

THE RETURN OF THE AUTHOR

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Abstract

The article transposes the text of Roland Barthes' "Death of the Author," (La Mort de L'auteur) (1968), to the arena of happenings in cyberspace, and examines the implications from the point of view of author-reader-text, active in the electronic environment. Cyberspace has become one united text (hypertext) that allows any author to add to it, and any reader to read the content. The act of reading the text from the network simulates the cyberspace hypertext wave function collapsing by means of the reader's submitted query. The text that was in a state of superposition throughout the network, or in Barthes' definition "multi-dimensional space in which many and varied writings are combined and meet, and none are foremost." becomes a single peak wave function that appears on the reader's display. Cyberspace accelerated the reading process to the speed of light, and led to a dramatic turning point of the disappearing of the traditional author, text, and reader, and the birth of the new Super-Reader-Author. This unification creates a paradigmatic shift from dualistic, Aristotelian object-subject thought, to the holistic thought of being, realized in the singularity of consciousness and connecting real space, the spiritual and cyberspace.

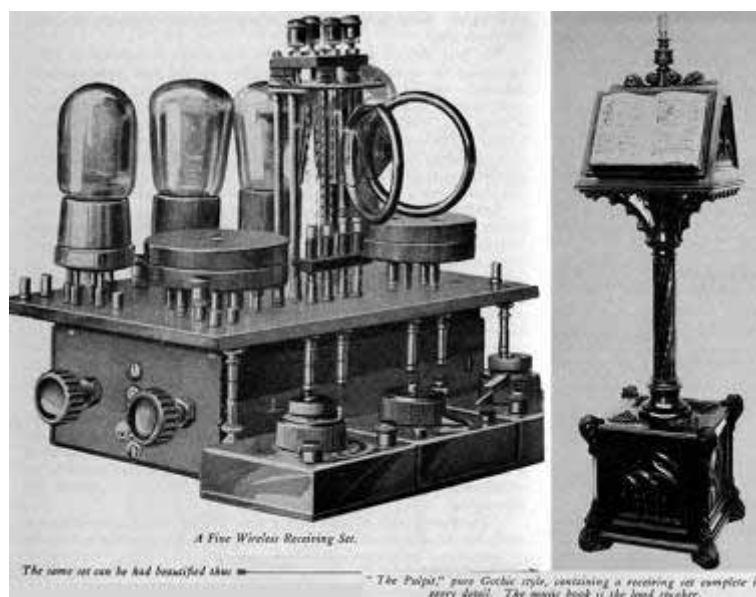
The article transposes the text of Roland Barthes' "Death of the Author," (La Mort de L'auteur (1968, 1977, 2005), to the arena of happenings in cyberspace, and examines the implications from the point of view of author-reader-text, active in the electronic environment.

"The Death of the Author" was written in a transition period between the epoch of the written word and that of the electronic word. A transition period is usually characterized by hybrid works, inspired by new ideas, but realized by old means Gentner, D.R., & Grudin, J. (1996). The claim is that over and above the use of the electronic medium for the needs of creating, distribution, and the consumers of the text,

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a dramatic change is effected in the whole, beyond the death of the author and the birth of a new reader. Ozenfant (1952) gives an example of this process in his description of a modern radio from the early decades of the last century. It was installed in the pulpit of a Gothic-style made of carved wood, with a heavy base, and at the top, a candlestick for a candle to illuminate the reading book. The book rests on a support that contains the loudspeaker of the radio. This ornate installation was an attempt to dignify new technology and its message, by giving it a classical appearance, and by adapting the manner of use to the old and familiar form. The pulpit “vocalized” the text written in the book that lay above the pulpit, instead of the reader standing in front of the illuminated book, concentrating on reading the text.

These reading conditions were essential for conveying the meaning of the author’s immutable text to the reader in the Newtonian world of fixed linear givens. This is actually an arrangement for conducting an experiment as in a physical laboratory, where rigid environmental conditions are enforced to ensure that measurement results bear out previous suppositions. Indeed, the pulpit kept the fixed relationships between the traditional author, the text, the reader, and the reading conditions. A change in the components of the experiment, through including the radio set, introduces a random variable, that must undermine the results.



Picture no.1, from Ozenfant, 1952, pp.160-161

On the left, fine wireless Receiving set. On the right. "The Pulpit", pure Gothic style, containing set complete in every detail. The music book is the loud speaker.

