

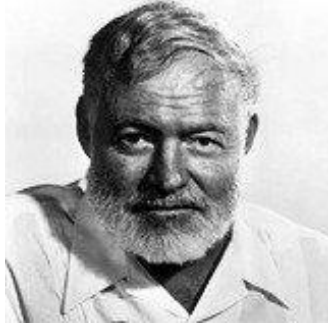
Writing English Medical Papers:  
Errors and Suggested  
Expressions  
v2.1 (since 2007)

Kihong Chang  
Ajou University School of Medicine

Experience

- *BTRT* consultant editor
- *The Obstetrician and Gynecologist*  
(Royal College of Obstetricians &  
Gynecologists)  
– International Advisory Board

# Simplicity



“He has never been known to  
use a word that may send the  
reader to the dictionary”

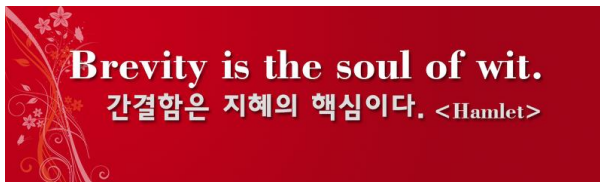
*Ernest Hemingway (1899 - 1961)*

Editors and reviewers look for

**Brevity** 간결

**Clarity** 명료

Validity



# 짜증!!!

화가난다



## Title

- No abbreviations are used in the title.

"Digoxin and Risk of Death in Adults with Atrial Fibrillation: The ATRIA-CVRN Study"

*Circ Arrhythm Electrophysiol. 2014 Nov 20*

"The associations between the MCP-1 -2518 A/G polymorphism and ischemic heart disease and ischemic stroke"

*Mol Biol Rep 2014 Nov 21*

## Upper case and lower case

- Characteristics and **T**reatments of **L**arge **C**ystic **B**rain **M**etastasis: **R**adiosurgery and **S**tereotactic **A**spiration  
*or...*
- Characteristics and **t**reatments of **l**arge **c**ystic **b**rain **m**etastasis: **r**adiosurgery and **s**tereotactic **a**spiration
- **B**rain **t**umor **R**esearch **A**nd **t**reatment (x)

## English name spelling

“홍길동”

Hong Gil Dong  
HongGil Dong  
Hong-Gil Dong  
Hong, Gil Dong

DiSaia  
DeHavilland  
Rouhette-Berton

GilDong Hong  
Gil Dong Hong  
Gil-Dong Hong  
Gil-dong Hong

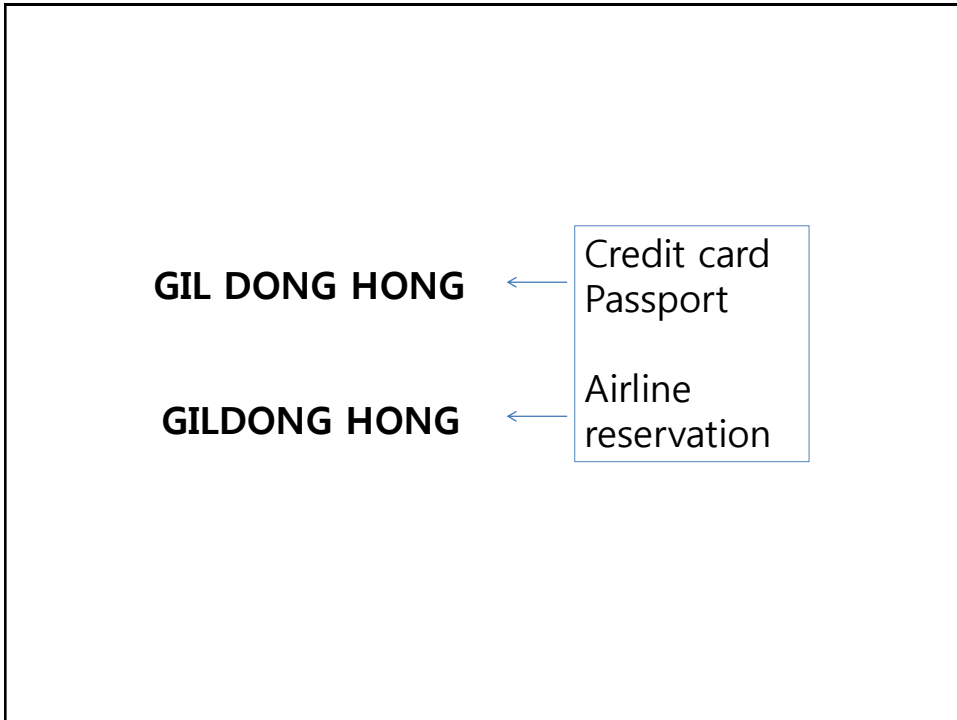
**Gildong Hong**



Charles Philip Arthur George



John Rhys-Davies



SKT 95% 오전 11:01

**예약**

장기홍 고객님의 예약 내역입니다.  
 예약번호: 57664207  
 예약명:

