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Sustainability Cuts Reincartradition

After facing many serious problems in a new application or system, people often go backward to re-use the old ways, which proved to have better result in a long run. This backward cycle that resulted from mistaken decisions, which is called in my paper as "reincartradition" is useless and costly, as society has often to pay with the unhealthy life and environment. "Reincartradition" happens in many sectors, includes (art) education. I am suggesting applying "sustainability" as the central issue to avoid this reincartradition to happen again now and in the future.

Quantity and practicality kills quality and pleasure

When I was child living in Indonesia, people still made food packages from natural material such as leaves and bamboo. In Java people usually wrapped sticky rice with banana leave as a take away food. In this way, the leaf functioned not only as a wrap component, but it also added special aroma to the rice. Visually, this rice-cake looked very attractive: a green cylindrical form, pined with two sticks keeping the leaf closed in both ends. To eat the cake, one just has to release one stick, and then open the leaf as same way as we open the banana fruit. This rice-cake was just one example of other hundreds of foods in Java that were traditionally packaged using material from nature.

When plastics as new material had been introduced and widely used in many applications, including in food area, food packages made of plastic gradually replaced the traditional one. The use of plastic that brought significant changes in food culture in Java happened mostly in the commercial food sectors, such as food stalls, restaurants and food producers.

Later in 1980's a new material called as Styrofoam (polystyrene) came to contribute in food package area, afterwards, it has been broadly used for packaging of takeaway meals. At that time, when I bought food from food stall or restaurant, I did not get my meal packed in traditional banana leaf or bamboo basket any longer, but, of course, in ugly-look-Styrofoam box!

Since this invasion of plastic and Styrofoam packs into traditional-natural food packages, I felt something has been missing from our food culture. I was missing the original smell and taste of rice-cake wrapped in banana leaf. Getting my meal always in the white-plain-standard-shaped Styrofoam box was often a painful, especially when remembering the beautiful form of bamboo basket meal box, which has disappeared.

People see food not just as food. In my opinion, the essence of food is not only in its nutrients and ingredients: as a product of culture, food should be seen as a whole. It is not the same food anymore, when it loss its original smell, taste, and form.

As a product designer, my longing for non-plastic-traditional foods was probably not just an emotional expression. From my point of view, there are too many qualities in the traditional food packages that cannot simply be replaced by those synthetic materials. Compare to plastic or Styrofoam food packages, the smell, the taste, and the forms of traditional food packages bring not only satisfy to the mouth, but they also give pleasure to the eyes. Taking ecological consideration, traditional food packages are more environmental-friendly: they are made of natural materials that are available there in your garden. For instance, as long as people still eat banana, there are always banana leaves left over for use. What is more, all these natural material will biodegrade when being composed. To contrast, most plastics and Styrofoam food packages have increasingly become problematic for our environmental and health.

Excluded from their perfect quality for containing liquid and drink, probably the most reason of applying plastic and Styrofoam packages was in their practicality and economical gain. Superiority, as Williams (1981) believes, may not be in form, but economics, packaging, advertising, or distribution, so the fittest tend to survive, and the least suited will disappear or are changed for better compete. The plastic and Styrofoam food packages were cheap, mass-produced, and high in availability. Economy is the key to survive; therefore, most traditional food packages, which were inefficient, un-practical and more expensive, gradually disappeared. Their quality of material and handmade have been replaced by the

great demand of quantity, which became increasingly more important in a changing mass-society.

Quality replaced by quantity. That was the picture of the change of value in the society at that time. The wave of modernisation and industrialisation had changed the way people work, eat and life. The common concern of a modern man was about productivity: producing big quantity with less time. A modern-man supposed to do thing more efficient and faster than ever before. People wanted to travel faster and faster, whether by car, train or aeroplane. In education, new systems in many levels were created to allow big number of students to finish their study as quick as possible. For efficiency reason, people also eat their food very quickly, then running back to their busy work. Vesmanen (2002) in "Organic Kitchen" notes, "eating is like a necessary evil, a ritual, which one must undergo in order to be a part of our efficient society".

