

Technical English Writing

Diseased English (I)

2011/9/11



死译

- For the fiber with enough large radius of the core, the attenuation of the optical wave can be ignored.
 - 将“纤芯半径足够大的光纤”硬译。
 - 多处定冠词均为误用。
- 改为: For a fiber with a sufficiently large core radius, attenuation of optical waves is negligible.



语法关系混乱

- It shows that the kinetics would influence the dynamic behavior of the Earth's deep interior and need more laboratory data.
 - **need** 一词的主语是什么，是 **it** 还是 **kinetics**?
- 可将后半句改为被动语态：This shows that the kinetics would influence the dynamic behavior of the Earth's deep interior, therefore more laboratory data are needed.
- 或不用被动语态：This shows that the kinetics would influence the dynamic behavior of the Earth's deep interior, therefore more laboratory data are necessary.



用词不当

- 例如从英汉词典查得**technology**和**technique**都是“技术”，但他们的含义和适用层次是不同的：
 - **science and technology, information technology, microwave technology**
 - **linear transform techniques, port scan techniques, an interlacing technique**



用词不当

- 又如许多英汉词典中，**apparent**和**obvious**都是“明显的”。
根据**Collins Essential English Dictionary**:
 - If something is **obvious**, you can easily see it or understand it.
 - An **apparent** situation, quality, or feeling seems to exist, although you cannot be certain that it does exist.
- 又如：The motion equation is **deduced**. 应该用**derived**，此错误很常见。（汉英词典？）



不符合英文表达习惯的中式英文

- Owing to the development of nanometer techniques and microelectronics, the trend of the miniaturization of integrated circuits and components towards atomic scale becomes strong and definite.
- 显然由中文硬译而成，可改为：The development of nanometer techniques and microelectronics has led to the miniaturization of integrated circuits and components with sizes toward the atomic scale.



不符合英文表达习惯的中式英文

- **So the speed of the atoms can be controlled.**
 - 频繁地用so开头是中文表达习惯的影响，用多了读起来感到别扭。如过文章里已出现过几处so，可考虑改用其他表达形式。
- 例如可改为：
 - **Thus the speed of the atoms can be controlled.**



不符合英文表达习惯的中式英文

- In order for formulas (15)-(17) to do numerical calculations, the diffusion coefficients are taken to be ...
 - 由谁进行数值计算，是作者还是公式？
 - **formulas (15)-(17)** 的表达也不对。
- 改为：In order to evaluate Equations (15)-(17) numerically, the diffusion coefficients are taken to be ...



不符合英文表达习惯的中式英文

- **Its more advantages are given in our previous paper.**
 - 提到过去论文中的结论，用一般现在时不当。
- 改为: **Its further advantages have been mentioned in a previous paper of the authors.**



不符合英文表达习惯的中式英文

- This results from the increase of temperature mainly.
 - 语法似不错，但是语感不对。
 - 有可能是片面理解了某些教材中关于副词放在后面的“规则”。
- 改为：This results mainly from the temperature increase.



硬译导致洋泾浜

- 原文：然而如何挖掘系统中有价值的信息和知识已成为提高工作效率并在企业中实现知识管理的关键。
- 译文：However, **how to mine** valuable information and knowledge from the system becomes the key to improve **work efficiency** and implement knowledge management of an enterprise.
 - **How to ...** 这种用法是很流行的中式英语。汉语中短语“如何...”做主语很常用，但不要照搬到英文中去。
 - **data mining**: 数据挖掘，是计算机学科的术语，但**How to mine data** 则不行，很别扭。
 - “工作效率”不能硬译成**work efficiency**。



改为：

- 然而如何挖掘系统中有价值的信息和知识已成为提高工作效率并在企业中实现知识管理的关键。

However, exploring valuable information and knowledge from the system has become a key in improving efficiency and carrying out knowledge management in enterprises.



洋泾浜，用词不当

- Nowadays, paying much more attention to the environmental protection, people have been looking for some ideal methods that not only can **decrease** the environmental pollution in the manufacturing processes but also can reduce the “contamination” of products.
 - 口语化的nowadays
 - 用得过滥的pay attention to和not only ... but also ...
- With growing environmental concerns, effective methods are being sought to reduce pollution in manufacturing processes and minimize harmful effects in end products.