<b>ICN → CTS</b> 2015년 1월 26일 월요일 10:05 - 12:45 PRESTIGE	<b>KE765</b> 터미널:
<b>CTS → ICN</b> 2015년 1월 30일 금요일 14:05 - 17:15 PRESTIGE	<b>KE766</b> 터미널:

**탑승객**

<b>KIHONG CHANG</b>	
항공권 번호	스카이패스 번호 BK30311267
<b>KEUNSUP CHANG</b>	
항공권 번호	스카이패스 번호 BK0191665

SKT 100% 11:59

메뉴 **KOREAN AIR** 마이페이지

< 이전 예약 관리

비행시간 : 3시간 10분 | 출발 터미널 : 1  
Boeing 777-300ER

Ⓞ 항공권 구매 시한 2015-08-09 19:00 (현지시간 기준)


**탑승객 정보**

CHANG / KIHONGMR  
항공권 번호 : --  
회원번호 : KE 113616050082

LEE / SOOJINMS  
항공권 번호 : --  
회원번호 : KE 11362669\*\*\*\*

CHANG / KEUNSUPMR  
항공권 번호 : --  
회원번호 : KE 11231304\*\*\*\*

LEE / CHONGAEMS  
항공권 번호 : --  
회원번호 : KE 11232294\*\*\*\*

연락처 정보 

## Foreign names

Denmark



Jensen

Nielsen

Hansen

**Andersen**

Christensen

Sorensen

Finland



Korhonen

Virtanen

Makinen

Nieminen

**Heikkinen**

Koskinen

Sweden



Andersson

Johansson

Karlsson

Eriksson

Larsson

Olsson

Norway



**Hansen**

Johansen

Olsen

Pedersen

Nielsen

Kristiansen

## **Main Text**

### **Introduction**

No data or conclusions  
are to be reported

### **Results**

- Do not repeat all results in the text
- Only significant key results
- The remaining in the tables and figures
- Advantages and disadvantages of results → to discussion

## 잡담 1

### USA and the UK

#### UK

- Primary school
- Secondary school  
(grammar school, public school)  
eg Eton College, Harrow School)
- University (3 years, read)



Eton College

#### USA

- Elementary (grammar) school
- Middle school (junior high)
- High school
- College (4 years, major)

- Aluminum & Aluminium
  - Different than & to
  - Gray & Grey
  - **Practice** & **Practise**
  - Color & Colour
  - Center & Centre
  - Hemoglobin & Haemoglobin
  - Hemorrhage & Haemorrhage
- cf: **Analyze** & Analyse (BJOG)



- British Journal of Dermatology  
"Manuscripts must be written in  
**British English**"
- British Journal of Cancer
- British Journal of *Pharmacology*  
"USA English"
- European Heart Journal  
"Oxford English spelling should be used"
- Journal of Neurosurgery  
"U.S. English"

- medical *license/licence*
- facial *complexion/complection*
- the test was *canceled/cancelled*
- *dependent/dependant*
- vertebral *hard disk/compact disc*
- treatment *program/programme*
- field of *specialty/speciality*
- morphine *sulfate/sulphate*

## 잡담 2 USA and the UK

Mr Mrs Ms Dr St Ave (US)

vs

Mr. , Mrs. , Ms. Dr. St. Ave. (UK)


## Alternate words for... ...study...

- investigation
- research
- examination
- review
- report
- evaluation

## **Alternate words for... ...determine...**

- clarify
- identify
- verify
- confirm
- ascertain
- delineate
- establish

## **Alternate words for... ...reported that...**

- concluded that
  - summarized that
  - observed that
  - stated that
  - described that
  - revealed that
  - demonstrated that
  - found that
  - inferred that
  - opinioned that
- 

**Alternate words for...  
...suggest...**

- advise
- advocate
- conjecture
- exhort
- offer
- propose
- recommend
- submit

**Alternate words for...  
...disadvantage...**

- limitation
- shortfalls
- fault
- flaw
- drawback

Webster's Dictionary

Thesaurus (유의어 사전)

**...never never never...**

- **Can't** be done  
→ **cannot** be ...
- **Don't** perform this procedure  
→ **do not** ...
- **We're** analyzing this  
→ **we are** ...

