

科学论文写作与发表：分类句式用语

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一、引言

科学论文的写作在常用句型、用语方面有一定的规律可循。掌握这些基本规律, 写作论文时可收到事半功倍的效果。那么, 常用的句型、句式怎样分类比较科学? 通常用到的句式为哪些类型? 各种类型又有哪些基本表达方法? 所有这些问题, 都拟在本文内例述和研讨。

为什么要掌握分类句式用语呢? 因为, 首先, 这有利于避免不必要的重复。许多有用的句型, 通常出现在科学论文的不同部分, 如表示研究目的用语, 不仅在论文摘要中用到, 而且在引言、讨论、甚至结论等部分都会用到。如果我们在讲述怎样写作各部分时都列举类似的用语, 势必造成重复、赘述。现在把它们集中起来分类例述, 就能避免不必要的重复。

其次, 掌握分类句式用语有利于比较地道、规范的英语表达。把英美人写作论文时的句式用语集中地进行分类选择, 有利于广大专业技术人员和研究生们学习、模仿比较地道、规范的英语表达, 有利于节约时间, 避免费力耗时地造出“蹩脚的”、甚至“中国式”的英语表达。

第三, 掌握分类句式用语有利于写作中的多样化表达。把表达相同或相似概念的不同表达方式集中分类, 便于写作中选择、比较, 有利于交替使用不同的句型, 避免句式单调、用词单一, 实现表达多样。

再则, 掌握分类句式用语也符合科学论文的写作规律。因为常用的句型是写作中客观存在的, 它们的使用已基本格式化了, 而且使用的频率又很高, 所以对常用的句式用语进行科学的分类, 是一件有实用意义的工作。

至于怎样分类, 这主要是从两个方面考虑。

一是从逻辑思维角度考虑。人们总是首先提出问题, 然后分析和解决问题, 最后得出结论或结论。这可以看作是解决问题的一种“模式”。这种“模式”, 也可作为我们分类选择句式用语时的指导思想。

二是从写作程式角度考虑。任何一篇科学论文的写作, 大都要: ①指出其研究的目的, ②限定其讨论的范围, ③说明其理论的依据, ④描述其实验的步骤, ⑤介绍其工作的方法, ⑥展示其研究的结果, ⑦作出科学的评价等。这种基本“程式”, 正是我们分类选择句式用语的实践依据。

鉴于上述, 我们在本文内对科学论文写作中常用的句式用语进行了分类, 并选择了 240 余条例句供参考。

俗语说: “熟读唐诗三百首, 不会作诗也会吟”。我们深信, 掌握英语科学论文写作中常用的句式用语, 无疑会有助于科学论文的写作。

二、“指出目的”的句式用语

1. 主要用场

指出研究目的句型在英语科学论文中反复出现, 这类句型用语比较集中地使用在论文的摘要、引言、讨论、结论等部分。

指出研究目的的常用表达有: “本文的主要目的……”, “该项工作主要是关于……”, “该项工作的主要目的是……”, “该项研究的主要目的是……”, “该项实验主要是为了……”等等。

2. 常用句式

(1) 本文的主要目的是……

- ① The purpose of this paper is…
- ② The primary goal of this research is…
- ③ The intention of this paper is to survey…
- ④ The overall objective of this study is…
- ⑤ In this paper, … was provided (given, illustrated)
- ⑥ Our goal has been to provide…
- ⑦ In this paper, we aim at…
- ⑧ The emphasis of this study lies in…

(2) 该项工作是关于……

- ① The present work is concerned with the processes underlying…
- ② The above work deals with the mechanism involved in…
- ③ Our work at present is devoted to the changes occurring in…
- ④ The work we have done bears on the effects produced by…
- ⑤ The work we are doing is closely related to the deliberations described in .
- ⑥ Compared with the current research, the previous work was in connection with the investigation made by…
- ⑦ The work presented in this paper focuses on several aspects of the following…
- ⑧ The authors are now initiating some experimental investigation to establish…
- ⑨ Our studies were performed to determine the amount of…
- ⑩ The problem we have outlined deals largely with the study of…

