

## The statement of material mix-match in jewelry design

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**Abstracts:** With the steps of the society moving forward, with the improvement of technology, with the residents' material life becoming richer and richer, people start to pay more attention to enrich their spiritual life, rather than treat the jewelry simply as the symbol of wealth, moreover they are going to make it a way to show their personalities. Material mix-match, as one of the most important way of design, is also usually used in the field of jewelry design. Sequentially brings the new light spot for jewelry design on both visual and implicational hierarchies, and promotes the quality of jewelry. Thus human beings start to use material mix-match to define themselves. After many years of study of design, the authors gradually summarized the regular patterns/features/procedures of material mix-match for jewelry design.

### The meanings & implications of mix-match

“In this new century, global fashion seems to lose its direction, then what is the new tendency? Consequently, free mix-match gets into new fashion trends.”<sup>[1]</sup>--ZIPPER

At the year of 2001, ZIPPER, a Japanese fashion magazine opened up a “mix-match” fashion trends with the words above. People started to use techniques of mix /collage & match frequently, little by little, the word “mix-match” has been into the eyesight of the crowd, even become the “standard” for their daily dresses---that is defining the personality, showing the characteristics. There's no need for new creating, what's in need is just refer to your own personality, follow a certain rules, then you can put the things that used to be irrelative together, make a total new style which is only belong to you.

As an indispensable part of fashion, jewelry is a rather important way for people to specialize themselves. When all the crowd start to try on fur mix-matched chiffons, evening dress mix-matched jeans, males' mix-matched females' clothes, punk mix-matched Lolita dresses , an ingenious jewelry will possibly be a punchline for the whole dress. As a result, the former patterns of jewelry could no longer satisfy the demands of people for fashion. We need to do things on the basis of the present jewelry , use the method of mix-match design to create new light spots for this field.

### The catalog of jewelry materials

There are lots of different types of jewelries in the market, so do the materials of jewelry.

There are several classes of jewelry materials on the present market: metals like gold, silver, palladium, platinum, titanium and so on... Bijouterie (natural &manmade): diamond, crystal, emerald, ruby, sapphire, alumoberyl, acrylic and so on...other materials like wood, paper, cloth, rope, leather and so on.

As the basic element of jewelry design, material has been in a crucial position of the presentation of jewelry. Moreover, because of modern technology getting more and more developed, the appearance of alloy materials and different kinds of new materials gives more new chances for

jewelry design. The model of human life getting diversification, the transformation of information getting diversification, and cultural fusion getting diversification, all of which gives us a news---to mix-match jewelry materials will bring more spotlights for it, will satisfy modern residents' appreciation of beauty better, will a better way to show the comprehensive personality of modern residents. Under the environment of millions of different materials, how to choose the right material, how to make a right mix-match, has become the key to succeed in the field of jewelry design.

As the global economy keeping in a low point, people started to change their consuming concepts. Materials of jewelry aren't limited in expensive metals any more, but new metals, manmade gems are going to be used more and more by jewelry designers. [2]They combine new technologies and their special ideas into their design, starting a new fashion revolutionary trend in the field of jewelry design for the year of 2012----different kinds of materials' mix-matching. Thus, the variety of materials is visualized, the exploration of nonmetal materials, alloy materials and new materials opened the minds of designers to a great extent. Designers imply new materials and new technologies, again inject new "blood" for Jewelry by their unique creativities. Except for the allachroic metal –titanium which is quite popular recent years, bronze, alloy and a serious of new metals are getting more and more popular. These metals are in abundant storage and also easy to be shaped, so they are widely liked by designers.

Mixing new materials together with other different materials will gain infinite fun. No longer effected by the price, designers can use more elements on the design of new materials. The mix-matchings that they made are filled with interest, this kind of design is totally different from the traditional serious outlook, starting to get lively and saucy. A piece of mix-match seems to look casual, but in fact it shows the acceptance in details across time and space.

## **The methods of material mix-match in jewelry design**

### **1.1 color based material mix-match**

King sukyoung (korea) mentioned in her book the color psychology of design that personal color is made up of three parts: core color, assistant color, interspersed color. [3]Actually, it's the same way in jewelry design, an impeccable piece of jewelry consist of core color, assistant color and interspersed color.

