平面构成
与 造型基础

——平面元素与表达

张旭生 应放天 王浩迅 编著　隋海燕 译

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前 言

　　对设计类学科基础教学的思考完善是随着时代、社会和文化环境变化而调整的连续过程。社会发展到了一个全新的时期，快速进入后工业信息化时代，对信息传达的要求更是提高到了空前的程度，作为视觉符号创造者的设计师们肩负着很多责任也面临着巨大的挑战。人类的视觉语言在信息传达中起到越来越重要的作用，越来越多的信息需要视觉影像、图形、符号来传递，这些视觉元素通过一定的规则有序地组织在一起，即"构成"，形成能够被认知和解读的信息载体。课程的最终目标是透过"构成"的相关课题研讨，使学生在平面形式语言内容与形式、平面形式语言与思维表达等方面得到拓展。可以说，用抽象的视觉语言表达理念、思想和情感是提高设计能力的第一步。抽象的形式语言之于设计活动犹如文字语言之于写作活动，有着重要的意义。抽象的视觉符号及其组织后的视觉语言系统是独特的表达工具，更是设计师和外界设计交流沟通的媒介。

　　本课程以视知觉与视觉心理规律为基础，并结合设计实务之需要，强调"感知的教育"思想；着眼于培养新的时间和空间意识，以及对一切视觉形式的敏感性；特别强调培养一种对抽象形式的兴趣，以及这种抽象形式与设计思维间的协同关系。抽象的视觉语言对于刚刚接触它的人来说是很难理解的，而本书中课题从"语言系统"中基础的"语词"开始，如婴儿学话般由易到难，使学生逐渐习惯用抽象的视觉符号进行思考和表达。课程包括10个与思维表达相关的课题和阶段：感性涂鸦——感性表达（咖啡味道）——抽象的看（视角与构图）——策略——构成——形——体——分析——同构——海报。

　　·感性涂鸦——与儿童涂鸦类似，感性涂鸦是从无意识到有意识的体验过程，使学生初步理解抽象图形的产生、语义与具象图形表达的不同，以及从图形样式到主客体转换的根本区别，使其建立抽象表达的基本概念。

　　·感性表达——或称为主观表现，是运用视觉语言的开始，是在内在感受驱动下的自发表现，其主旨是将个人的特有感受通过个性化的视觉样式自然地表现。其结果必然是带有强烈个体特征和感性色彩的视觉图形，从而达到设计思维与表达的有机融合。课题的设定应能引起学生的切身经验与共鸣。

　　·抽象的看——"看"即"发现"，善于在日常生活中发现不寻常的美是课题的训练目的。打破我们日常视角、视域以及成见与概念的束缚，就会有令人惊奇的发现；将其延伸到对人的行为、生活现象、思想观念的全新思考，将最终影响创新思维的发展。

　　·策略——设计思维中的重要内容，解决问题的方向与指导。课题通过对存在多种可能性预设问题的解决，训练学生增强策略意识和提出个性解决方案的能力。

　　·构成——课题主要以情态构成的方法进行文字元素构成设计，使学生明确构成是手段而不是目的，并进一步理解构成的原理、方法、目的，正确处理形式与内容之间的关系。

　　·形——课题要求将三维立体图形转化为平面图形，并体会在此过程中因图形关系的转化带来的视觉模糊性，最终实现创意设计在思维上的交叉与转换。

　　·体——即"结构素描"，是研究在平面上以线的形式表达三维体积与空间的规律及方法的课题，是设计思维表达的重要基础技能之一，其训练要义是从简单的形体开

始，对比例、透视等形体要素的精准再现及其规律的掌握，最终达到脱离实体对象制约、自由表达思维的目的；同时，整体观察的方法导致整体思维的习惯，有助于学生养成从全局把握对象的思维习惯。

·分析——伴随设计思维的展开，设计者需要调动一切视觉符号来记录、整理思维的过程，留下思维的痕迹，并借助视觉表达的展开使得思维不断走向深入。抽象思维的视觉化重在思维内容的传达而不在于视觉的形式美感，每个人可以有自己独特的表达方式。

·同构——课题将人的"手"与不同生物体利用符号语义同构的方式有机的整合到一起，使结合后的形象更具象征性、启发性和视觉冲击力。课题使学生了解图形的象征性及语义构成的概念与方法。