Re-inventing tradition

The world condition has continuously changed. People of the globe today have been dealing seriously with some new issues. Modernisation and industrialisation with its mass-production, besides bring many new advantages for our lives, it has also resulted in many problems. Pollution, exploitation of resources, and deforestation, has been claimed as the main trigger for many natural catastrophes and global warming. On the other hand, changing lifestyle, consumerism, infinitive amount of products and material goods has resulted waste problems that degrades our environment.

Many researches found dangerous particle in materials we use for living that harmful to our health. For instances, their studies show some poisoned chemistry in the eating utensils or in food packages we usually use, and of course in the foods we eat as well. In textile industries, some specific synthetic colours they used for dying, beside resulted in some health risks, they have also caused ecological problem, especially their waste polluted the water and rivers affected many fishes and other biodiversity.

To deal with these issues, the new finding of a potential harmful in the thing, material, product, or system will usually be followed up by removing that thing from its use, and a new product or system will be created to replace the old one, which is more safe and less harmful. This so called development, or improvement, in general, appears in three models of solution: making a modification of it, proposing the new concept/idea, or re-inventing the traditional/previous object.

The examples to those three alternative solutions might be better illustrated in automobile industry. Generally speaking, cars have been blamed as one of the great contributors to global warming. The main concern of using car is the pollution resulting from the gas emissions, the use of energy and exploitation of resource for the fuel. The first alternative of making improvement of car is to modify its fuel that free of carbon emissions. This modification will achieve in more efficient car that has a minimal impact on the environment. These kinds of cars –whether electric, solar cells, or biogas fuelled- are now there on the road.

The second method, which is more radical, is to re-inventing the whole paradigm of transportation, such as how if the auto industry not simply as a maker of cars but as a provider of mobility? As McDonough (2001) proposes, it is useless owning and maintaining three cars when one could use the service of a big vehicle for family travels, sport car for dating, or public community car to transport the children. Here, as a mobility provider, the car company might offer customers access to many different kinds of vehicles rather than selling them a car. Although still far from perfection of the solution, City car club is one of examples of this kind of idea. As a member of City car club, you own no cars, but you can drive a car when needed.

The last method is to re-invent the old tradition. Take an example a bicycle. Bikes have been commonly used as a transportation vehicle in many big cities around the world to alternate the use of car. Bicycle, 'tricycle' and other old vehicle that powered by human muscle is probably one of the effective transportations especially for city use, to mobilize people from one place to others in relatively short distance. The typical problem of the mobility in the city is the limited capacity of road, parking place, and of course pollution! Therefore, to avoid the problem of using car, many people simply back to tradition way of transportation: muscle-powered wheels.

In the area of food culture the act of re-inventing tradition has been even more obvious. Traditional agriculture in pre-industrialization used to protect and maintain the plants with organic pesticides. The method was changed when manufacturers largely produced synthetic pesticides in the 1940s: pesticides like DDT were widely used in both traditional and modern farm. Since some studies in the 1960s found that the use synthetic pesticides such as DDT has been very harmful to the order of ecosystem and to human health, the method of farming has been changed again, back to re-inventing traditional ways such as organic and biological farming.

The studies show that synthetic pesticides used for food crops are dangerous to people who consume those foods. Many fruits and vegetables remain containing chemical poison eventhough after being washed. This seems to be one of the reason for the growing of the organic food movement.

Another case is the danger of styrofoam and plastic food packages. Styrofoam, which is made of co-polymer styrene, may result sickness, such as endocrine disrupter chemicals (EDC), and cancer. Some studies more than two decades ago show, when Styrofoam takeaway pack is used for containing hot or warm food, some poisoned chemicals in Styrofoam will be accumulated and meld with the food we eat. The same risk happens, when we warm the food contained in Styrofoam or plastic pack using microwave oven, plastic wrapping can transmit the chemicals during the heating (Hunter, 1993).

It has been almost three decades plastic and Styrofoam food packages replacing the leaves and bamboo meal boxes. After the finding of harmful and dangerous impacts in these synthetic materials, again, people seek new material that has low risk and more suits to contain the food they eat. Nowadays, besides paper, using natural material such as bamboo for food packages is also recommended, especially for Indonesian context. Fast growing bamboo is an excellent material for replacing the synthetic one, since it can be harvested every four years.