King sukyoung thinks that the core color is supposed to be peaceful colors that people won't take unkind to it, the assistant color should be harmonious with core color, and the interspersed color ought to gain attention of the crowd which require it a distinct color. At the same time, she takes the example about the match of men's formal wear. Blue is a color with a little luxury which can give a deep impression to other people. However, if you continuously wear it for three day for work, even you change your ties and shirts everyday different from before, that doesn't make any difference for other people. Conversely, if you pick the main color of your suit as a peaceful color, since that doesn't make any deep impression to others, even just the same as the day before, only if you change your tie and shirt would make it special.

When making jewelry, we can also use the same rule as the match principle for the whole dress, so as the different way. The jewelry itself is the embellishment for the entire match, if we pick a peaceful color as the main color, which might not catch a lot of attentions, then the jewelry will lose its original meaning, meanwhile it might also be unnecessary and cumbersome. But if there isn't any sense of unity in the colors from the top until the end of your body, the blendent will lose the sense of wholeness and taste.[4] So the essential color of a jewelry should be materials in bright colors, then the assistant color and the interspersed color should be materials in peaceful colors, in order to make a better match with clothes, in order to get a better effect.

Let's take an example of the mix-match of silver materials. Silver has its unique silver sheen, this easy matching color makes it acceptable in diversity ornaments, even gives it the ability to show different characters. When matching with white crystal, it will show a perfect harmony, and give others a sense of pure and clear. So at this point, we should focus on crystal, and treat silver as an assistant. (Figure 1) When matching with leather materials, an intense comparison of colors gives an impact to others, so at this time, we should treat silver material as a principal, and treat leather material as a supplement.

Let's take another example of the mix-match of colorful gems, agate has a light intensity of colors, which gives a strong impact to vision. If you use it as a supplement in a piece of ornament, that might make a distraction. So it's better that we make it as a prime material, mix-matching with black rope or leather rope would be a nice pick.



Figure 1 Silver mix-match with crystal

Of course, there are some jewelries without one main prominent color, probably they just want to highlight a series of color like COLOR-Warm, COLOR-Cold..... Then in this situation, we can pick materials in similar colors to mix-match. (Picture 2 & 3)



Figure 2 Mix-matching in similar colors



Figure 3 Mix-matching in similar colors

All in all, the mix-match of jewelry should be done under the principles of colors. As a essential part of the whole body's dress, the mix-matching of jewelry design has it's own patterns and specialities.

### 1.2 Morphology based material mix-match

The form of modern jewelry is mainly in four aspects: dot, line, surface, space. <sup>[5]</sup>Dot: In the design of jewelry, dot may has different areas, the size of which should according to its surrounding elements, that means there are relative dots in the design of jewelry, but no absolute ones. Line: line

is frequently used elements in jewelry design, the length of the lines, the rough milling, the firm soft and the volatility can all become the language of designers. Surface: much as the breakthrough when show gem materials, cambered surface, facet surface, corn surface, irregular surface express different feelings. Space: it is the composition of the substance, even the soul of jewelry design. The combination of point and line: line is expressive, it can extend upward, downward, leftward and rightward, expresses a sense of determination and stability. However dot gives an impression of lonely, single and stable. Setting a set of dots along a straight line will show coherence, climax, regulation and development. In the field of jewelry design, the showing of surface always comes with the changes of dots and lines, then gives people a sense of smooth and stable. For instance, inlaying silver wires around a gem with camber surface will give an impression of soft, active and motion in quiescence; adorning nature shape gems around a black rhombic gem will give an impression of founder, unity and elegant. The defining of space is the organic combination of dots, lines and surfaces. When we doing mix-matching, we shouldn't be limited in a narrow space, on the contrary, what we should do is to choose dimensional blocks like sanders blocks, mix-match with vivid silver wires winding around, will give an impression of gentle and stable. We can also make a mass of silver wires winded into a 3 dimensional space, then embellished with red coral, will give an impression of lively blooming.

In a conclusion, when doing mix-match on jewelry design, we should follow the principle of dot, line, surface and space. This is the morphology design of jewelry. Only if we find the laws of dot, line, surface and space, only if we find the suitable place for materials, can we do the right and resultful mix-match, can we make our design vivid and interesting, or that will be in a mess. (Picture 4 & 5)



Figure 4 Dots in certain lines



Figure 5 Designer: Jiang Youya Supervisor: Xue Hongyan

### 1.3 Culture based material mix-match

Jewelry itself is something of great cultural connotation. The trends of a country pop culture are directly reflected in the people's living habits, dress and wearing.<sup>[6]</sup> With the development of modern society, the deepening of globalization, people in the city live a westernized life, their lifestyle and thinking way tends to be the same as the other cities, but the heterogeneity of the culture is still very treasure.<sup>[7]</sup> Therefore, we need to make the appropriate mix and match between different cultures in jewelry design and, to meet different needs of people.