·海报——通过海报设计简单的应用项目，使学生体会图形在实际设计中的应用效果。

课题的架构力求体现多维性与开放性。这里的"多维"不仅是指从平面到立体的空间维度，更是思维的多维度，使学生意识到设计活动即便是在基础阶段其本质也是思维的创新；课题的开放性，其意义在于通过课题引起学生的思考，作品作为思考结果的呈现，力图从平面视觉的角度，给初学设计者一个开阔的关于"平面"的概念，并将其视为一种开放的、多元化的，而非某种特定的、封闭的领域。希望本书能在开拓学生的思维与表达方面有所启示。

编者　于浙江大学
2008年8月

Preface

The pondering on the foundation teaching of design is the continuous process which along with the time, social and the culture environment. It is now a brand-new time, entering fast the post-industry- information time, enhances the transmissive request of information to unprecedented degree, As the inventor of visual mark the designer have many responsibilities and also face the huge challenge. Humanity's visual language plays the more and more vital role in the information transmission. The more and more information need the visual image, the graph, the mark to transmit. These visual elements are organized together through certain regular, namely the constitution, then forms the cognitional and explainable information. The curriculum ultimate object is to develop plane formal language content and form, plane formal language and thought expression and so on for students through the related topic of the constitution deliberated. It can be said that, it is the first step to enhance the design capacity that studies to express idea, the thought and the emotion with the abstract visual language. The abstract formal language in the design has the vital significance like the word language in writing. The abstract visual mark and the visual language system after organizing is the unique expressing tool, is the exchanging and communicating medium between designers and the outside.

The curriculum regards consciousness and the visual psychology rule as a foundation, unifies need of the design practice and emphasizes the sensation education. It focuses on raising the new time and spatial consciousness and all visual form sensitivity, emphasizes specially on raising one kind of interest of the abstract form, as well as the coordination relations of this abstract form and design thought. The abstract visual language is very difficult to understand to the person who just contact it. Topic starts from the foundation word of language system, like the baby study speech from easy to difficult, caused it to be accustomed to gradually use the abstract visual mark to ponder and express. Curriculum includes 10 topics and stages about thought expression: The perceptual doodle — perception expression (coffee flavor) — looks at abstractly (angle of view and composition) — the strategy — the constitution — the shape — the body — the analysis — the isomorphism — the intention (playbill design).

The perceptual doodle — is similar with the child doodle. The perceptual doodle is the experience process from unconsciousness to consciously. Topic requires preliminary the difference among abstract graph's production, semantic and the embodiment graph expression, understanding of the basic difference from the graph style which transforms to the host and visitor body and establishes the basic concept of the abstract expression.

The perceptual expression — or is called the subjective performance, is the beginning of utilizing the visual language, is spontaneous performance actuated under the intrinsic feeling. Its primary intention is that individual unique feeling is performed naturally through the personalized visual style. Its result is inevitably the visual graph with intense individual characteristic and the perceptual color, thus achieving organic fusion between the design thought and the expression. The topic hypothesis ought to cause student's personal experience and the sympathetic chord.

Abstract looked — Looks means discovers, The topic training goal is good at discovering unusual beauty in daily life, If breaking our daily angle of view, the sight, the prejudice and the concept fetter, you can have the astounding discovery. And extending brand-new ponderation to human's behavior, the life phenomenon, thought

idea, thus affect fhe innovation thought devlopment.

The strategy — is the important content in the design thought. The strategy is the direction and the instruction of solving question. The topic trains the student to strengthen the strategy consciousness and the individuality solution ability through solution of the diversities possibility question.

The constitution — topic mainly carries on the writing element constitution and takes the spirit constitution method. It is clear that the constitution is the method, not the goal. It makes the student to understand the constitution principle, method and goal, process correctly between the form and the content relations.

The shape — topic requests transforming from the three dimensional to the plane figure, and realizes visual ambiguous in this process of transforming between picture and background, finally causes lapping and transforming in the creativity design thought.

The body — namely "the structure sketch" . It is the topic that researches the rule and the method expressing three dimensional volume and the spatial by the line form in the plane. It is one of important foundation skills of design thought expression. Its training essential is accurate reappearances and rule grasping of the proportion, perspective and so on.It begins from simple physique, finally achieves the goal of separating restriction from the entity object and expressing freely the thought.At the same time, the whole observation method causes the overall thought custom. This is helpful for the student to foster the thought custom of grasping the object overall.