Readers of a written text in the media epoch of radio and television are constantly subject to rapid changes in their understanding of their environment and the texts they read. The shift creates a gap between electronically fast changing consciousness and understanding, and the printed texts that remain "slow" and stable. The authors who make the texts try to introduce changes that will match the dynamic environment, but the moment the text is printed and fixed, it becomes separated from its author; the author "dies". The article, "The Death of the Author" was written in the pre-internet transition period when the Aristotelian dualistic approach, with its dichotomy between object and subject, was still appropriate. The text was written, printed, and distributed by "slow" technology, for a reading public that became "fast" and its reading subversive. For the new fast reader, the fixated concepts that originated in the slow world, such as author, God, knowledge, and their derivatives, disappeared. Carried away in space, the reader lost all points of reference, and encountered random texts, to which he tried to give meaning, as best he could.

Barthes describes the "slow" linear world where there is a clear distinction between different subjects and objects in space, and likewise, between texts composed of diverse words having clear meanings: "the structure can be followed; 'run' (like the thread of a stocking)" (ibid. p.16). Barthes then adds that "We know now that a text is not a line of words releasing a single 'theological' meaning (the 'message' of the Author-God)".

His intention is that in the new state, the text ceases to be unambivalent, and causes the death of the traditional author. Barthes describes the process "As soon as a fact is narrated no longer with a view to acting directly on reality but intransitively, that is to say, finally outside of any function other than that of the very practice of the symbol itself, this disconnection occurs, the voice loses its origin, the author enters into his own death, writing begins." (ibid. p.8). In the "slow" world of Barthes, that preceded to cyberspace, the moment the text or the voice (the object) is detached from its creator (the subject), it is "launched" into void that separates the various objects from the subjects, and becomes detached from the significance that charged it when it was first written or spoken by the author. The detached text moved in free pathways in space, colliding with other texts that were transmitted in similar fashion by various authors. The resulting total mass of texts became "multi-dimensional" space in which many diverse writings combined, and collided, none of which were original (ibid p.14). This chaotic

state leads Barthes to the conclusion that writing or creating in his day rejects defined meaning, and in his words, “In the end, it means to deny God and his hypostases—reason, science, law” (ibid p.16).

Changes in the consciousness of the experimenter alter the results of the experiment. For the new reader biased by the electronic media, introduces “chaotic” variables to the process; reading with a fixed meaning has ceased. The existing reading arrangement no longer matched reality, and it was necessary to update it. The Gothic pulpit was used for reading information, while the reader was settled in front of the page, keeping lighting conditions dictated by the candle. This was no longer suitable. The reading arrangement resembling the Thomas Young’s two slits experiment to demonstrate the properties of light. In Young’s experiment a beam of light is directed to a plane with two slits through which light rays pass, thus creating typical wave patterns on a screen. And so too, reading a text from a book and its meaning is similar.

Because the consciousness of the reader becomes dynamic under the influence of the electronic media, some measurement components are constantly changed. The reading has ceased to be unambivalent. Although the projecting beam of light (the text) is the same beam, the observer (the reader) has changed, and reached a different understanding of the “slaw” text. The result is the birth of a new, adaptive reader, biased by the electronic media, in the world of the fixed text, and the anonymous author. That was the state of things at the time of Barthes writing.

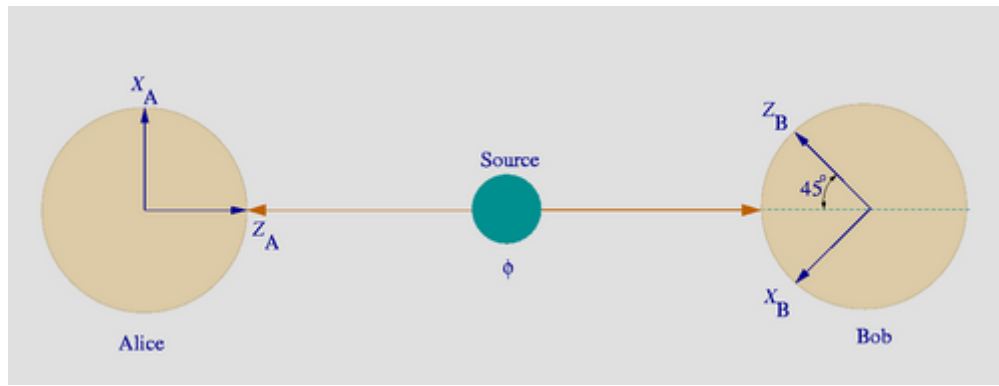
The changes in the arrangement of the experiment (the reading) did not stop in Barthes’ time. The printed, fixed text turned into electronic signals and was transferred to communication networks, that is, cyberspace. The new arrangement transformed the reading experiment and its results drastically. The reader, the text, and author abandoned their real, slow surroundings in favor of new, fast space containing numerous fast texts. These texts are written and distributed electronically at the speed of light, and within seconds reach any reader or author worldwide. This activity equalized the speed of the author, text, and the reader. The volume of texts in cyberspace is monitored by search engines such as Google, involving tens of thousands of computers that store in their memories the addresses of around ten billion WWW pages from all over the world. (True as of October, 2004) from:

<http://forums.searchenginewatch.com/showthread.php?t=2687>).

Cyberspace has become one united text (hypertext), that allows any author to add to it, and any reader (submitting a query) to read the content. Google is a new

“super-reader” of the global text, making use of the crawler and mining devices that code, map and grade the tens of billions of pages on the net. As a result, the search engine has become a conscious entity to every text in WWW. Joining us all to cyberspace has of necessity become part of this consciousness. Searching for, and finding any text is carried out in fractions of seconds, or in other words, the texts are located at a distance from our bodies the same as the reaction time of the human nervous system, and are therefore part of our bodies. For example the search engine Google carried out a search for the string ‘New York’, which brought the result: Results 1 - 10 of about 1,010,000,000 for new york [\[definition\]](#). (0.14 seconds) , that is to say in a search of 0.14 seconds more than a billion relevant results were received, of which the first were the most suitable. Texts created and stored in cyberspace are not detached from the reader and the author, but are inseparable parts of them. The unification of reader and author occurs in parallel by additional means, such as the Global Positioning System, (GPS), that supplies a real-time picture, including and synchronizing all locations of its components, and also global networks of cellular telephones. Cellular phone assimilation has reached a peak (109%) to more than one per person in Israel. The individual users of the system are in superposition one to the other, collapsing into discrete wave function, by reading the exact place and time of every element in relation to others. The GPS is aware of all its elements in space and time, like Google is aware of the total text (the hyper-text) in cyberspace. In this state, authors are not dead, they are united in the frame of global body together with the readers.

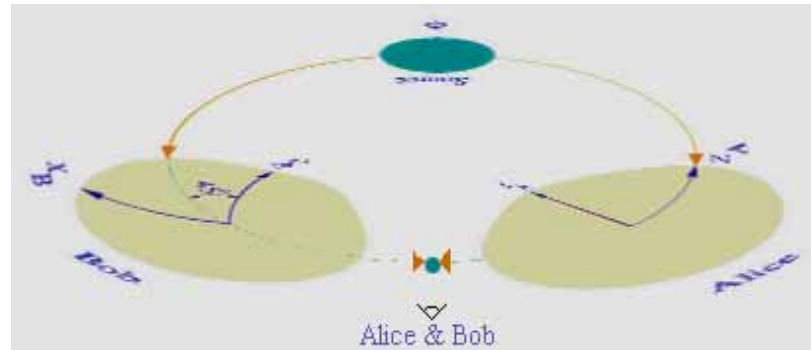
The united global body enables reading a text in ways that were inconceivable in “slow” real space. For example, the EPR paradox (Einstein-Podolsky-Rosen) is a thought experiment that demonstrates that the result of a measurement performed on one part of a quantum system can have an instantaneous effect on the result of a measurement performed on another part, regardless of the distance separating the two parts. Einstein called this phenomenon "spooky action at a distance".



Picture no. 2. from: http://en.wikipedia.org/wiki/EPR_paradox
 The EPR thought experiment, performed with electrons. A source (center) sends electrons toward two observers, Alice (left) and Bob (right), who can perform spin measurements.

The meaning is that a number of atoms in our bodies are connected to an unseen atomic network on the other side of the universe, and influence the state of billions of atoms light years away. The implications of the experiment are that the universe is a-local, where events at one place on the surface of the Earth instantaneously influence events on the other side of the Earth and the universe.