(3) 该项工作的主要目的是…

- ① The chief aim of the present work is to investigate the features of …
- ② The main purpose of our recent work was to examine the properties of…
- ③ The major object of their further work will be research into the nature of…
- ④ Our work in this direction has been intended to provide some information about…
- ⑤ The work which is being done now is designed to find some solution to the problem of…
- ⑥ Work of this kind has been started in order to assess the role of …
- ⑦ Previous work in this area was initiated in the hope of obtaining data in…
- ⑧ We did this work hoping to establish…
- ⑨ The authors undertook the work with a view to show…
- ⑩ By doing this work we expect(ed) to demonstrate…
- (1) Doing this joint work, we intend(ed) to show…
- (12) The primary objective of our work was to define the reasons for redundant protection systems and give examples of systems used in …
- (13) With research of many years, the author's endeavour is to explain why in…
- (14) The above-mentioned work has been performed with a view of …

(4) 该项研究的主要目的是 …

- ① The chief aim of the present study is to find out…
- ② The primary object of this fundamental research will be to reveal the cause of …
- ③ The main objective of our investigation has been to obtain some knowledge of…
- ④ The study of … was made in order to clarify…

- ⑤ The above study has been carried out to determine...
 - ⑥ Their(pioneer)studies were intended to elucidate...
 - ⑦ Those earlier investigations are in hopes of providing evidence for...
 - ⑧ We performed this present study in the hope that we might bring to light some facts about...
 - ⑨ The authors attempted their studies in order that they might...
 - ⑩ We undertook the above study to the end that we might...
 - (11) They initiated the present study so that they might...
 - (12) Carrying out this study we hope to find out...
 - (13) Performing these studies the author intended to reveal...
 - (14) With recent research, the author intends to outline the framework of...
- (5) 该项实验主要是为了
- ① We made these experiments in order to show a correlation between...
 - ② The author attempted the set of experiment with a view to demonstrate certain phenomena...
 - ③ Experiments on...were made in order to measure the amount of...
 - ④ Experiments involving...have been carried out to determine...
 - ⑤ Experiments using this technique are (not)under way test(check) ...
 - ⑥ Experiments on...are made to answer the question whether...
 - ⑦ The experiment being made by our research group is aimed at obtaining the result of...
 - ⑧ We have designed such an experiment for the purpose of ...

三、“限定范围”的句式用语

1. 主要用场

限定主题范围的句式用语，在英文科学论文中常出现在“引言”和“讨论”中。限定主题范围时的常用表达有：“该问题是关于……的研究”，“该问题在……范围之内（外）”，“该问题涉及到……范围”，“该问题可进一步推广到……范围”等等。

2. 常用句式

(1) 该问题是关于……的研究

- ① This problem is concerned (chiefly)with the study of...
- ② The problem of ...deals (largely)with the determination of ...
- ③ The problem they have advanced bears on the elucidation of ...
- ④ The problem to be discussed in this paper is related closely with...
- ⑤ The problem described previously was directed to the example of..., which differs from...
- ⑥ The problem under investigation involves some significant agreements and disagreements in...

(2) 这是研究……的问题

- ① The problem concerned with the nature of...
- ② The problem relating to the influence of...
- ③ The problem which deals with the role of...
- ④ The problem which bears on the effect of...
- ⑤ The problem in connection with...
- ⑥ The problem as mentioned previously in...

(3) 该问题在……范围之内（外）

- ① The problem is within the scope of …
- ② Our problem lies beyond the range of …
- ③ The problem you have just outlined seems to be outside of the province of…
- ④ The problem the authors have raised goes off the limits of…
- ⑤ The problem I have referred to falls within the field of…
- ⑥ The problem under discussion is not within the scope of…

(4) 该项研究涉及到……范围

- ① Studies of these effects cover(ed)various aspects of……
- ② Investigations on…involve(d) also specific situations.
- ③ Our studies with this technique are confined to one particular aspect.
- ④ More recent studies by this worker were chiefly concerned with the influence of…
- ⑤ The research on the conventional techniques explains well the phenomenon of
- ⑥ The new findings from the experiment agree to the result obtained in…

(5) 该研究进一步推广到……范围

- ① The authors have extended their studies to some other related species.
- ② We hope to expand our investigations to include other materials.
- ③ The research we have done deserves further studies.
- ④ The investigation carried out by the experts suggests an increase of the application in …
- ⑤ The approach under study predicates a wider range of application.