The analysis — Following design thought expansion, the designer needs to transfer all visual mark to record and organize thought process, leaves the thought trace behind and has the aid of the visual expression to cause the thought to move towards unceasingly thoroughly. The abstract thinking vision does not lie in visual form esthetic sense, but in the thought content transmission. Each person may have oneself unique expression way.

The isomorphism — using the mark semantics isomorphism way to organize the hand of the human and the different organism conformity together, cause the union image to have the symbol, the instructive and the visual impulse. The topic makes the student to understand the graph symbol and the semantic constitution concept and the method.

The intention — through playbill to design simple application project, experience graph in actual design application effect.

The topic construction endeavor to manifest multi-dimension and openness. This multi-dimension not only refers to the plane to the three-dimensional spatial dimension, but also to thought multi-dimensionally, even if it causes the student to realize design is also the thought innovation in foundation stage. The significance of the topic openness lies in causing student's ponder through the topic. The work, as ponder result present, tries hard to give young designer one open concept about the plane from the plane vision angle, and regard it as open and multiplication, not the non-some kind of specific seal domain. I hope this book can enlighten student's thought and expression.
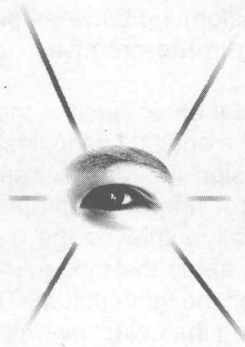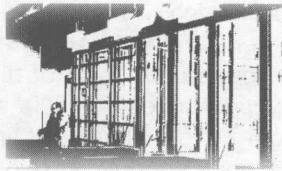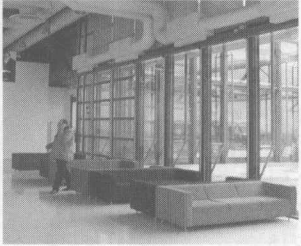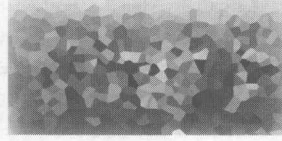
Author   in Zhejiang University
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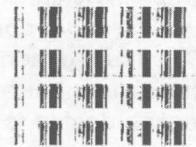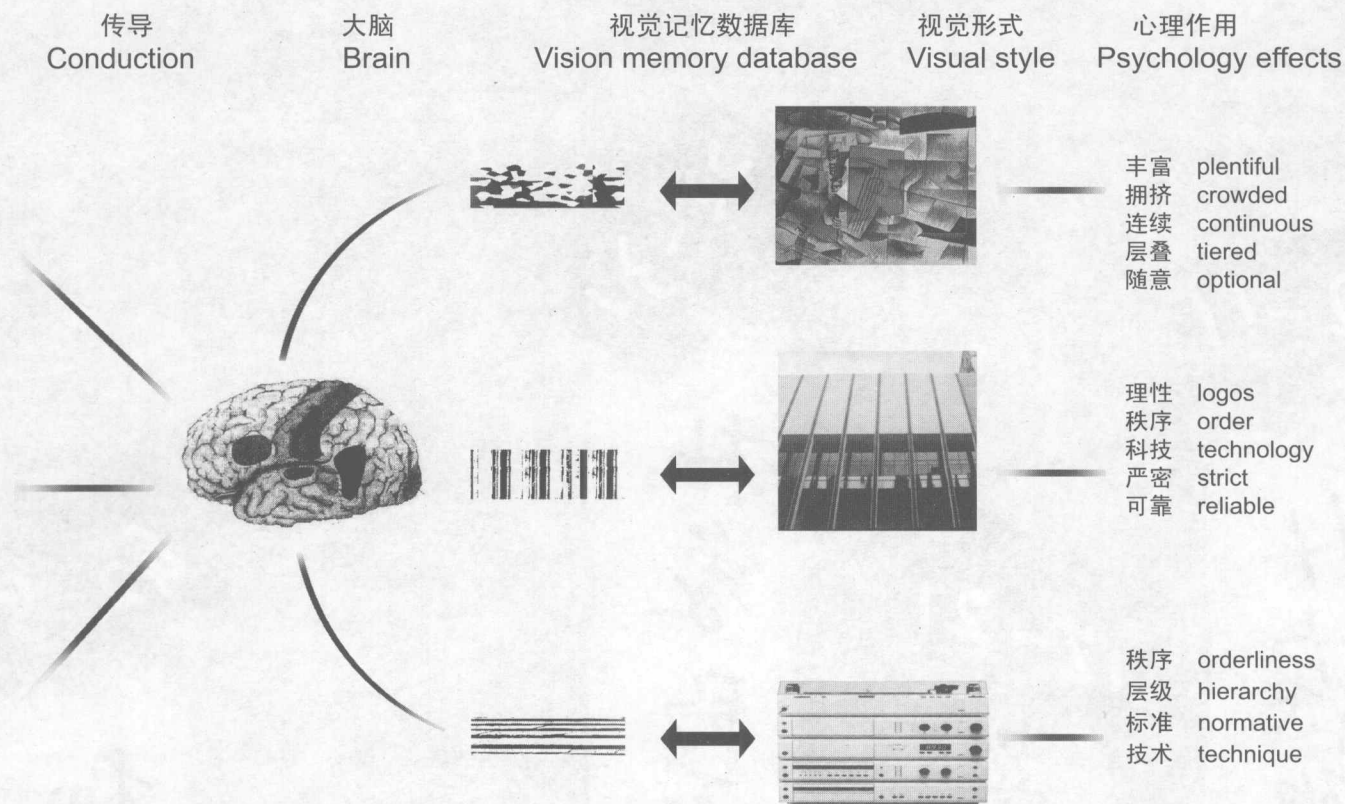| 环境 Environment	看 Look	见 See	生物能量编码 Biology energy coding