繁琐，用词不当，结构不合理

- **So the method using high-intensity ultrasonic as a kind of physical refining means to improve solidification structure without pollution is promising.**
 - 主语the method 和谓语 is promising 相距太远。
- **Therefore high-intensity ultrasound has become a promising physical refining means to improve solidification structure without pollution.**



- To observe the effect of high-intensity ultrasonic on the solidification structure of Sn-Sb alloy, we processed the samples and selected two points (top one and bottom one) from each sample, then put them under microscope to study their microstructures.
- To observe the effect of high-intensity ultrasound on the solidification of Sn-Sb alloy, we processed the samples, and studied the microstructure on top and bottom parts of each sample with a microscope.



繁琐

- **by making use of ... \Rightarrow using ...**
- **owing to the fact that ... \Rightarrow because ...**
- **a sufficient quantity of ... \Rightarrow many ..., enough ...**
- **at this point in time ... \Rightarrow at that time ..., then ...**
- **increased by a factor of two \Rightarrow doubled**
- **in view of the fact that ... \Rightarrow considering that ...**
- **It has been brought to our attention that ... \Rightarrow We note that ...**
- **by means of ... \Rightarrow by ...**
- **In the event that ... \Rightarrow When ..., If ...**
- **It is often the case that ... \Rightarrow Usually ..., Frequently ...**



基本错误成堆

- Because it is more complicated that the modes of aerodynamics of SMAV (小飞机) are founded, and there are larger difference between its theoretical modes and practical conditions, it can be not generally used when the control laws of SMAV are designed. We utilize the test method to deal relationship of control forces or moments with movements of rudders (舵) of SMAV. Limited to length of the paper, the problems about modeling of its modes will not be detailedly discussed, which will be wholly explained by another paper.

- it is that 句型使用不当。
- there are larger difference between ... 语法错误：比较级，单复数。
- can be not ... 不通。
- deal 后面不能少了with。
- problems about, detailedly discussed, wholly explained, 生造。
- limited to the length: 介词to不对。



改为：

- **Because modeling the SMAV aerodynamics is complicated, and the theoretical modes greatly differs from the practical conditions, these modes cannot be used in designing SMAV control in general. We use a test method to study the relationship between control forces or moments and the rudder movements. Modeling of the modes will be discussed in a separate paper.**

(85个单词减少到57个)



硬译

- The changes of its some physical and chemical properties in production were used to research its phase transition process.
 - some 放的位置不对，不能说... of its some properties。
 - 这里research一词虽无语法问题，但读来别扭。
- Changes in some of its physical and chemical properties in the production were used to study its phase transition process.



克服繁琐

- **With applying data mining to PDM, it is very meaningful for the thinking and technologies of PDM and the rapid development of the application of data mining. And, it is helpful to improve the development and usage of enterprises' databases. ⇒**

Application of data mining to PDM is meaningful both to PDM and to the development of data mining application itself. Data mining is also useful in developing and applying database in enterprises.



不当并列

- **Customized and complicated products have the features of high price, very long lifecycle and customers have some maintenance capacity.**
 - 两个不对等的句子不能并列。
 - 缺点和优点不宜并列。
- **Customized and complicated products are usually high-priced. Nonetheless, they have a long lifecycle and provide maintenance to customers.**



- 鉴于目前数码显微系统没有针对金属切削刀具的图像分析软件的问题，以VC++为平台开发了专用的分析软件。
- According to the present numerical microsystem, there is no specialized microscope that can detect cutting-tool. Special analysis software has been developed through VC++ platform.
 - 滥用According to是中式英语常见问题之一。
 - 译文与原文意思相差大：原文讲没有软件，译文却说没有显微镜。原文“没有软件”是状语，英译文将“没有显微镜”变成结果。
 - numerical, through用词不当。



改为：

- 鉴于目前数字显微系统没有专门针对金属切削刀具的图象分析软件的问题，以VC++为平台开发了专用的分析软件。

As the present digital microscope systems do not include specialized software for analyzing cutting-tool images, special-purpose analysis software has been developed using VC++.