## ...never never never...

Sentence begins with...

- **But** we observed in our study that...**x**  
→ However, .....
- **And** the following patients...**x**
- **45** patients were enrolled in this study...**x**  
→ Forty five patients....

## Do's & Don'ts

- could, can, might...**x** → maybe...√
- biggest study...**x** → largest study...√
- important...**x** → of significance,  
critical...√
- done.. **x** taken...**x** → performed... √



## 잡담 3

- Cesarean section
  - Julius Caesar was ***NOT*** born by Cesarean section!!!!!!!!!!
  - Latin "caedere"; to cut



## Common grammatical errors

- ...observed.So... → ...observed. So...
- ...observed,and... → ...observed, and...
- ...observed;but... → ...observed; but...
- ...observed:many → ... observed: many...
  
- P=0.05 → P = 0.05
- %, °C

## Better expressions, better grammar

- **Surgery**

- Greek: χειρουργική *cheirurgikē*, Latin: *chirurgiae*, meaning "hand work"

- **Operation**

1) 운영 2) 작전 3) 사업 4) 수술 5) 활동

- Surgeries → **surgical** procedures

- Undergo **surgery**

- Surgical duration → **operation** time

- Operation note → **surgical** note/record

cf: pre - **operative**, post - **operative**



## Better expressions, better grammar

- 4 times more... → 4 fold greater...
- cases... → patients, subjects
- group... → Group...
- pts classified as... → pts defined as...
- MRI imaging → MR imaging
- about... → approximately
- nearby... → adjacent to
- few, a few, several, numerous

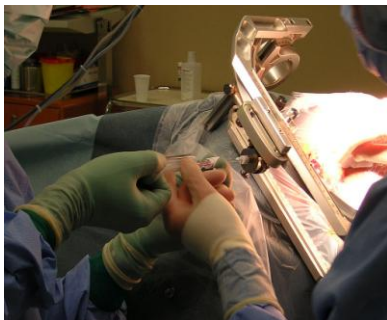


## Better expressions, better grammar

- ..it was seen that → ..observed that
- ..try to → ..attempt
- ..amount → ..quantity
- ..finish → ..completion of
- ..like → ..such as
- ..given → ..administered
- ..need → ..require
- ..get → ..obtain, acquire
- ..died → ..expired, deceased

## Better expressions, better grammar

- ..used 썼다 → ..employed 사용



## Staff 스텝 (step?) & Faculty

- "Staff only"
  - "Restricted area"
  - "No entry"
  - "Private"
  - "Entry forbidden"
  - "No unauthorized access or entry"
- "직원외 출입금지"  
"staff" → "faculty"

design HUG



STAFF ONLY



## Better expressions, better grammar

....and and and and....

- subsequently...
- followed by...
- leading to...
- resulting in...
- consequently...
- finally...

## Commas

- ...alpha, bravo, charlie, **delta** and **echo**
- ...alpha, bravo, charlie, **delta**, and **echo**

## Commas

At the last follow-up there was clinical improvement in terms of VAS and NDI scores and the postoperative flexion-extension range of motion at the operative site and adjacent levels was well maintained.

- Comma where?

## 잡담 4

- Cell phone
- Mobile phone
- Hand (held) phone
- Smart phone
- Hand held device



1973, 2kg

## Common grammatical errors

Ultrasound



Ultrasonogram vs Ultrasonography

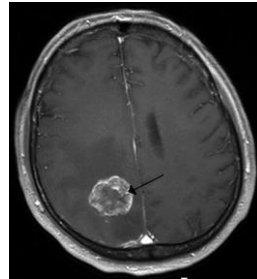
Mammogram vs  
Mammography



## Tense

### 동사의 시제 (時制)

- Result: **past** tense  
...our results showed that...
- Figures and Tables: **present** tense  
...arrow indicates...  
...arrow pointing to lesion...



A poorly written paper is not enjoyable to read

Spell check!!

ㄱ ㄴ ㄷ  
√

# 왕 짜증!!!



When writing a paper:

‘... blood, toil, tears and sweat...’