Different materials, as well as different cultural expression: Jade is a manifestation of the culture of the Chinese nation, ruby is the highlight of the Italian culture, celadon is the natural expression of the ancient Chinese culture, sapphire is the incarnation of the Islamic culture in the Middle East ...

Jeff Shi have mentioned in a interview called 《Chinese original design force》, "a good design work should be corresponding to the life, culture, therefore, localization design is one of the elements of good design. Moreover, the visual language of the work, materials and their corresponding process are also important aspects. For the people of different cultures, without having to learn another set of culture and language, will be able to break the boundaries, resonates with the work. "in turn we can also draw: in this pluralistic society, jewelry design especially the modern jewelry design, different cultures mix and match to make a work more with a different kind of affinity, it enables people to resonate better and get everyone's favor.

As we all know, different cultures have uneven difference. Although the culture of Japan and Korea are subject to the influence of China, but also has its own characteristics, as the King Wenxue (North Korea) mentioned in his "Three Kingdoms of East Asia: Red China, the primary Korea, variegated Japan."<sup>[8]</sup> Eastern culture and Western cultural differences are the largest, as Ye Jingtian said in "cross-border": Western is free, they have the freedom to create things, very human; Asians will put a lot of added value in a thing itself.<sup>[9]</sup> Oriental artists implicit characteristics and the direct expression of the Western artists, each had a different beauty of art and design.<sup>[10]</sup>

So how to do the jewelry material culture mix and match? In fact, we can find a reference from many of the world design case. Chinese home brand products in Ya'an, selected the two landmark buildings to represent the East and West, the use of simple, modern pop language, expressed humorously the spiritual symbol of East and West in their life. Than in our Jewelry designs, we can also choice iconic symbol appropriately which represent the Eastern and Western cultures, for example, we can choose porcelain representing the Eastern culture, to match with the cortex which on behalf of Western culture, giving people the feeling of bright spots.(Figure 6)



Figure 6 Metal & Fur : metal shows western culture and fur shows eastern culture

Of course, we can not only just mix and match the culture in space, we can also mix them in time. we can mix and match the elements on behalf of Chinese culture in different dynasties .We can also mix and match the rococo pattern with modern minimalist lines .they are good matches.(Figure 7)



Figure 7 Black Silk is on behalf of Chinese culture but dots are on behalf of western culture

#### 1.4 skin texture based material mix-match

Texture reflects the texture attributes of the object itself, the material beauty, it can enrich the shape, strengthen the sense of three-dimensional and texture. <sup>[11]</sup>

The materials we use in jewelry design such as the metal, gemstone, and others, have different textures. Metal materials are shiny, smooth, toughness, there is a strong visual impact. Gemstone is sleek, smooth, hard. The wood material is soft, light weight, easier processing. Artificial gemstones such as acrylic is light, has rich colors, but its gloss is not as good as precious stones and metals. Cortical surface is rough, soft, gives a warm feeling. Cloth and rope through the preparation gives a bump to the touch, also have the soft, skin-friendly texture.

Then we can mix and match with the use of the Constitutive Law.

The form of texture is regularly, some free, some rough, some smooth, some hard, some soft. <sup>[12]</sup> Jewelry texture of the material is divided into the natural texture (precious stones, wood and other natural texture) and man-made texture (precious metals processing texture, artificial stones,



artificial leather artificial texture). Based on various characteristics of the material, we can choose different texture material to mix and match. (Figure 9)



Figure 8 Metal mix-match with cloth

For example, the mix and match of wood and hollow silver pieces, the natural texture of wood looming through the hollow silver pieces texture, is a good combination of natural and artificial; we can also choose the natural turquoise and Asia linen rope to mix and match, the natural turquoise lines formed on the woven flax embellishment, giving a fresh feeling.

When we mix and match different texture material, we can use the method of comparison, coordinated approach, or both contrasting and coordination to highlight the quality and characteristics of the materials used for jewelry design.

### 1.5 Processing based material mix-match

In Jewelry design, there are a lot of process. The technology used in the traditional processing of gold and silver jewelry including: filaments process, bluing process, Kingfisher process. In the processing of precious stones, including the cutting, grinding, polishing, drilling and so on. The use of technology in the processing of other materials including: carving, engraving, weaving, and so on. As well as the suppression of the modern processing technology, such as the casting, electroforming, plating, and so on.

