



PREVENTION OF EARTHQUAKES AND GLOBAL WARMING, DESIGNING IN THE NATURE, NEW STRUCTURAL MODELS, DESIGN METHODS AND SUSTAINABLE ARCHITECTURE AND ENGINEERING

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Throughout history, humanity has passed through many periods, and new builds are designed in every step. The new construction builds and environments have changed their habits and habitats. Nowadays, nature requires explanations about old historic buildings and their structural systems. According to the study's latest design criteria, new structural and earthquake design models were implemented to provide the internal structures and contribute to constructional cost analysis. The regulations require natural designs, sustainable systems, and functionality, among other daily needs.

Humanity has recently lost and ruined all architectural designs, disciplines, laws, and engineering criteria. Thus, humanity has tried to provide balance, find a definite solution, and create natural designs. The study discovered new criteria, models, methods, calculation ways, and explanations about life in the world.

Furthermore, many ecological investments are made, and people try to support them, especially engineers, architects, and economists, who invest in natural energy. Therefore, the studies show a positive way that it can be applied in all regions worldwide, which is most effective. They contain the sustainable architecture and engineering criteria and assume the additional requirements. You can see more details below.

Keywords: Sustainability; Natural energy; New structural models; Calculation methods; Life in the world; intentions; Discoveries about the internal designs.

1. INTRODUCTION

In the beginning, most studies in the academy have proven climate change, so they produce new design methods and architectural designs that benefit from the sun and natural energy. In the survey, you will first find how many methods (my Ph.D. private or personal or individual conducts) can be used to take earthquakes under control? Secondly, how will the methods influence the structural design criteria? Thirdly, how can we design the structural projects and architectural designs according to new structural design criteria?

The first method is “the direct and indirect lights from the sun”. We can benefit from the expansion changes over the earthquake plates in terms of scale. As known, three types of expansion plates are famous because of their motions. Convergent boundaries move to or squeeze each other, divergent boundaries move away, and transform boundaries exhibit a parallel motion. In all boundaries, all motions can be taken under controlled by the expansions of the earth so we can easily benefit from the sunlight, and you can see the figures of the direct and indirect lights or wave distribution below.

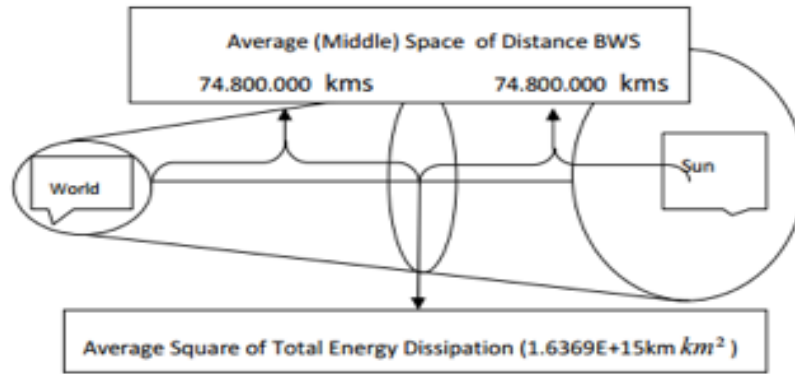


Fig. 1 – Energy integration scheme and indirect wave distribution.

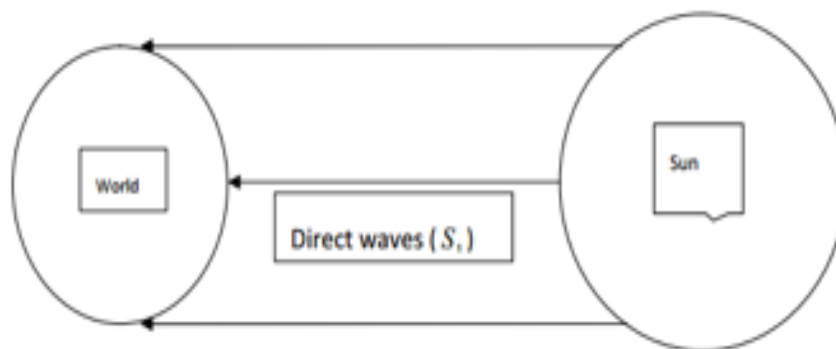


Fig. 2 – Energy integration scheme and direct wave distribution.

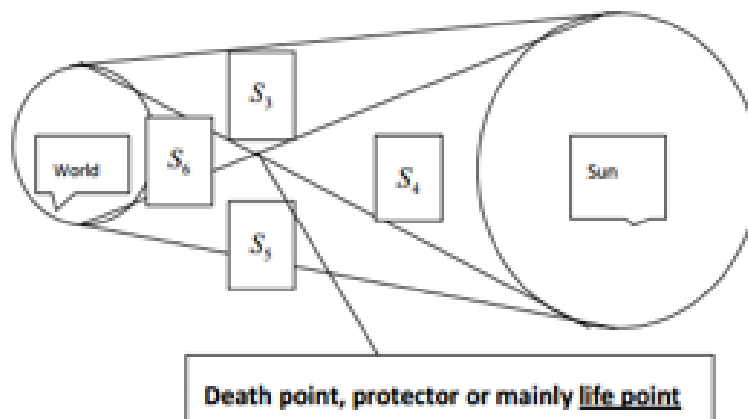


Fig. 3 – Energy integration scheme and energy dissipation region between shadow waves and direct and indirect waves.