*Winston Churchill, 13 May 1940*

# Syntax

- 통어론 (統語論), 구문론 (構文論)
- Language rules
- The grammatical arrangement of words in sentences

eg,

"...*time flies like arrows*..."

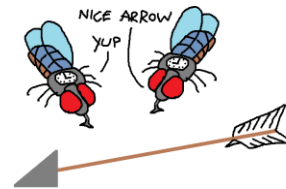
- syntactic ambiguity



- 의미: 시간의 흐름은 화살같이 **빨리** 간다

- *time* the speed of flies as quickly as you can

- Certain flies *enjoy* an arrow



## DO NOT USE!!!

- Dash/Hyphen (-)
- ...shall be... (cf: ...will be...)  
used sometimes in UK English  
in USA legal documents

## Brackets

사과(沙果)는 과일이다  
사과 (apple)

- (Fig.1) → (Fig. 1)
- (Table 1.) → (Table 1).
- Brown et al(1987) → Brown et al (1987)
- Figure 2:(a,b,c) → Figure 2: (a, b, c)
- ( apple ) → (apple)
- **EXCEPT!**  
...diagnosed with idiopathic hypertrophic  
pachymeningitis [1,4,9].



## 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> degree relative

- 아버지 어머니 아들 딸
- 형 누나
- 삼촌 사촌



대통령의 5촌 조카

## Bi -, Semi -

- Biweekly – every 2 weeks
- Bimonthly – every 2 months
- Semimonthly – every 2 weeks
- Semiannually – every 6 months
- Quarterly – every 3 months

## 잡담 5

"The pen is mightier than the sword"

"펜은 칼보다 강하다"

The power (less?) of the keyboard??

"...morphine sulfate is a powerful opiate used to **relive** pain...."



## can be & maybe

- "can" - ability or capability

***Can** she swim?*

***Can** you speak Korean?*

... our results shows that it can be...

- "**maybe**" – probable

## may be & maybe

- **may be** (two words) *might be, could be, or would be* = possibly
- **maybe** (one word) = probable

## who & whom

...35 patients were enrolled in this study,  
and  
**who/whom (?)**  
showed that...

- Current English: use **who** in all contexts

## possible & probable & perhaps

- **Possible** – it could happen < 50%
- **Probable** – more likely to happen > 50%

"...our results show that the outcome is **probably** more favorable.... "

## consist/comprise/composed

"...our patient group selection..."

- consisted of...
- comprised of...
- was composed of...

## English Medical Abbreviations

### Abbreviation 약어 略語

- Used frequently in medicine, military
- Boost efficiency
- Disadvantages:
  - difficult communication, understanding
  - ambiguity

# THAAD

- 세드? 새드? SAD?



- Terminal High Altitude Area Defense  
(전구 고고도 지역방어)

## ...in medicine...

- [Methionylthreonylthreonylglutaminylarginyl.....isoleucine](#) 186,819 letters
- **Pneumonoultramicroscopicsilicovolcanoconiosis** – longest word in English dictionary

## Orthographic styling

- [Periods](#) (stops): used in styling abbreviations
- Prevalent practice today is unnecessary

Ph.D	→	PhD
M.D.	→	MD
C.O.P.D.	→	COPD
e.g.,	→	eg
c.f.	→	cf

April 16<sup>th</sup> → Apr. 16 → Apr 16

## ...plurals...

- Plurals for medical acronyms
  - add lowercase *s* (no apostrophe)
- eg,
  - *one OCP, two OCPs*  
(oral contraceptive pills)
  - MRIs
  - 1970s

## Do Not Use! (JCI)

- IU [international unit](#) mistaken for "IV" or "10"
- MgSO4 [magnesium sulfate](#) may be confused with "MSO4"

## 논문 번역 의뢰

- All terminology in English
- eg  
Objective: 이 연구의 목적은 Traumatic brain injury (TBI) 후 early period에 Unfavorable neurological outcome을 예측할 수 있는 clinical and radiological risk factors를 identify해서, 궁극적으로 TBI후 초기에 neurological outcome을 improvement를 목적으로 clinical trials를 시도하기 위한 대상 환자 선정 기준 (selection criteria guideline) 을 마련하는데 있다.



**Thank you!**

**Merci!**

**Danke!**

**Grazie!**

**お陰様で!**

**Спасибо!**

**Gracias!**

**σας ευχαριστώ!**

**Siyakubonga!**