长句晦涩难懂

- While adopting impact loads with multishocks to make shock experiments for cobalt-base and nickel-base alloy coats on the surface of mild carbon steel or stainless steel, it is found that under the impact force that is only about 11%~43% of the static yield limit of the material, the coat and upper part of base generate micro-plastically deformation.

- 原句太长（60 words），while引导的从句应可独立成句，说明做一个什么样的实验。原来的主句可改为结构较简单的被动语态，说明实验结果。（Fog index 约 30）
- about 多余。
- 基本语法错误：base, plastically。



改为：

- To perform shock experiments on cobalt- and nickel-based alloy coatings, impact loads of multiple shocks were applied to the surface of mild carbon steel or stainless steel. When the impact force was only 11%~43% of the static yield limit of the material, micro-plastic deformation was found on the coatings and in the upper part of the base.

(Fog index 约 12)

为了对钴基合金和镍基合金镀层进行冲击试验，在软性碳钢或不锈钢表面施加多重冲击。当冲击力仅为材料静态屈服极限的11%~43%时，在镀层和合金基上部发现了微小塑性形变。



... of ... of ... of ...

- (... about alloy A and alloy B ...) There are intense deformative rigidification and material floating effects on the lower part of the edge of the covered coat of the latter one's base, meanwhile cracks are likely to emerge and spread at this part.
- Intense deformative rigidification and material floating phenomenon exist at the lower edge of the coating on the latter's base. Meanwhile, cracks in this part are likely to occur and spread.



论文摘要的修改

- In this paper **the** high-dimensional coupled Lorenz equations are studied. We **obtain** a sufficient condition for the global stability of the solution **of this coupled systems** with Dirichlet condition and **prove** that the asymptotic synchronization occurs provided the coupling **strengths of this systems** with Neumann and periodic boundary conditions are **sufficient large**.
 - 第二句太长，两件事情完全可以分开讲。
 - **of this system** 重复。



改为：

- **High-dimensional coupled Lorenz equations are studied in this paper. A sufficient condition for global stability of the solution to this system under the Dirichlet condition is obtained. It is proved that asymptotic synchronization occurs when the coupling strength under Neumann and periodic boundary conditions is sufficiently large.**

本文研究高维耦合Lorenz方程。求得了Dirichlet条件下使该系统全局稳定的充分条件。证明了在Neumann和周期性边界条件下，耦合强度足够大时会发生渐近同步。



- This paper brings forward a design of security identity authentication system with fingerprint identification and contactless IC card technologies, then discusses the specific security mechanism. The principle, main function and the composition of hardware and software of the system are mainly discussed. It has fine safety, high reliability and utility value.
 - 可看出由中文逐字硬译的痕迹。
 - 典型的中式英语: **bring forward, then, are mainly discussed, it has ...**



改为：

- **Design of an identity authentication system based on a non-contact IC card for fingerprint identification is presented. The security mechanism, system operation and main functions are discussed. Hardware and software structures are introduced. It has been shown that the described system is highly secure and reliable.**

More Examples

科技英语修改实例

2011/9/11



关于论文标题

- 标题要画龙点睛，重点突出。可用主要结论作标题以引起读者注意。“关于某问题的研究”一类标题已很少使用。
- 在20篇稿件中就有1/3的标题用了**Study on**:
 - **Study on Electrooptic and Piezoelectric Effects of the Photorefractive Lithium Niobate Crystal**
 - **Theoretical Study of Electronic Structure and Magnetism of Fe_{1-x}Co_x Alloys**
 - **On an Open Question and Its Application**
 - **Study on the Rate of Sonochemical Synthesis of Polysilane**
 - **Study on Preparation and Stability of Nano-liposomes Containing Volatile Oil ...**
 - **Research and Development on a Novel System of PCR Amplification**
 - **Study of Azimuthal Instability of Two-Phase Jets by Integral Transformation Method**



修改实例1：标题

基于关联矩阵法的上海城市综合竞争力分析

硬译：洋泾浜

Urban Comprehensive Competitiveness Evaluation of Shanghai Based on the Relational Matrix Analysis

Evaluation of Overall Competitiveness of Shanghai Based on Relational Matrix Analysis



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冠词应删去

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修改实例1：摘要

综合竞争力的高低直接反映着该城市对现有经济能力和资源进行全面整合的能力。

硬译：洋泾浜

SS'S: 应避免

Urban comprehensive competitiveness's evaluation reflects directly the all-integrated ability of city's existing economy and resource.