西方古典绘画、雕塑艺术以客观现实世界为对象追求真实的美。
通过再现人、物、事件来传达情感、思想和追求。
Western classical painting and sculpture art take objective reality world as object pursue real aesthetic feeling. Through reappearing the human, the thing, the event to transmit the emotion, the thought and the pursuit.

古典绘画

抽象艺术

1. 客观视觉对象从被人的眼睛感知到最终在人的心理上产生反应，这是一个非常复杂的过程。了解这个过程的作用原理和规律，特别是"见"与"心理作用"两个互逆的过程，对于我们学习设计是必要的。
2. 抽象化的视觉表达是我们所要探讨的主要内容，是最普遍和最基本的视知觉规律。
3. 作为视觉语言的初学者，我们犹如婴儿，必须从头开始并不断练习。

传导 Conduction	大脑 Brain	视觉记忆数据库 Vision memory database	视觉形式 Visual style	心理作用 Psychology effects

丰富 plentiful
拥挤 crowded
连续 continuous
层叠 tiered
随意 optional

理性 logos
秩序 order
科技 technology
严密 strict
可靠 reliable

秩序 orderliness
层级 hierarchy
标准 normative
技术 technique

现代抽象艺术则通过抽象的形式直接作用于人的视觉和心理，产生更加强烈的刺激，并引起人的心理变化，使抽象的形式摆脱客观现实对象的束缚，成为独立的审美对象。现代产品、建筑等成为抽象艺术语言语用的载体，在这一点上，抽象艺术成为设计美学的引领者。

Through the abstract form, the modern abstract art acts directly to human's vision and the psychology, has a more intense stimulation, and causes human's psychological change. It makes abstract get rid of the fetter of the reality object, becomes the independent esthetic object. The modern product, the building and so on become the carrier which the abstract art language uses, on this, the abstract art becomes the anticipator of design esthetics.

现代设计

特定的样式以其视觉特性作用于人的视知觉，引起人的共鸣，是对设计的主要诉求之一。

The specific style by its visual characteristic function and the human is consciousness, causes human's sympathetic chord, is one of design's main demands.

1. The objective visual object is finally produced by human's eye sensation in human's psychology response, which is an extremely complex process. It is necessary for us to study the design to understand the mechanism and the rule of this process, especially the two reciprocal processes of "sees" and "the psychological process".
2. The abstraction visual expression is the primary coverage which we discuss, is the most universal and most basic visual consciousness rule.
3. As the beginner of studing visual language, we just like the baby and must start and practice unceasingly from the beginning.