Locality matches the state of dichotomy between object and subject. Therefore Alice and Bob are two separate subjects, and in a state in which Alice will immediately know something about Bob who is far away from her, which is impossible. Barthes' "slow" reader and author are in this state of one knowing nothing about the other. Barthes' conclusion, as we said, is that the author is dead, and the reader and the text remain. As we mentioned, Alice and Bob are now "fast", joined together in cyberspace and their measurements (their reading) of the two separate electrons (texts) discharged by the atom (the author) becomes a single measurement (reading) carried out by the super-reader-author (SRA), when the wave function collapses. A text of this kind appears impossible to the traditional slow reader, exactly like in the EPR thought experiment, the "slow" reader located outside the event horizon (of cyberspace), feels as though far more time has passed from the moment the two electrons left the atom, till they are measured by Alice and Bob. That is because he monitors the two electrons image that is "frozen" on the event horizon, before it is "swallowed" up on the way to the cyberspace singularity.



Picture no.3. Alice and Bob, author-reader united in cyberspace.

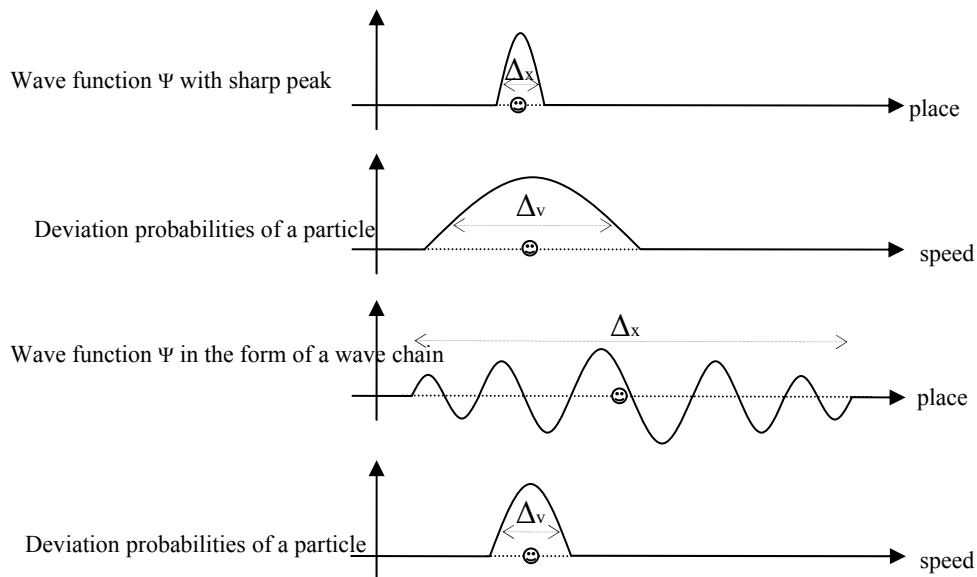
The same moment that Barthes describes when “the voice loses its origin, the author enters into his own death,” actually no longer exists! In cyberspace existence is the experience of eternal self feedback writing and reading.

(Connecting to the cyberspace by a central hub that links all the references in the network, for example, GPS, Google and cell phone, resemble reading information stored at the event horizon of a black hole by connecting its singularity. Every user, reader or author connected to the cyberspace “downloads” the data stored in its singularity. The act of reading the text from the network simulates the cyberspace information wave function collapsing by means of the reader’s submitted query. The text that was in a state of superposition throughout the network, or in Barthes’ definition “multi-dimensional space in which many and varied writings are combined and meet, and none are foremost.” (Roland Barthes, p.4) becomes a single peak wave function that appears on the reader’s display).

The reader in Barthes’ “Death of the Author” is biased by media propagated at the speed of light, and dominated by Heisenberg’s uncertainty principle. According to this principle, it is never possible to know with absolute certainty the position of a particle and its speed, at one and the same time. However much one knows about one of these with greater accuracy, one knows less accurately about the other. (Steven Hawking, 2003,214) For example a one peak wave function, describes a state in which the location of the particle (the word and its meaning) is absolutely defined, but the gradient of the function changes sharply, thus the speed changes fast, and is not defined. One can compare this state to the action of reading in the “slow” or static world, in which objects (words) and meanings are well defined, but if the reader moves fast, the text will disappear together with the meaning. In our example the reader (and his consciousness)

moving fast is distanced from the "slow" printed word, and so the meaning is not clear, or disappears.