The overall competitiveness of a city directly reflects the integration ability of the city's economic strength and resources.



修改实例1：摘要

综合竞争力的高低直接反映着该城市对现有经济能力和资源进行全面整合的能力。

不顺口

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拘泥于汉语用词

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而关联矩阵法作为一种基于矩阵模块的系统评价方法具有客观性与主观评价相结合、互为补充的优势。

洋泾浜

At same time, Relational Analysis is synthesis of rational and induce, as system evaluation via matrix module.

As a system evaluation method based on matrix modules, relational matrix analysis (RMA) has the merits of combining and complementing objectiveness with subjective assessment.



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便于下文引用



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用词不当

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用词不当，不知所云

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修改实例1：摘要（续2）

基于上述原因，本文运用关联矩阵法对上海近几年综合竞争力的各项指标进行评价，并针对结果提出了制定城市发展策略的建议。

拼错

The paper applise Relational Analysis to analyse detailed targets that reflect Shanghai urban comprehensive competitiveness lately years and bring forward some advise of city's development.

The paper applies RMA to the analysis of various specifications that reflect the overall competitiveness of Shanghai in recent years, and provides several proposals for the city's development.



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The original



- **The overall competitiveness of a city directly reflects the integration ability of the city's economic strength and resources. As a system evaluation method based on matrix modules, relational matrix analysis (RMA) has the merits of combining and complementing objectiveness with subjective assessment. The paper applies RMA to the analysis of various specifications that reflect the overall competitiveness of Shanghai in recent years, and provides several proposals for the city's development.**

The revised



修改实例2：标题

传输线变压器的机理及宽带阻抗匹配的设计

不用冠词

可改为简洁形式

The Mechanism of Transmission Line of Broad Band and Designing Method of the Impedance Match Transformer

多余

不用冠词

Mechanism of Broadband Transmission Line and Design of Impedance Match Transformer



修改实例2：摘要

传输线变压器具有频带宽、易于制作的特点，在通信领域得到了广泛的应用。

不符合英语表达习惯

Being characteristic of its general frequency and broad band and being easily devised, the transmission line transformer has been widely applied in the field of communication.

用词不当

应省略

定冠词使用不当

With its broadband characteristic and the ease of manufacturing, transmission line transformers have been widely used in communications.



修改实例2：摘要（续）

但在超声换能器与超声信号源之间采用传输线变压器实现阻抗匹配的报道较少。

用词不当

That用法不对

However, few articles have been released that the impedance match between ultrasonic transducer and ultrasonic signal source can be achieved through the transmission line transformer.

定冠词使用不当

However, few publications have mentioned that impedance match between an ultrasonic transducer and the signal source can be achieved by using a transmission line transformer.



修改实例2：摘要（续）

本文对传输线变压器实现宽带阻抗匹配的机理进行了详细分析，

词义理解错误

on, of

Specific analysis is given in this article about the mechanism which the transmission line transformer realizes the impedance match of broad band, ...

语法错，可用
with which

句子应断

定冠词不当

繁琐

This article shows how a transmission line transformer can realize broadband impedance match.



修改实例2：摘要（续）

通过等效电路阐明了传输线变压器如何巧妙地利用传输线间的分布电容，使其由影响高频能量传输的不利因素转换为电磁能量转换必不可少的条件。

断句

用词不妥

... and also through a equivalent circuit it is illustrated that the capacitance distributed among transmission lines can be ingeniously utilized and switched from being adverse factors of the transformation of high-frequency energy to the indispensable conditions of the transformation of electromagnetic energy.

of...of太多，定冠词不妥，罗嗦

An equivalent circuit is used to show that distributed capacitance between transmission lines can be utilized, turning an adverse factor affecting high frequency transmission to a necessary condition for EM energy conversion.