四、“说明理论”的句式用语

1. 主要用场

说明有理论根据的句式用语，在英语科学论文中常出现在引言、实验描述及讨论等部分。说明理论根据时常用表达如下：“该理论是……提出来的”，“该理论的内容（特点）是……”；“根据该理论，可以得出……”，“该理论认为……”，“应用该理论能（或不能）说明……”等等。

2. 常用句式

(1) 该理论是……提出来的

- ① The theory of...was created 50 years ago
- ② The alternative theory was constructed in 50's.
- ③ The theory of...was developed in the 1930's…
- ④ The theory of...was elaborated in the early 70's.
- ⑤ The theory of...was formulated as early as 1900.
- ⑥ The theory of...was advanced as long ago as the 1860's.
- ⑦ The theory of...was put forward as far back as 1897.
- ⑧ The theory of...was proposed last year.
- ⑨ The theory of...was suggested the year before last year.

(2) 该理论的内容（特点）是……

- ① Underlying this theory is the idea that…
- ② The underlying concept of this theory is…
- ③ The underlying principle of the theory is as follows…
- ④ This is an alternative theory that…

- ⑤ This is a similar theory to the effect that ...
 - ⑥ This is a working theory which is based on the idea that...
 - ⑦ A basic feature of this theory is ...
 - ⑧ The fundamental feature of this theory is as follows.
 - ⑨ The theory is characterized by...
 - ⑩ ...prove to be the outstanding features of the theory.
- (3) 根据该理论, 可得出.....
- ① According to B's theory both processes occur simultaneously.
 - ② As follows from the theory by N, such situations lead to...
 - ③ As can be seen from the theory and theory advanced by...such interactions are the basis of...
 - ④ In the light of the theory ,we have developed a variation method to handle such problems.
 - ⑤ Based on the theory, the author has obtained sufficient information from recent experiments with...
- (4) 该理论认为...
- ① The kinetic theory holds that...
 - ② This newly-developed theory maintains that...
 - ③ The theory advanced by...claims that...
 - ④ The theory of ...predicts that...
 - ⑤ The principal concept of the theory lies in...
 - ⑥ The investigating theory...
- (5) 应用该理论 (不) 能说明.....
- ① We can interpret these findings in terms of the above theory.
 - ② We cannot explain these phenomena using the above theory.
 - ③ We can hardly explain these findings applying this theory.
 - ④ These findings can be interpreted in terms of the above theory.
 - ⑤ Such phenomena cannot be explained on the basis of this theory.
 - ⑥ The theory can (not) apply to other cases of...
 - ⑦ The theory developed by...is valid (invalid)for other species.
 - ⑧ X's theory proved to be true for all steps of...
 - ⑨ The above theory has been verified by many other authors.
 - ⑩ This very peculiar theory can be applied to a wider range of experiments in ...

五、“描述实验”的句式用语

1. 主要用场

描述实验过程的句式用语, 顾名思义常用在与实验有关的段落之中。描述实验情况时的常用表达为“该项实验具体包括.....”, “到....., 从未有过该项实验研究”, “进行该项实验, 以便检验.....”, “该项实验证实 (未能证实),”等等。

2. 常用句式

(1) 某项实验 (所用设备) 包括.....

- ① The experiment consisted of three steps, which are described in Table 3.
- ② The test equipment which was used consisted of five force-measuring transducers and two recording instruments furnished by...
- ③ Included in the experiment were a high- pressure vessel assembly, 2 UA -3 uranium

analyzers, and a complete 100*50*50 cm soil bin.

④ All high-pressure hydrogen creep rupture tests were carried out in specially designed high pressure equipment rated at...

⑤ The winch is composed of the following main parts: a welded frame, a safety-brake clutch, a chain drum and a worn reducing gear.

(2) 到……, 从未有过某方面的实验

① An experiment of the kind has not been made.

② The kind of experiment you have in mind has never been carried out until now.

③ The kind of experiment you mentioned would not be undertaken in the near future.

④ So far we have not performed any experiment of this kind.

⑤ Until now the authors have not attempted any field experiments of...

⑥ Researches on the mobility of ions in neutral gases began more than 75 years ago, but very accurate data obtained through actual experiments have not appeared as yet.

⑦ ...However, no direct experimental measurements of this have been reported.

(3) 进行该项实验, 以检验……

① We (have)carried out several sets of experiments to test the validity of...

② They undertook many experiments to support the hypothesis which...

③ We initiated experiments to prove...

④ They have undertaken special experiments to disprove...

⑤ A number of experiments were performed to check...

⑥ Many studies have to be attempted to verify...

⑦ More than one set of experiments must be initiated to substantiate...

(4) 某项实验证实 (未能证实) ……

① Experiments by M and his associates (have) showed...

② Recent experiments in this area (have) suggested that...

③ The present series of experiments (have) indicate(d) that...