Thanks to the changes. Today there is a growing awareness among the middle-high-class restaurants and hotels in Indonesia to re-use bamboo and other natural materials to serve their food. The main concern is not only to re-introduce local culture and identity, but also to be ecological sounds. Economy and practicality is not the main issue, since the costumers are ready to pay more for well-designed bamboo packages containing their food. This new trend in back to old tradition seems to be global: as Janine Chi (2006) notes: "As the use of organic ingredients increases among restaurateurs, chefs, and home cooks, there has been a renewed interest and attention devoted to sustainable agriculture and farming". From Chi's point of view, this movement of organic foods and sustainable farming is primarily rooted in reclaiming the primacy of "place" and "old" ways of producing and consuming food. Today, when I visit restaurant in Java, I can probably received my meal in traditional packages again. Not in plastic or Styrofoam packs!

Those illustrations of how people re-invent old tradition lead me to this question: "How some old traditions, ways of life, and principals that have been for a long time rejected by society, now are gradually re-used, re-vitalized in our

contemporary lives?" For sure, there must be some superior qualities in those old things that make them possible to reincarnate in our lives.

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However, re-inventing tradition should not mean back to a primitive way literally; it is more a kind of refining the old concept of thing or habit, which is then put it in a new context. The solution might be whether a product or a system. So, in a case of transportation as discussed earlier, the results of re-inventing the bicycle might be new products based on bicycle principals with better improvement in design, such as hybrid bike, more comfortable, more passengers allowed, and having different purposes. We could call it as a neo-traditional bike.

Studying most of the actions of re-inventing old tradition, I came up with a simple pattern, which concept I may call as a "Reincartradition". What I mean by reincartradition here is a certain phase of our lives when we re-invent, re-vitalize, or re-use the old way of lives or tradition, after we found some problems -some failures- occurred in the newer application. In more simple words, it is the action of re-using the old practice. In general, the pattern can be drawn like this: "old practice" – replaced by "new practice" – problems occur - return to "old practice".

Taking examples from food culture area, the pattern could be formed as follows:

Organic pesticides – (replaced by) synthetic pesticides – (return to) organic pesticides.

Organic foods – (replaced by) synthetic foods – (return to) organic foods.

Natural material food packages – (replaced by) synthetic material – (return to) natural material.

As I have illustrated in the beginning of the discussion, the whole process from rejecting the old practice into applying the new, until then go backward again to re-use the previous old one, may consume really a lot of time! We needed more than twenty years to return to re-apply organic pesticides, after we realized that some synthetic pesticides were really harmful to our environment and dangerous to our health. It took about thirty years to re-use the idea of traditional food packages in Java, after we found out that the use of some plastics and Styrofoam food packages created big problems for environment, and may result in serious sicknesses.

The action that we have to go backward might be called as a "reincartradition's cycle". Certainly, that time span we have lived in those cycles, were useless and

costly, or even dangerous, as many have lost their live. It was a failure that we should have not done, and we should not anymore do in the future.

The cost our society had to pay caused by those failures was enormous. Take example the use of pesticides. Due to the wide application of synthetic pesticides, many people –the farmer, the worker in agriculture, and food consumer- have suffered from serious sicknesses, from abdominal pain, dizziness, headaches, nausea, vomiting, as well as skin and eye problems. The World Health Organisation and the UN Environment Programme estimate that each year, 3 million workers in agriculture in the developing world experience severe poisoning from pesticides, about 18,000 of whom die. According to one study, as many as 25 million workers in developing countries may suffer mild pesticide poisoning yearly. For public, children are especially susceptible to the harmful effects of pesticides. A number of research studies have found higher instances of brain cancer, leukemia and birth defects in children with early exposure to pesticides.

Nevertheless, pesticides has also resulted environmental problems. The use of pesticides can decrease the general biodiversity in the soil. They contribute to air pollution, disturbing wildlife and the whole ecological order. Some pesticides contribute also to global warming and the depletion of the ozone layer.

We can still make the long list of faillures, not only in agriculture and food culture, but also in other products and systems such as technology, economic, social and education. These faillure might affect both physically and psychically to human being, which ranges from small, medium until serious fatal problems. One could still argue that this is the way the human history must go. It is human nature to make mistakes: people learn from mistakes to do some improvements, to have better lives. For some point this argument might be right. However, there are always plenty of probabilities in any matter. Couldn't we re-construct and anticipate future with better awareness of possible risks and damages, so that we would not need to make reincartradition now and in the next generation to come? Avoiding reincartradition by sustainability?