The second method is “Liquefaction to soften the movable plates of the convergent, divergent, and transform boundaries.” Thus, by drilling land surfaces and injecting the liquid material into a crust or outscoring all over the world, all zones can be easily monitored and controlled.

The third method is “the weight factor over plates.” As known by a great audience, all underground resources have been consumed, and people have produced lots of cars and vehicles and designed plenty of devices. It can be solved using surface waves by weight and efficiently replacing raw money with people. We can change the weight over plates and provide a balance with a tiny weight factor. Do not forget that a micron-sized motion corresponds to 1000 years of energy dissipation (Integration) or the 7.2 magnitude size of an earthquake motion.

Secondly, all engineers and architects may design a softer build or structure and material. This will contribute to all economic advantages because earthquake factors or forces affect the cost analysis or budget of the state’s economic conditions. It means tiny outforces or only death, live loads, and systematic designs according to functionality. This contains all engineering science fields. For an internal structural design, you can see the new structural scheme for the buildings under excitation and death loads.

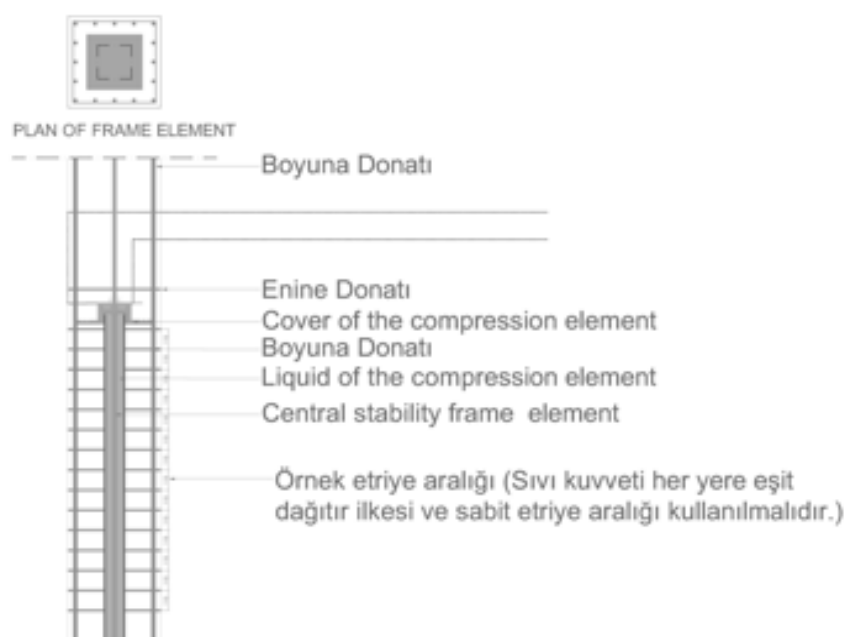


Fig. 4 – Integration scheme of the internal strength design for the columns and beams in reinforcement concrete systems.

In Fig. 4, the system requires a liquid column rod throughout the columns and compression regions in beams. Thus, the compression effects transmit to the foundation, and the incident prevents life losses on the column and beams because of the compression power. As well known, after casting the concrete in the compression elements, the strength is increased, but after death and live loads go up, it reduces to the improved conditions. Therefore, recycling systems damage the engineering principles (Safety, economy, and esthetics). The new design and calculation method are applicable all around the world. According to the criteria, earthquake methods first decrease the design dimension sizes under death and live loads, and the liquid column transmits the load direction to the foundation. During an earthquake or out effects, the system works as before. The liquid column rod conditions and resists. The combination will create a great advantage for all humanity.

Thirdly, while combining the new structure system or criteria with the engineering systems or architectural designs, we can derive ecological and sustainable designs, and after years and years, the structures

can be moved to new generations. Their materials have already depended on natural materials, predominantly liquid materials, so according to Archimed theory, liquids cannot squeeze by pressure because the strain amount is very close to zero. The hydraulic system is related to the same scientific law. The central rod can be designed as cylindrical. Combining the different studies, all architectural designs are built efficiently and correctly.

2. CONCLUSION

First, most people know about architectural sustainable design. Still, they generally benefit from it in a tiny amount, so we have guaranteed the circular sustainable schemes in the study.

If the prevention of global warming and earthquakes is to be demanded, one of the three methods above should be applied. In this case, we can decrease global warming and create great energy for all buildings and all vehicles over the land surface. The design methods will provide significant advantages for human peace because people will have economic freedom, and we won't consume underground resources or raw materials. This will also offer groundwater and underground water level protection because humanity knows all underground resources are restricted, and people should discover or intend to return for natural balance.

Another Ph.D. study has proved that if we need to design environmentally sustainable structures or power, we should change the regulations because of the new structural models above. We can combine the steel material strains and liquid transmission power or target liquid displacements about compression.

As a result of the article, we can easily change the world so many times where the internal structure power or integrity can be constructed. It will provide it economically. All countries will profit or promote a great power, and in all international areas, people will be free.

ACKNOWLEDGMENTS

Aydoğan IBIS owns all these studies, including his PhD studies at Bogazici University. His company, Akare Ahl&Akare Engineering, owns all copyrights for architecture, restoration, and project design.

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