④ The experiments reported here (have) demonstrate (d)

⑤ These experiments involving...confirm(ed) our evidence that...

⑥ Our experiments with...failed to prove...

⑦ These highly-technical experiments support(ed) our assumption that...

⑧ Our initial experiment confirms that the choice of concept is correct.

⑨ The above-mentioned experiment has proved the newly -developed technique is very reliable.

⑩ This conclusion is also supported by the experiment as has been described previously.

六、“介绍方法”的句式用语

1. 主要用场

介绍研究 (实验) 方法的句式用语, 在英语科学论文中常见于摘要 (资料型摘要)、引言、实验描述及建议等部分, 介绍研究方法时的常用表达如: “该方法首先由……发明 (使用)”, “该方法与其他方法有 ……差别”, “应用该方法可以进行……工作”, “该方法称为……”, “使用该方法已获得……”等。

2. 常用句式

(1) 该方法首先由……发明 (利用)

① The method of ... was first developed by N.

- ② The method of ... was first applied by B.
 - ③ The method of ... was first used by A in the early XXth century.
 - ④ The method of ... was first brought into used by C.
 - ⑤ The method of ... came into use as long ago as 1920.
 - ⑥ The original proposal of this method was first made and published in 1963.
 - ⑦ The method of making a frequency standard was not invented till the existence of...
- (2) 该方法与其他方法有……差别
- ① The method of ... does not differ at all the routine one
 - ② The method of we use differs greatly from the one used earlier.
 - ③ The method they developed is somewhat different from the conventional one.
 - ④ The new technique is quite different from the old one.
 - ⑤ The newly-elaborated technique has something (nothing, little) in common with the one previously used.
 - ⑥ The method of deriving a program described here differs from previous practice in that...
- (3) 应用该方法可以进行……工作
- ① The method allows us to demonstrate...
 - ② This technique enables us to observe...
 - ③ The above procedure makes it possible to defect...
 - ④ This method is capable of providing...
 - ⑤ By the method we are able to investigate the insight of...
 - ⑥ We have adopted the integrated filtering cell approach to miniaturize the prototype.
 - ⑦ The method proves to be useful in...
 - ⑧ The interpretation effects were successfully evaluated by employing AIA.
- (4) 该方法可称为（描述为）...
- ① The method used is known as...
 - ② The technique we applied is referred to as...
 - ③ The procedure the followed can be briefly described as ...
 - ④ The approach adopted extensively is called...
5. Since the method was first put in use, we might as well name it as...
- (5) 用该方法已获得……
- ① We have obtained this information from recent experiments with...
 - ② Detailed information has been acquired by the authors using X-ray analysis.
 - ③ The researches have recorded valuable data using the newly-developed method.
 - ④ The experts in the research center are satisfactory with the experimental results achieved by the application of...

七、“展示结果”的句式用语

1. 主要用场

展示研究结果的句式用语，在英语科学论文中常见于摘要、实验结果、结果与讨论及结论等部分。展示研究结果时常用的表达有：“该项研究结果说明了……”，“根据该项研究结果可以得出……”，“该项工作提供了……结果”，“该项实验取得了……结果”，“……概括了该项结果”等。

2. 常用句式

- (1) 该项研究说明（指出、揭示）了……

- ① The studies we have performed show(ed) that these particles are responsible for ...
- ② These pioneer studies that the authors attempted have indicated marked variations in...
- ③ We carried out several studies which have demonstrated that the substance acts on ...
- ④ The research we have done suggests an increase in...
- ⑤ The investigation carried out by...has revealed no resistance of...
- ⑥ Our research has supported the assumption that...
- ⑦ Their studies have confirmed the opinion that...
- ⑧ This research bore out the idea that...
- ⑨ Laboratory studies of...did not furnish any information about...
- ⑩ Our research carried out to the same effect failed to reveal any variations in...
- (1) Recent research into the nature of... fails to support the theory that...
- (12) Most recent studies showed no changes in...
- (13) Further research reveals no evidence of...
- (14) All our preliminary results throw light on the nature of...
- (2) 根据该项实验结果可得出.....
 - ① More recent experiments in this area lead us to conclude that the phenomenon is related to ...
 - ② Most recent experiments to the same effect have led the authors to believe that the mechanism is out of action.
 - ③ Further experiments in this area have enabled these workers to suggest that...
 - ④ As a result of our experiments, we concluded that...
 - ⑤ From our experiments, the authors came to realize that...
 - ⑥ From these experiments one can conclude that...
- (3) 该项工作提供了（没有得出）.....结果
 - ① This fruitful work gives explanation of...
 - ② Their fundamental work provides some knowledge of ...
 - ③ The author's pioneer work has contributed to our present understanding of...
 - ④ This joint work of many years has led to further progress in...
 - ⑤ Our integrated work of the past few years adds to our current concept of...
 - ⑥ The research work has brought about a discovery of...
 - ⑦ The research by workers (has) result(ed) in a solution of...
 - ⑧ Our work on...(has) failed to give...
 - ⑨ Their initial work with...did not result in...
 - ⑩ This initial work with...did not result in...
 - (11) Further work in this field failed to contribute to...
 - (12) These findings of the research has led the author to a conclusion that...
- (4) 该项实验（研究）取得（没有取得）.....结果
 - ① Some results of...are obtained in the experiment with...
 - ② Sufficient result for...has been observed with the new method...
 - ③ Further progress can be provided by these experiments...
 - ④ No clear advancement has (so far)been see in...
 - ⑤ No direct outcome was then reported in...
 - ⑥ No such finding could be available in...
 - ⑦ No further result can be found with that technique.