Perhaps it is impossible to avoid absolutely reincartradition. Some problem matter has a very high degree of complexity, makes it is very difficult to predict its long run result. Getting rid of risk will require changes in the way we see, think and practice our life. In other words, we have to re-frame the value of human's creation of materials, products and systems. This aim is suited with recent issue

"sustainability"; it could be said that 'sustainability' is the key to stop reincartradition.

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Sustainability has increasingly become a central concept for re-shaping our world, especially when we take environment, ecology and future living as main consideration. Sustainability discourse is discussion of how to make human economic systems last longer and have less impact on ecological system. Sustainability as a concept has been applied in many field, such as development, technology, agricultural, art, design, architecture, economy, culture, and education. Although each field would have slightly different definition of what might be sustainable is, it seems that all have something in common: it is solution in process, system or product that can be maintained at a certain level indefinitely.

For example, sustainable agriculture could mean the development of agricultural system that would last indefinitely. Sounds similar, sustainable education might promote the improvement of educational systems towards sustainable development.

The effect of reincartradition will gradually disappear when all activities of manmade world is directed in a more sustainable way. What is then in practice meant to be sustainable, and how to achieve the goal of sustainability?

Since sustainability has become a new paradigm in many professional fields in 1980s, it has been long discussion between many experts from diverse background such as governmental institutions, NGOs, education institutions, and industries in defining the conception of sustainability. In general, there are at least three different concepts of how sustainability should be applied in to human activities.

The first one, proposed usually by environmentalist or religious movement, see human greediness as a central of all un-sustainability. The infinitive of wants or goods, and consumerism and its effect in degrading our environment are rooted deeply in the greediness; such a human drive and desire in wanting to have more and more of anything. Consider the fact that (natural) resources are limited, the more rational solution to deal with that issue is not to resize the amount of consumption and production that can fulfil the (infinitive) desire, but to reduce – or in more extreme- to eliminate the desire it self.

From this point of view, by not wanting anything, one can effectively reduce the demand of quantity of goods. At least, when one can manage not wanting to have so many things, one could indeed have more possibilities to consume only things that are essentially needed, in a very good quality. A good quality of product, for

example, will live long lasting, so in this way, it will diminish waste and increase the quality of life. The Simple living movement is one of models in pursuing a kind of of lifestyle that minimize the 'more-is-better' pursuit of wealth and consumption. It is a way of life that downshift from greater consumption to simplicity.

The second concept suggests a slight different issue. Advised by scientists, professionals and experts from different fields, the idea is to reconstruct all human activities in producing products, services or systems by setting eco-efficiency as a main matter to achieve economic gains, and at the same time decreasing environment problems. Although they have similar concern with the previous concept, such as to consume less, to minimize waste, and to protect natural resources, the way they solve the problem is different. Rather than extremely practicing the simplicity of life, they propose a progress development of quality of life, by doing efficiency in all aspects. This act of efficiency, often supported by new system or new technology, will cut the uses of time, energy, material and other resources, resulting in the betterment of economic and quality of life, with less bad impact to environment.

Paul Hawken (1999) in "Natural Capitalism" shows, how many successful companies operate by applying a new paradigm of industrialism have achieved great efficiency and better profit, and at the same time improving the quality of the environment. Here, the term of natural capitalism refers to the belief that business and environment can work together.

The last concept recommends some issues, which in some points radically contradict to the previous ideas. The most challenge concept, called "Cradle to cradle" is proposed by McDonough and Braungart in 2002, has received many concerns and attentions. In McDonough and Braungart's view, unlimited production and quality of environment are not two matter of choose. Intelligent design should allow both nature and commerce to blossom and grow. Therefore, in certain conditions, consuming more goods is not always seen as an evil as the environmentalist usually view. The argument is, why should not produce and shopping more goods, if those goods are best in quality and risk-free for environment?