Opposite successive peaks wave function, enters uncertainty regarding the location of a word (meaning), but there is great certainty about its speed. That is similar to the state of reading a fast text in cyberspace, where the content is in superposition. The text that becomes a hypertext is "stretched" widely in meanings and variable links that explain it, but is no longer understandable as it was when it was read in the traditional "slow" way. As in cyberspace all the elements, the author, the reader, the text and the space become "fast", the reader is able synchronizing himself with that text, and to understand it in relation to the time and place of reading, as we saw previously in the example of searching for a specific text on WWW with the help of a search engine.



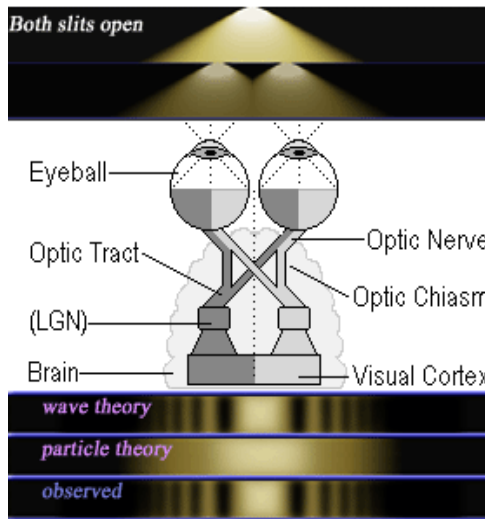
Picture no.4. The wave function determines the probabilities of particle in being present in different places at different speeds, in such way that Δx and Δv obey the uncertainty principle. In Steven Hawking, 2003, p.114.

In order to understand the meaning of a text in cyberspace, one must understand the characteristics of fast space, which are different from the traditional slow space in which human beings operated for thousands of years. The traditional slow text is converted into electronic particles with high kinetic potential, in their ability to convert that energy into mass, after colliding with another particle. The result can be a chain reaction of particles whose sum of mass is greater than the mass of the original particles (Zvi Yanai, 2005, p.41). In other words, the text that underwent transformation into electronic

particles is introduced into a particle accelerator which is cyberspace, and collided at high speed with the target which is the reader's consciousness, also connected to cyberspace, and moves at the speed of light. The result of the collision is a "chain reaction" that releases energy, or added hyper-meaning, embedded in a hypertext, something that cannot be expressed in slow traditional space. The "chain reaction" impacts the cyberspace inner and outer content. The traditional low-speed text that suited Newton's local and deterministic world, in which there was clear understanding of a separate subject and object, and time was fixed and stable, is transformed into a text in superposition. The components of the hypertext moving in cyberspace in every possible trajectory at one and the same time, collapse into a final state determined by the decision of the reader. The electronic text, the author and the reader resemble quantum mechanics that removed the concepts 'certainty' and 'causality' from the dictionary, and replaced them by probability. The reader in the world of quantum physics has stopped being an observer or objective reader, and has become an inseparable part of the subject of his reading, and an active partner in creating the text and the reality, in contrast to the classical "slow" world in which the identity of the object and the text were independent of the decisions and actions of the reader (Zvi Yanai, 2005, p.135).

Niles Bohr wrote, "The lack of ability to differentiate in the accepted way between physical phenomena and their observation, which frequently puts us in a position familiar in psychology, where we often encounter the difficulty of distinguishing between subject and object" (Zvi Yanai, p.137).