从儿童身上我们可以得到很多启示：兴趣、自信、创造力以及他们的学习方式。右图为三岁儿童没有任何"指导"下的自画像。这种生来具有的学习能力是教学中应给予特别关注的。

We may obtain much inspiration from the child:interest, self-confident, creativity as well as their study way. The figure on the right is three years old child's self-portrait without any "the instruction". This kind of spontaneous learning capability should be given special attention in the teaching.

开始 The beginning

兴趣本身不是课题内容，但却是不可或缺的要素。兴趣是一切行为最好的动力，特别是对于相当数量的没有学习绘画经历的"工科"同学，如何树立学习的信心和兴趣是个困难的开始，也是至关重要的开始。长期片面的应试教育体制，艺术教育的缺失以及媒体对艺术概念的片面解读阻碍和禁锢了学生的思维和创造力。我们的课程最主要的任务和目标首先是解除这种禁锢和阻碍，让学生放松并释放自己的创造力；在某种意义上，这一点尤为重要。

以文字语言的学习类比，"构成"类基础课就是从最基本的字、词开始系统地告知学生"表达自己"。一切视觉形式都是工具，表达自己的想法、感受、意图才是最终目的，自信的"说"是学习语言的重要方法途径。我们可以从儿童的学习过程中得到启发。如果把它放在视觉语言体系中来考虑又会怎样呢？写实性的素描就像一篇说明文，是以描述对象为主体，客观、公正的表达为目标的；而非写实性的素描多是以作者本身为主体，对象仅是作者表达自我情感的载体，强调的是主体性感受的个性化表达，也就是说是否"像"并不是这类语言表达方式的标准，相反，过于依赖对象反而会制约作者个人因素的发挥和表达。将素描从写实、说明的桎梏中解脱出来，学生们的作品焕发了新的生命力，充满了个性与创造性，看不到概念化与模式化的痕迹。这是个好的开始。

课题：5分钟头像速写。

Interest itself is not the topic content, but is actually the indispensable essential factor. The interest is the best power of all behavior, specially for the engineering course schoolmate who have no drawing experience. How to set up the study confidence and interest is a difficult start, also is the very important start. In long-term one-sided took an exam education system, the artistic education deficiency as well as the artistic concept one-sided explanation from the media hinder and confine student's thought and the creativity. The most main duty and goal of our curriculum are relieve this kind of imprisonment and the hindrance at first, let the student to relax and release own creativity. In some kind of significance, this point is more important.

By analogy with the word language, the constitution basic course begins from the most basic character, the word system to impart students to express oneself. All visual forms are tools, expressing own idea, feeling, intention is the final goal, say with self-confident is the important method and way to study the language. We may be inspired from child's study process. How is it able if it is considered placed in the visual language system? The practical sketch looks like a descriptive text, takes describing the object as the main body, expressing objectively and fairly is goal. But the non-practical sketch more takes author himself as the main body, the object only is the carrier to express the author self-emotion. It emphasizes the personalized expression of independent feeling, in other words, the similar isn't the standard of this kind of expression language way. On the contrary, relies on the object too much restrict the authors individual factor to display and express. Extricating the sketch from the shackles of practical and explainable function, the student's works have new vitality, fill individuality and the creativity and blind generalizing and patternizing trace. This is a good start.

Course:Sketch 5 mins

02-11 什涂鸦一开始
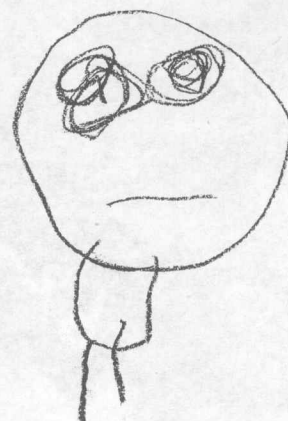
12-21 感性表达

22-31 抽象的看

32-41 策略

42-51 构成

52-61
形

62-7
体

72-81
分析
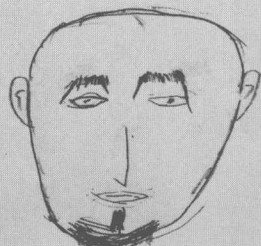
82-89
同构

90-10
海报

从涂鸦开始 Start from the doodle

从涂鸦到设计这个实验探讨的其实是现代艺术中的抽象概念和方法。现代抽象绘画的先驱康定斯基（Wassily Kandinsky），在一次无意识的情况下从他的绘画作品中领悟到不描绘客观物体的绘画同样可以感人。据此，他逐渐发展了完全由抽象的线、形和色彩构成的构图，表达其对外部和内心世界的理解，形成了独特的视觉语言风格。课题练习旨在涂鸦的基础上整理提炼，使抽象的符号更加清晰、明确、个性化，实现视觉语言传情达意的目的。