"Cradle to cradle" principal takes often nature as an ideal model. Take as an example a tree. In nature, a tree creates big amounts of blossoms for producing another tree: although it disposes a lot of wastes on the earth, still it is not measured as wasteful and harmful. It is merely a highly effective of nutrient

cycling, safe, and beautiful. Using that inspiration, we can make use of the intelligence of natural system and applied it into new products, systems, or tools. Three views of sustainability

All concepts seem to have their own right. Controlling the greediness, as practiced through a simple living in some point is very elegant, yet an effective solution. From philosophical point of view, having less desire is a state of truly efficient, as it requires less energy, less exploitation of resources and less burden in the life. An old saying tells: "Don't increase your property, it's better to throw away your desire".

Dealing with this issue, Jules Henry (1963) in "Culture Against Man" illustrates the essential different between the primitive and modern worlds. In primitive culture, as a rule, one does not produce what is not needed, thus objects are made in the quantity and at time required. As a contrast, resulted by contemporary dynamics, modern culture lacks of property ceiling. In Henry's view, the most obvious gap between these two cultures is that while the primitive culture produces a fix bundle of wants that resulting stability; the modern culture creates infinity of wants that resulting restlessness. Nevertheless, Henry also defines two important poles of human life: one is 'value' and the other is 'drives'. Value refers to all kind of things that most human being would like to be: love, harmony, kindness, quietness, fairness, contentment, fun, honesty, relaxation, and simplicity. Meanwhile, drives are other element of human being resulted by driven culture such as achievement, competitive, profit, expansive, progressive and mobility. It is drive that always desires security and a higher standard of living. People in the modern society live between the fight of this two poles. Unfortunately, the situation seems to be unbalance. In one side, there are so many institutions and supporting instruments available for facilitating human's drives and desires, while in the other side, there usually lacks of support if one seek for value.

Nevertheless, simple living does not identically mean primitive living; it can employ newest technology to serve effectiveness, such as using Internet to be effective in communication. The idea of simplicity would probably considered to be problematic, when it goes too much into extreme attitudes, such as antigrowth, anti-progress and anti-change mind set, meaning -in a truly sense- all progresses and developments of new things are just bad. This would also contradict to the basic characteristic of human being that endlessly developing and improving their quality of life. The nature it self -often thought as an ideal model- continuously evolve and develop in their own way for reaching its perfection.

The second approach, which based on eco-efficient concept, has proved successfully in minimizing environmental damages, while taking profit from economic growth in many sectors such as businesses, industrial manufactures, buildings, agriculture and education systems. By using tools such as recycling, energy and resources saving, selective consuming, and waste reducing, this method shows how progressive sectors can gain efficiency, and be a good friend to environment.

However, those achievements are not without critic. "Efficiency isn't much fun" as McDonough and Braungart (2002) argue. In their opinion, "in a world dominated by efficiency, each development would serve only narrow and practical purposes". I just shall quote their full expression of efficiency as following:

"Beauty, creativity, fantasy, enjoyment, inspiration, and poetry would fall by the wayside, creating an unappealing world indeed. Imagine a fully efficient world: an Italian dinner would be a red pill and a glass of water with an artificial aroma. Mozart would hit the piano with a two-by-four. Van Gogh would use one color. Whitman's sprawling "Song of Myself" would fiat on a single page. And what about efficient sex? An efficient world is not one we envision as delightful. In contrast to nature, it is downright parsimonious"

Particularly from McDonough and Braungart's view, the idea of recycling things, minimizing and decreasing the risk, or being less bad, is still considered as "no good" solution. Actually, those actions do not really stop the problems completely; they only postpone and slower down the bad impacts, to be appeared in a longer time. Finally, they will end up with similar problems: waste or environment degradation. This is because the essence of the problem is still there, unsolved. The recycled plastic product, for example, will go anyway to landfill when its usage has reached the end cycle. In its last destination, it is still the same material: unbiodegradable-harmful plastic.

McDonough and Braungart demonstrates, in order to have really a high-end-clean result, we have to restart from the first step, reconstruct completely the old ways, then remake thing by using new paradigm. The result is, our planet will be filled only with highly guarantied risk-free products, built from materials that are fully biodegradable or they can be transformed into new material, for making new products. In this way, producing and consuming quantity of goods is no longer

claimed as un-sustainable. It is just like a tree that produces abundant blossoms to serve life and beauty to the earth and others living being.