Date back to primitive society, people used diversities of collars, bracelets, earrings, to decorate their bodies, but the main purpose is to show the tribes, clans and totems, secondly to state their social status, identities and abilities. <sup>[13]</sup>As the handicraft art becoming more and more developed, ancient people started to put precious metals that they abstracted into the use of making jewelry. So far, the golden crafts found earliestly from archaeological excavations is from Shang dynasty, that's over 3000 years from today. Under the power of the Shang royal court, most of the gold artifacts

were gold foils, gold leaves, gold pieces. At the same time, because of the prosperity and the evolution of bronze technology, the manufacturing of silver and gold was also in a golden time. In return, the progress of silver and gold technology also pushed forward the workmanship of bronzes, jades and lacquers. It gave the strong technical and material support for the booming of jewelry design, and opened up a new higher space for the innovations of designers.<sup>[3]</sup> Then came the period of Qin and Han dynasty, the fabrication of silver and gold crafts synthesized cast, weld, wire inlay, embedded casting, plunge grinding, polishing, and many mechanical joints techniques, all of which had already gotten into a high level. The Tang dynasty was in extreme prosperity, the same in the jewelry field. The hammering, pouring, sealing, cutting, polishing, rivet, plate, carve, hollow out were widely used in jewelry design. Running to Ming dynasty, the scientist Song Yinxing wrote a book named *Heavenly Creations*. He explained pearls, treasures, jades, crystals, glasses respectively and detailedly in the last chapter of this book. ("All the pearls come from clams, after months get embryos, after years become treasures").<sup>[14]</sup> Since then, it gradually formed the system of silver & gold-based, jades, gems, agates, crystals, glasses and many materials all together developing. In a word, traditional ornaments are all made of precious materials, in rigidly handmade and complex figures, so spontaneously the jewelries was regarded as a symbol of society status.

On one side, ever since the first industrial revolution, science and technology are advancing in a high speed. People are leading abundant material lives, thus they initiate luxury spiritual life as well, no longer treat jewelry simply as the mark of wealth, but more as a defining of personality, as a tool to show the real person inside. On the other side, since the economic crisis swept up almost all the countries around the world, global economy kept in a low point, the crowd realized the necessity of changing the consumption idea, the materials of jewelry design was not only limited in the precious metals, high quality gems, new materials like alloy, manmade gems are getting into the eyesight of the crowd.<sup>[15]</sup> The quality of silver and gold, the size of pearls and gems, are not so important anymore, the creativity, specialty, cultural taste and the expression of form are in the front rank.<sup>[16]</sup> Finally, plenty of nonmetals, nongems and substitute materials appeared, like modern alloy materials, plastic materials, local materials, fabric materials and so forth. With the corresponding, it also comes up many new workmanships, like welding technology, joint technology, electroplating technology and so on.

In the the design process of jewelry material mix and match, many design rules will be applied: the mix and match of colors, shapes, cultural and texture ..... In fact, all of these design rules are based on the range in which processing can be realized. Therefore, the development of modern processing technology, provide more possibilities and greater upside to jewelry materials mix and match design.

We can try to encase hollow or metal carving material in carved red with the of silver-clad process, which can be made into exquisite earrings or necklace, contains full of gentle breath of oriental women (Figure 9); we can also try to use filigree process with which we can mix and match the filaments made of silver raw materials and cortical, can fully demonstrate the sense of silver lines and flowing rhythm; we can also try polishing process, first, make the free-form white crystal surface polished, than connect with transparent fishing line, and match the silver tube and green leather cord, the whole necklace is fresh and bright, just like the summer grapes.



Figure 9 Hollow out wood encased by mosaic gold

In short, in the process of material mashup, taking into account the feasibility of processing, on the contrary, the feasibility of processing also contributed to the possibility of a variety of materials mashup.

### **Conclusions:**

Mix-match, is to follow your own personality, to follow certain principles, then assemble originally irrelative materials together, reach to a new kind of style. In the condition of a variety of different materials, mix-matching different materials in a certain design concept becomes a new lightspot of jewelry design. The mix-match of materials has intimate relation to color, morphology, texture and processing. First of all, the mix-match of materials should follow the rules of colors specialty and keynote. Secondary, the mix-match of material should follow the rules of dot, line, surface and space. Then, the mix-match of materials can base on cultures which include cultures in the aspect of both time and space. Finally, during the processes of materials mix-match designing, we also need to consider the feasibility of processing technic. Using “mix-matching materials” to make jewelry not only reveals the qualities of different materials, but also implies different culture and implications that comes from mix-matching

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