- ⑧ No experimental evidence has come to the studies of...
- (5) 某数据（图、表）总结（概括）了从……得到的……结果
 - ① Figure 3 shows the results obtained from studies of...
 - ② Table 5 presents the data provided by the experiments on...
 - ③ This table summarized the data collect during the experiment of ...
 - ④ The results reported above have been shown in Figure 1.
 - ⑤ Our experimental data briefly summarized as follows.
 - ⑥ Some of the authors' findings are listed in tables.

八、“作出评价”的句式用语

1. 主要用场

研究成果评价的句型用语，在英语科学论文中常见于：摘要，讨论及结论等部分。从狭义上讲，研究成果评价是论文作者对自己所做工作的评价，从广义上讲，这种评价不仅限于对个人工作的评价，同时也包括作者对别人的评价，提出自己的观点和见解。作出评价时，肯定和否定是两种最基本的评价。

2. 常用句式 and 词语

- ① The author's work on...has been very successful
- ② Our work involving studies of...did not prove to be encouraging.
- ③ The new information has been insufficient to indicate that the change is dramatic.
- ④ One of the assets of this technique is that it is very simple.
- ⑤ The theory by...seemed quite competent.
- ⑥ We consider the new idea quite likely a suitable one
- ⑦ The data available in literature are quite important.
- ⑧ The newly-developed method has certain advantages over the existing methods.
- ⑨ The author has satisfactorily come to a conclusion that...
- ⑩ These highly-technical experiments failed to provide any correlation between...
- (11) The theory of...did not explain how much modifications arose.
- (12) These findings are not consistent with the current theory.
- (13) The above hypothesis seems rather interesting.
- (14) So far there is not enough convincing evidence showing...
- (15) The data obtained appear to be very similar to those reported earlier by...
- (16) There may be a different approach to the above findings
- (17) Our experimental result does not seem to suggest the following assumptions

利用上述句式，表示肯定评价的形容词，如：good, satisfactory, competent, convincing, adequate, reliable, correct, valid, helpful, fruitful, successful, stimulating, attractive, interesting, promising, exciting, careful,; profound, comprehensive, useful, encouraging, extensive, clear, sufficient, etc.

表示否定评价的形容词，如：deficient, faulty, inadequate, incomplete, unconvincing, unsatisfactory, meaningless, unreliable, incorrect, wrong, invalid, confusing, inexplicit, contradictory, controversial, divergent, puzzling, conflicting, ambiguous, insufficient, etc.

英语科学论文的写作句型用词方面有一定的规律可循。为了避免不必要的重复，有利于比较地道，规范的英语表达，有助于写作中的多样表述，并遵循科学论文的写作规律，本文对常用句式用语进行分类选择。根据表达科学研究成果的一般逻辑思维顺序和科学论文的结

构程式，写作英语科学论文时常用句型用语可作如下分类：①指出研究目的，常用句型用语 54 条；②限定主题范围，常用句型用语 30 条；③说明理论依据，常用句型用语 36 条；④描述实验过程，常用句型用语 30 条；⑤介绍工作方法，常用句型用语 32 条；⑥展示 研究结果，常用句型用语 46 条；⑦作出科学评价，常用句型 17 条及 48 个表示肯定或否定的形容词。实践表明，集中掌握这些常用的型用语，对于写好英语科学论文大有裨益。