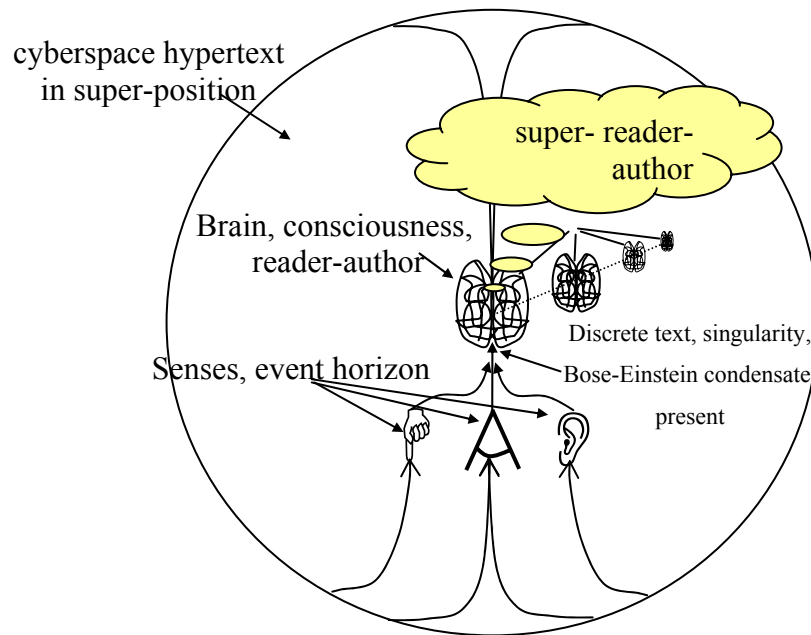
If we return to Thomas Young's two slits experiment, we will see that an electron has the character of both, a particle and wave, and every electron has the wave function diffused throughout entire space. With a light detector installed on one of the slits in the experiment, and radiating photons instead of a light beam, according to the uncertainty principle, the resolution measurement of the detector determines the results. If the detector has a high enough resolution, its action interferes with the photons and destroys the wave pattern on the target screen. If the detector has a resolution sufficiently low so as not to interfere with the pattern of condensation then its accuracy is too low to say from which slit the photon enters.



Picture no.5. Human sight, as part of Thomas Young two slits experiment.

The fast reader linked directly to cyberspace is part of the two slits experiment, and serves as a detector. The text changes into photons projected on the reader's retina, and are passed on to the optic nerve, reader's brain and consciousness. The brain and consciousness becomes the experimental target screen on which the information is projected. However, unlike the passive screen in Young's experiment, this is an active screen. Projection of the photons influences the characteristics of the brain, by changing the electric pulses, and with it the discharge of chemical materials from it. As a result, new pathways are created in the brain, memory changes and thus consciousness changes. In other words, the characteristics of the detector (the reader) and the resolution change following the action of measuring, and so the result is not "objective", and neither is the reading of the electronic text. The brain and consciousness act as feedback and control the reading of the next text that will be carried out in cyberspace as would an operator of a Scanning Electron Microscope, whose gaze onto the examined matter transmits an electrons beam which alter the location of the particles and the properties of the observed matter. The similar impact is accomplished in a reality TV show, when the audience voting using remote controller, cell phone, or internet, determines the participants fate. Similarly, the reader of a text in cyberspace creates constant transformation of content and meaning, because texts connected to him, which explain and expand, change all the time. The reader in cyberspace becomes reader-author, whereas the electrons that make up the text become the consciousness and its body, in superposition, until the critical moment when the MIND of the reader interferes

and creates a central meaning in reading the text. (David Bohm, 1987, p.82). At that moment, the wave function of the text collapses to a discrete point and meaning.



Picture no.6. Scheme of creating the Super-Reader-Author in cyberspace.

The fast reader in cyberspace is an “isolated” item among many fast readers, who together create the Super-Reader-Author (SRA) used in the “hyper-neo-cortex,” a unit that contains the combined power of computation in cyberspace, to understand the super-text (hypertext). That text that is read by every reader separately is channeled by hubs similar to Google and GPS, which serve as an optic nerve and the super-consciousness of the “hyper-neo-cortex” and are stored within them. According to need and in a short time, the text undergoes the Bose- Einstein condensate like, in order to obtain a clear meaning, and is channeled to every “isolated” reader or “cell” that creates the SRA.

Thus Bathes was correct in determining that the traditional author disappeared from the critical dialogue of contemporaneous literature, and was replaced by the reader. But since then, the new reader has become the electronic super-reader in cyberspace. The borders of his body have expanded to cyberspace size, and have combined with the bodies of other authors that were lying dead somewhere in Bathes’ slow physical space. The question is, is there still significance to anti-hegemonic subversive reading of a text?