In many respects the whole inspiration of Cradle to cradle by McDonough and Braungart might be the ideal model of sustainability. Perhaps, the idea of "more producing and consuming can be good" could be still dilemmatic. The complexity of human being, however, cannot be just entirely transformed into a model of nature. The fundamental distinction between human and nature is human does have greediness while nature does not. Mahatma Gandhi says, "This world is sufficient for all people, but not enough for one greedy person". So, why should produce big numbers of things if the needs are small? Even if human could be able to produce everything in ecological way just as nature always does, should they keep producing anything, which some might be useless? Though the energy we use in production is renewable, the material is biodegradable and can be recycled, yet there are still other "energy costs" to be judged, such as human energy that employed in the section of design, manufacture, marketing, transportation, retail, and recycling.

The involvement of time and capital is another aspect to be added, which brings such production into many consequences. The harmony that works in nature undoubtedly has its own perfect law, but we do not have to copy all singe detail of their operations. The main concern of celebrating the unlimited production is, it could be interpreted as a kind of 'legitimating' for industrialist to produce an ecological but non-sense and useless products. For this, sustainability would loss its meaning.

Common sharing views of sustainability

Despite some differences in viewing how to achieve sustainability, these three concepts share some common grounds. First, they call for the need of change in paradigm of human relation with nature. In the name of improving life, in most cases nature has become the object of exploitation, greediness and desire of human being. The alarm is, "How to constantly grow and develop without damaging the environment".

Secondly, all things in nature always work in balance and harmony, so human being can take many lessons from them. In other words, we need to live as closer as things work in nature. This attitude has been shown by many primitive and traditional societies in pre-industrialisation era. In traditional and indigenous

knowledge and practices, we often find undoubtedly harmonious balance between aesthetic and function, physical and ideological purpose, and economic and ecological decision, resulted by thousands of years accumulation of practice experience and collective wisdom (Nugraha, 2005). This view reveals the reason why 'reincartradition' happens.

Third, sustainability always relates to the concept of locality. It is dealing with local culture, the use of local materials, local knowledge, economic and environment. This means, every case of sustainability should be solved in specific way, depending on the diverse conditions of local culture and resources.

To be sustainable, as the last point, there should be significant shift in paradigm from rather economic growth to good growth. Economic cannot become any longer the only king that drives all kind of development without environmental concern. In this respect, human should put back the quality as a priority to replace quantity, put value as priority replacing drives, and put beauty and harmony as priority replacing (bold) economy and practicality.

Giving overly value in practicality and quantity have changed human attitude towards "time". It accelerates the speed of lives, results in restlessness and anxiety in many people, which cannot flow and keep up-to-date with this rapid change. In technology, as Bezerra (2005) concerns: powerful technologies with their increasing speed and more changeable than ever, have produced high degrees of anxiety for the fact that human ability is very limited, at this speed, to distinguish and control the good from the bad results brought by the new invention. Equally in food culture that in a state of continuous change, and recently the changes have been so fast that they are bound to have a shock effect (Vasanen, 2002). This is then only a matter of time, before they really give up. As nature never been in such rush and hectic lives, nor we, human being, should be.

Reflection: sustainable art education?

According to previous discussions, "reincartradition cycle" happens in many aspects of human life. This backward cycle that resulted from failure decisions is useless and costly. From time to time we have been finding out the mistaken applications in our products, tools and systems. All these might still continuously to happen. Who knows, may be one day in the future we could not use microwave oven anymore to warm our food?

The key issue to halt "reincartradition" rests in sustainability. Sustainability as a concept that has been applied in many sectors, recommends the way of

indefinitely development, yet bring no harmful to human lives and environment. In other words, we do not need to make reincartradition anymore, once we apply the principal of sustainable development into our activities.

Undoubtedly, reincartradition appears also in (art) education, as there are already existing concepts of sustainable education, which focus on developing tools, facilities, methods, systems, and curriculum of education in more sustainable ways.

We are now searching new paradigm in art education. As it appears here, my paper proposes no new idea but points of consideration. Hopefully, other contributors could use these as a ground to start with: create intelligent decision to avoid reincartradition. Be sustainable!

Last of all, it is much better to get confuse in some time, before making any vital decision. Instead of being rush, we should allow time to make thing getting mature and ripen, as nature always does.

Let's get confuse! References

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