Comparison of Three Perspectives on the Evolution of Technology

[Name of the Writer]

[Name of the Institution]

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**Introduction**

Every author views the evolution of technology from a different perspective that results and affects to a particular aspect. Though views of all authors are different from one another. But, there is also the existence of some common and similar features, parts, and happenings in technology which look the same. In most of the theories presented for the purpose to explain the evolution of technology, there is the same factor discussed. The factor is human intervention to meet the specific needs of human beings. According to research findings of (Boyd, Richerson, & Henrich, 2013), *"Innovation is the rate-limiting step, but when innovations do occur they are accompanied by causal understandings of how the innovation works, and why it is better than previously used alternatives. The innovation spreads rapidly because the causal understanding spreads with it."* Hence, this essay report compares and contrasts three theories about the evolution of technology, which are the theory of Gerhard Lenski, Leslie White, and Alvin Toffler.

**Gerhard Lenski Perspective on the Evolution of Technology**

The theory of evaluation presented by Gerhard Lenski is considered is much different than all other theories presented by other authors. The perspective of Gerhard Lenski on Evolution of technology is comparatively different than the perspective of others because it covers and describes each and every aspect of technology evolution with time and changes occurred. In some terms, the perspective of Gerhard Lenski can be found similar to others’ perspective because the perspective of each of the author results and impact to a particular aspect while Gerhard Lenski’s does the same as well. Gerhard Lenski views and interprets technology as a crucial and critical aspect in the evolution of social, cultural, and societal development among the people. In this aspect, technology is described to as “the information and details about how the material sources and resources of a particular society or community can be used or utilized for meeting the needs, wants of human beings and to satisfy their ultimate desires.” The perspective of Gerhard Lenski states that the society and community get advanced as per the level of information within the society or community. In other words, the higher the level and amount of available information in the society and community, the society or community is more likely to be developed and advanced. Gerhard Lenski’s further states that is one of the most important factors in the conversion from one level of technological development to another. Hence, information is the factor that has a huge role in the transformation from one level of advancement/development to another (Sharma, & Mishra, 2014). Based on the view of Gerhard Lenski, societal endurance has been mainly a function of the level of technological advancement of a society to other societies to which this has been in a tough competition and survival.

**Leslie White Perspective on the Evolution of Technology**

Leslie White was the anthropologist who was known for his advocacy several theories regarding societal evolution, cultural evolution as well as he has presented theories about technological evolution during the nineties. The perspective Leslie White about the evolution of technology is majorly focused on considering technology as an important component or part of the culture. Leslie White views and assesses technology as an element or component of every culture in accumulation to the sociology and ideology all of which are consistently and continuously changing hence leading to a general and wide-ranging evolution of culture (Momani, & Jamous, 2017). The theory and perspective of Leslie White about the evolution of technology has been considered as highly and more realistic than the views and theories presented by others (regarding the evolution of technology as well as its relation with the society and culture). Based on the views of Leslie White, a culture changes and grows as the level or amount of energy harnessed per capita each year (per year) increases OR as the performance, reliability, and efficiency of every mean which puts this energy to the work is raised and increased. Furthermore, Leslie White perceives technology as the aspect that changes and improvements due to the attempts taken by a man for problem-solving to enhance survival.

**Alvin Toffler’s Perspective on the Evolution of Technology**

Alvin Toffler is a well-known person due to his expertise as a writer, futurist, and businessman. Alvin Toffler is well known for his work regarding modern technologies such as communication revolution, and digital revolution and their impacts on the cultures around the world. Alvin Toffler refers to revolutionary changes and ups and downs in the society or community and economy in an approach where he talks about to as “waves.” According to views and thoughts of Alvin Toffler, every human being has already passed with the initial two waves (stages of life) and is under the process to enter into the third wave or stage. Here, the third stage to which a human being enters is believed to be the learning and knowledge phase for him or her. Based on the study and research findings of (Haller, 2011), *“The way from the first to the current (third) wave was long and difficult, marked by deep changes in all domains as well as at a mental level.”* This means that the survival and process from the initial (first) stage to the knowledge stage (third wave) is much longer and difficult than the process and move from the first stage to the second one (Boyd, Richerson, & Henrich, 2013). This process and entrance from the first stage to the third is was marked by huge changes in each and every domain as well as at the mental and maturity level of an individual. Proceeding forward, the perspective of Alvin Toffler further says that the mental and physical modifications and adjustments of human brains have always contributed to the present transition and change of the society and community as well as to the transition of the economy.

**Conclusion**

After an in-depth analysis of perspectives of Gerhard Lenski, Leslie White, and Alvin Toffler about the evolution of technology, it has been concluded that thrice of the theories consider technology as the key and major factor which contributes and plays a huge role in the evolution of society. The ultimate need of continuously meeting the increasing needs of human beings have let changes and improvements in technological aspects. Hence, this leads to an overall and general effect on the nature of society as well as the community. Knowledge is also a crucial factor as it dictates the degree to which people (individuals) keep up with the technological change. Beyond that, it can be said that all of the three perspectives are similar up to an extent but different based on the views of authors about the evolution of technology.

**References**

Boyd, R., Richerson, P. J., & Henrich, J. (2013). The Cultural Evolution of Technology: Facts and Theories. Cultural Evolution: Society, Technology, Language, and Religion, 12, 119-142.

Sharma, R., & Mishra, R. (2014). A Review of Evolution of Theories and Models of Technology Adoption. Indore Management Journal, 6(2), 17-29.

Momani, A. M., & Jamous, M. (2017). The Evolution of Technology Acceptance Theories. International Journal of Contemporary Computer Research (IJCCR), 1(1), 51-58.