Indeed the reader in cyberspace is linked to the network that unites far distances so that they are equal to the other organs of his body. When he reads a text, he actually reads himself who is in an everlasting state of becoming. Illustration of such idea can be found in "MyLifeBits"- Gordon Bell's project, where he has captured a lifetime's worth of articles, books, cards, CDs, letters, memos, papers, photos, pictures, presentations, home movies, videotaped lectures, and voice recordings and stored them digitally. He is now paperless, and is beginning to capture phone calls, IM transcripts, television, and radio (<http://research.microsoft.com/barc/mediapresence/MyLifeBits.aspx>). MyLifeBits is digital real-time implementation of Georges Perec's novel '-Life, a User's Manual', where he created an omni-image of memories, feelings, dreams, desires that are his life summary. MyLifeBits is the SRA omni-real-time-hyper-summary. This radical change in the concept of self, the surroundings in which the "Self" acts, and the text the same "Self" reads reflect the viewpoints of two photographs taken at an interval of about 70 years, at the beginning and the end of the 20th century.



Picture no. 7. Listening to the radio at its inception.
From: <http://codesign.scu.edu/chad/12/Overview.html>

The first photo, it seems, is from the 20s of the 20th century; it pictures two young women with earphones listening to a small radio set. The room is full of objects typical of that period (the "slow" world) including a bookcase full of books, books on the table, a mirror, a solid clock, pictures and photographs on the wall and on the mantelpiece, a bowl, and little figurines. The books and objects in the room contain "slow" texts and messages, in which information is passed on from object to subject (author-reader) artifacts worthy of regular reading or attention. The introduction of new electronic technology represented by the radio set creates a new focus in the forefront and center

of the room, while the past items remain at the background. The listeners are physically attached to the radio by an electronic umbilical cord -- the wires and the earphones; they are united in the common experience of listening to electronic waves. Their consciousness is carried through the instrument to a far singularity, leaving the slow material objects behind. The women are listening to rapidly changing information, both by the producers of the program of the broadcasting station, and by one of the women who controls the volume of reception, adjusting the stations when occasionally the receiver overlaps two stations at once, producing an ambivalent message. The information or the text that populates the electronic space is in superposition, the wave function of the broadcast content collapses into the state defined by the interference of the listeners. The new information joins the reading of the slow familiar surroundings, in which the wave function of the slow objects remains defined, with a clear meaning. The manner of reading changed by the agency of radio is subversive compared to the previous traditional slow, defined way of reading. The moment the women began to listen to the electric broadcast, and from then on, the interpretation of the slow written text exemplified by the books in the room, in the pictures, the photographs, the objects, even the clock, and the mirror that reflect their image, will not return to what was before. These objects whose purpose was to accurately define meaning, place and time, relative to themselves and various subjects, lost that ability from the moment that consciousness of the subject was accelerated by the fast and volatile electronic medium. Broadcasting and television that succeeded radio only enhanced the process, by accelerating the sense of sight and generating additional detachment of the listener-viewer from the physical environment.



Picture no. 8. A Student with head set, wandering in VR.

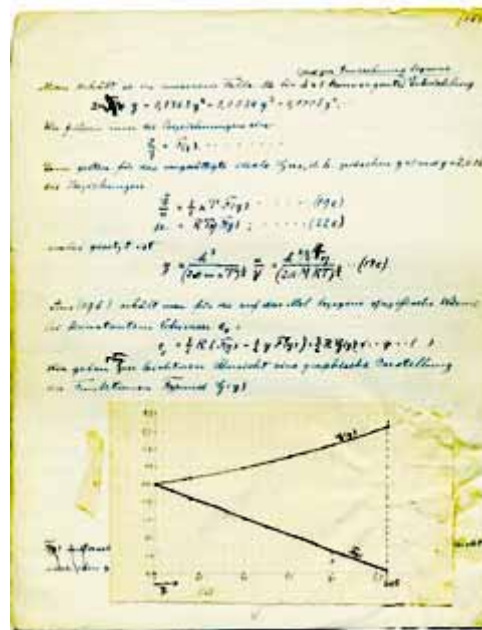
From: <http://www.yonago-k.ac.jp/hikona/118/photo/equip/e1.jpg>