修改实例2：摘要（续）

以500kHz~2MHz范围内的超声换能器的阻抗匹配变压器的设计为例，具体给出了确定传输线变压器特性阻抗、线长、磁心、导线型号和匝数的方法。

用词不当

Taking the design of the impedance match transformer of ultrasonic transducer in the range of 500kHz~2MHz as an example, we donate the specific method to determine characteristic impedance, the length of wire, magnetic core, as well as the model of wire and winding turns.

As an example, design of an impedance match transformer of an ultrasonic transducer working in the frequency range of 500kHz~2MHz is described. The characteristic impedance, wire length, magnetic core, specifications of wire, and winding turns are determined.

长句改短

The mechanism of transmission line of broad band and designing method of the impedance match transformer



Being characteristic of its general frequency and broad band and being easily devised, the transmission line transformer has been widely applied in the field of communication. However, few articles have been released that the impedance match between ultrasonic transducer and ultrasonic signal source can be achieved through the transmission line transformer. Specific analysis is given in this article about the mechanism which the transmission line transformer realizes the impedance match of broad band, and also through a simple equivalent circuit it is illustrated that the capacitance distributed among transmission lines can be ingeniously utilized and switched from being adverse factors of the transformation of high-frequency energy to the indispensable conditions of the transformation of electromagnetic energy. Taking the design of the impedance match transformer of ultrasonic transducer in the range of 500kHz~2MHz as an example, we donate the specific method to determine characteristic impedance, the length of wire, magnetic core, as well as the model of wire and winding turns.

The original

Shuozhong Wang, SCIE, Shanghai University

Mechanism of Broadband Transmission Line and Design of Impedance Match Transformer



With its broadband characteristic and the ease of manufacturing, transmission line transformers have been widely used in communications. However, few articles have been published to mention the fact that impedance match between an ultrasonic transducer and the signal source can be achieved by using a transmission line transformer. This article shows how a transmission line transformer can realize broadband impedance match. An equivalent circuit is used to show that distributed capacitance between transmission lines can be utilized, turning an adverse factor affecting high frequency transmission to a necessary condition for EM energy conversion. As an example, design of an impedance match transformer of an ultrasonic transducer working in the frequency range of 500kHz~2MHz is described. The characteristic impedance, wire length, magnetic core, specifications of wire, and winding turns are determined.

The revised

Shuozhong Wang, SCIE, Shanghai University

New Design For Ultrasonic Flowmeter Of High Precision

This article reports a new system design for ultrasonic flowmeter of high precision . Aiming at the requirement of high precision and wide measuring range , we combines both the traditional theory for ultrasonic flowmeter and the advanced CPLD high frequency circuit design technology at the present time and scheme out a new type of ultrasonic flowmeter with digital AGC(automatic gain control) system , automatic false detection system and high frequency counting system . It also has master and slave MPU framework working in parallel mode and has manifold output modes which can provide interfaces for many industry standards . This article also provide the result of this system working in laboratory and industrial environment .

New-Design For of a New Precision Ultrasonic Flowmeter Of High Precision

This article reports-describes the a-new system-design for-of a precision ultrasonic flowmeter-of high-precision-. Aiming at the requirement-of high precision-accuracy and a wide measuring measurement-range-, we combines-both-the traditional theory for-of ultrasonic flowmeter is combined with and the advanced CPLD high frequency circuit design technologytechnique, at-the-present time-and-to give scheme-out-a new type of ultrasonic flowmeter with digital AGC(automatic gain control)-system-, automatic false detection system-and high frequency counting systemcapability-. It-The syatem also has a master-master-and-and-slave MPU framework working in a parallel mode and-haswith manifold mulyiple output modes-interfaces which can provide-interfaces-for-manymeet various industry standards-. This article also provides the-results of this-the system working-both in laboratory and industrial environments-.

Design of a New Precision Ultrasonic Flowmeter

This article describes the design of a precision ultrasonic flowmeter. Aiming at high accuracy and a wide measurement range, the traditional theory of ultrasonic flowmeter is combined with an advanced CPLD high frequency circuit design technique to give a new type of ultrasonic flowmeter with digital AGC, automatic false detection and high frequency counting capability. The system also has a master-and-slave MPU framework working in a parallel mode with multiple output interfaces that can meet various industrial standards. The article also provides results of the system both in laboratory and industrial environments.

End of the Unit

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