a significant impact upon how that reader and other readers in that environment interpret texts. If, for example, monks in a Christian monastery all read a book on the causes of war, their values would lead them to read the book in similar ways as opposed to the way that, say, a squadron of Marines stationed in Afghanistan might read and interpret the same book. This scholarship of reading in America discusses how what are sometimes called "interpretative communities" - elderly women, lawyers, blue collar workers, high school girls, housewives, and so forth - each approach books in similar ways within their own group but then again differently from groups who are distinct from themselves.

Reading is "socially framed," Long argues. "Collective and institutional processes shape reading practices by authoritatively defining what is worth reading and how to read it. In turn, this authoritative framing has effects on what kinds of books are published, reviewed, and kept in circulation in libraries, classrooms and the marketplace, while legitimating, as well, certain kinds of literary values and correlative modes of reading" (Long, 192).

The United States has long been the source for these collective and institutional processes that "shape reading practices" as Long puts it and determine what is worth reading. And this began with Luther Gulick and Albert Sturges. And now the
Internet comes to Micronesia and we legitimately ask ourselves if this is not also happening with the Internet with American influence over Micronesia also influencing the eagerness with which the Internet is used and what sites or kinds of sites are most worth reading. But above all, Micronesians belong to strong interpretative communities who share values that everyone knows, lives, and speaks. And if it is true that the communities and the environments in which we live influence how and what we read, then this becomes in an odd kind of way, a sort of self-determination of reading - that individual societies in Micronesians - Pohnpeians, Kosraeans, Chuukese and so on - have the capacity to determine for themselves what information sources best serve those values, including how much the Internet can and cannot also serve those values. Being an integral part of an interpretative community allows words and ideas within that community to have special and unique meanings that would not exist elsewhere and it is from those meanings that these communities gain, maintain, and use strengths that foster identities from one generation to the next. And an awareness of these issues of informational tools, the ways in which they change our ways of thinking - and the intellectual ethics that each of these tools demands of us - will naturally lead indigenous peoples to realize for themselves the full, positive potential of these tools for generations to come.

Missing from past interpretations of the state of reading and education in Micronesia, apart from its cognitive formation among administrators, educators, and commentators in relation to history and the point at which its contemporary condition can be linked, is the application of these instruments and their "intellectual ethics" as an integral phenomenon to the context of indigenous social worlds. Colonial introductions are themselves negligible factors under the preview of such applications in the sense that neither is "culture" subjected to a descriptive nuance to satisfy outside influencers nor is it relegated, in the strength of its own social being, to outside standards that determine the very introduction of these instruments – particularly the book and the Internet. Instead, a self-determination of reading – and subjected however it will be to the power of the Internet – evolves under its own adaptations to thinking and under the social, cultural, and intellectual adaptations upon which these social worlds in Micronesia have always depended.

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Translate the text into Russian. Check the meaning of any unfamiliar technical words in the vocabulary at the back of this book. Text 2. Computers in Education. National Council for Educational Technology. The Council's purpose is to bring beneficial change to the processes of learning in education and training through the development and application of educational technology.Â Task 9. Decide whether the following statements are true or false in relation to the information in the text given below. 1. The Americans and the Japanese are working together to produce user-friendlier computers. 2. The clipboard computer was first sold twenty years ago. An example of the second is provided by the unspeakable combination of sounds found in R. Browning: Nor soul helps flesh now more than flesh helps soul. To create additional information in a prose discourse sound-instrumenting is seldom used. In contemporary advertising, mass media and, above all, imaginative prose sound is foregrounded mainly through the change of its accepted graphical representation. This intentional violation of the graphical shape of a word (or word combination) used to reflect its authentic pronunciation is called graphon. Types of gadgets: classification of the most modern gadgets: racing drones, streamer webcams, biometric locks, the Surface Book.Â Device is an item or instrument used to do certain work or/and achieve a certain result. Thus, a personal computer and video camera are devices. But, for example, a gaming joystick or helicopter for a camera, they are gadgets.