The second photograph, taken at the end of the 20th century, about 70 years after the first, shows a text and other data being read in Virtual Reality surroundings. The reader is equipped with his VR headset including display, earphones, microphone, and data gloves that connect him via computer to cyberspace. Similar to someone using a Scanning Electron Microscope, the reader moves within the electronic hypertext that changes while reading. The reader while reading becomes an author, thanks to the technical ability to alter the location of the observed data. The wall video screen, the computer display and the VR headset display multiple hypertext windows, which the author-reader reads writes and activates. The room where the reading is taking place looks 'anonymous,' minimalistic, clean of any object from the slow world, and populated with technical equipment used in cyberspace. The only object similar to those in the first picture with the women listeners is the analog clock on the wall, on the right of the picture. The clock is waning in significance, because it is only used for moments, when the author-reader "returns" to slow reality, in which analogical local time is still valid. The cyberspace clock is subject to the digital global time synchronizing all users and texts. Even the author-reader in the photograph looks anonymous, with his headset hiding his identity, ethnic origin, age, and characteristics that are not significant in cyberspace. The author-reader is wholly detached from the material world by means of his electronic equipment; his sense detached from the physical environment, because it no longer has the same meaning. The extensions of his electronic sense, controlled by his consciousness, recreate his virtual space where he acts within the "arrangement" of cyberspace data in discrete relative states. He remains alone, separated from the "real" world, while the rest of the subjects accompanied him in the real world, become digitally represented avatars. He has no authors and other readers besides himself; all have "died". That is in sharp contrast to the room with the two radio listeners, where according to what is in the picture one can decode: their socio-economic status, geographical location, fields of interest, the identity of the books in the bookcase, and so on. Their uniform clothing and hairstyles give a clue as to their age, education, opinions, religion, etc. The listeners are sitting at ease, aware to their physical surroundings, time and to each other. For them, each is a separate and independent subject, occupying space in the defined room. The separation from the real world is hardly felt, and is accomplished by the headphones. While sitting, they are attentive to the real world around them, and to the virtual world of the broadcast on the radio. The two women symbolize Alice and

Bob of the EPR thought experiment, which in short time will be united, to form the SRA in cyberspace, depicted in the single image of the cyberflaneur in the later photograph.

The passage from being a reader of a slow text to a fast one is a daily happening for most of us. For example, take a series of paintings along the wall of platform in a London Underground station. From a stationary train, the passenger looking out of the window sees a single frame of the series of paintings, and reads it as a single, clear peak wave function. When the train leaves the platform and accelerates, the frames change at speed, creating a filmstrip with a different meaning from the single frame, and having a wave function with the width of the number of frames on the platform strip. When the passenger then looks over the cellular phone display or the PALM computer in his hand, he accelerates to the speed of light, and watches the data situated in superposition in cyberspace. His glance and actions bring about a crash in the wave function of the contents of the super-space text, in the singularity of his consciousness. We may say that in this instance the cyberspace and the subject became aware one to each other.

In conclusion, one can infer that the “Death of the Author,” was written in a similar period to that reflected in the photograph of the two women listeners, or at the speed of the subway leaving the platform. It was the old, slow world dominated by dichotomy between object and subject, and text printed on paper. The process of acceleration of the reader’s consciousness was just beginning, through radio broadcasts and television. Cyberspace accelerated the reading process to the speed of light, and led to a dramatic turning point of the disappearing of the traditional author, text, and reader, and the birth of the new SRA. The SRA can render the chaotic text of cyberspace meaningful from his point of view, while carrying out electronic reading. That ability is similar to the physical phenomenon of the Bose- Einstein condensate of atoms of a substance uniting at nearly absolute zero temperature, to one “super atom” that sustains super-fluidity (he.wikipedia.org).



Picture no. 9. A page from Albert Einstein's paper "Quantum theory of uni-atom ideal gas" (1924), describing the Bose- Einstein condensate. From "Ha'aretz" newspaper, 23.8.2005

In this new state the atoms act in symbiotic harmony, demonstrating the characteristic of ignoring gravity and friction. For example, gas will become fluid, and will climb up the sides of the glass it is in, unlike the behavior of isolated atoms that constituted the gas at a higher temperature, and moved in a chaotic manner (Barabasi 2002, 324), similar to the image in Barthes' "multi-dimensional space in which a variety of writings, none of them original, blend and clash". The condensation ability of the SRA, allows turning the text in cyberspace into the super -atom, that can be identified and followed; the hypertext and SRA then embodies "God and his hypostases—reason, science, law." The existence of the united reader-author-space creates a paradigmatic shift from dualistic, Aristotelian object-subject thought, to the holistic thought of being, realized in the singularity of consciousness and connecting real space, the spiritual and cyberspace (Rosen, 2005).

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