课题要求
1. 以抽象的笔触和机理探索表现不同感觉或情感意向。
2. 工具材料不限，尽可能发挥工具材料之特性。
3. 创造独特、个性的视觉体验。

This experiment from the doodle to design discusses actually abstract concept and the method in the modern art. Modern abstract drawing pioneer Kandinsky comprehends in an unconsciousness situation from his drawing work that the drawing also is touching without describing the objective object. According this, he has developed gradually the composition constituting completely by the abstract line, the shape and the color, expressed his understanding to exterior and the inner world and formed the unique visual language style. The purpose of the topic practice is reorganizing and refinement in the doodle foundation, causes the abstract mark to be clearer and personalization, realizes the goal of vision language expressing one's ideas.

Subject requirements
1. Using abstract brushwork and mechanism to explore different feelings and emotional intention.
2. All kinds of tools allowed. Displays characteristic of as far as possible the tool.
3. Creates unique and individual visual experience.

02-11

什涤鸦开始
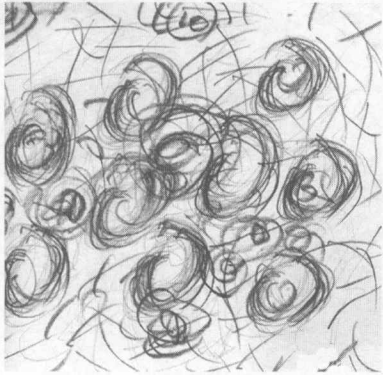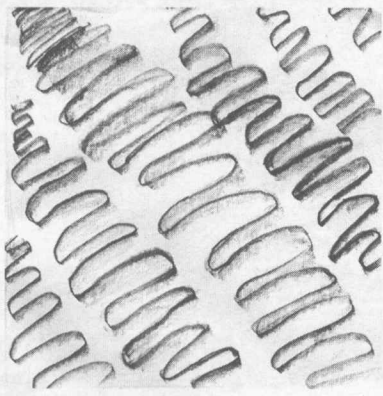
涂鸦应在自由、放松、游戏的状态下进行，并充分探索各种图形元素的可能性：点、线、面、大小、粗细、轻重、多少、明暗、曲直、软硬、疏密、秩序、自然、均匀、变化；借助材料特性产生图形、机理的可能性：铅笔、毛笔、蜡笔等不同的笔触，在各种质感的基材上形成各种机理和图形，这种组合的可能性几乎是无限的。

涂鸦并非毫无规律的任意涂抹，在这个过程中需体会的是图形与心理作用的内在联系规律：根据格式塔心理学理论，图形的视觉心理与个体生活经验有着紧密的关系，正因如此，图形才能成为信息传达的媒介。同时，格式塔的完形理论也告诉我们，一个画面中的图形应该有一种主要的形式或结构特征，保持画面的统一性与表意的倾向性，也就是遵循多样性统一的形式规则。

The doodle should carry on in the free, relaxing, playing condition, and explore each kind of graph element possibility, the spot, the line, the surface, the size, the thick and thin, the weight, the how many, the light and shade, the bent and straight,the soft and hard,the density and sparse, tae order,the natural, the even, the change. Produces the graph and mechanism possibility with the aid of the materials behavior. The pencil, the writing brush, the wax pencil and so on . Each kind of mechanism and graph can form by all sorts of changes . This kind of combining possibility is nearly infinite.

The doodle does not wipe willfully, in this process it must realize the inner link rule of the graph and the psychological process. According to the Gestalt psychology theory, the graph visual psychology and the individual experience of life have the close relations, the graph can become the transmissive medium of information.At the same time, the Gestalt theory also tells us, in a picture graph it should have one main form or structure characteristic, maintain picture unity and meaning's tendentiousness, also follow the form rule of the multiple unification.