

**NANYANG
TECHNOLOGICAL
UNIVERSITY**



*Silent Transformations
NTU, 7-9 March 2016*

Understanding the Mind of Bilinguals from Their Progression in Linguistic Behaviour

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Robert B. Kaplan's pioneering study (1966) on ESL students' essay writing in English

- Students who came from different linguistic and cultural backgrounds showed rhetorical differences in paragraph organization in essay writing.
 - That is , the students' essays were **incoherent in the eyes of the native-English-speaking readers.**
- Kaplan's claim: **Rhetorical differences could reflect different patterns of thinking.**

Five types of paragraph development for five groups, identified by Kaplan (1966)

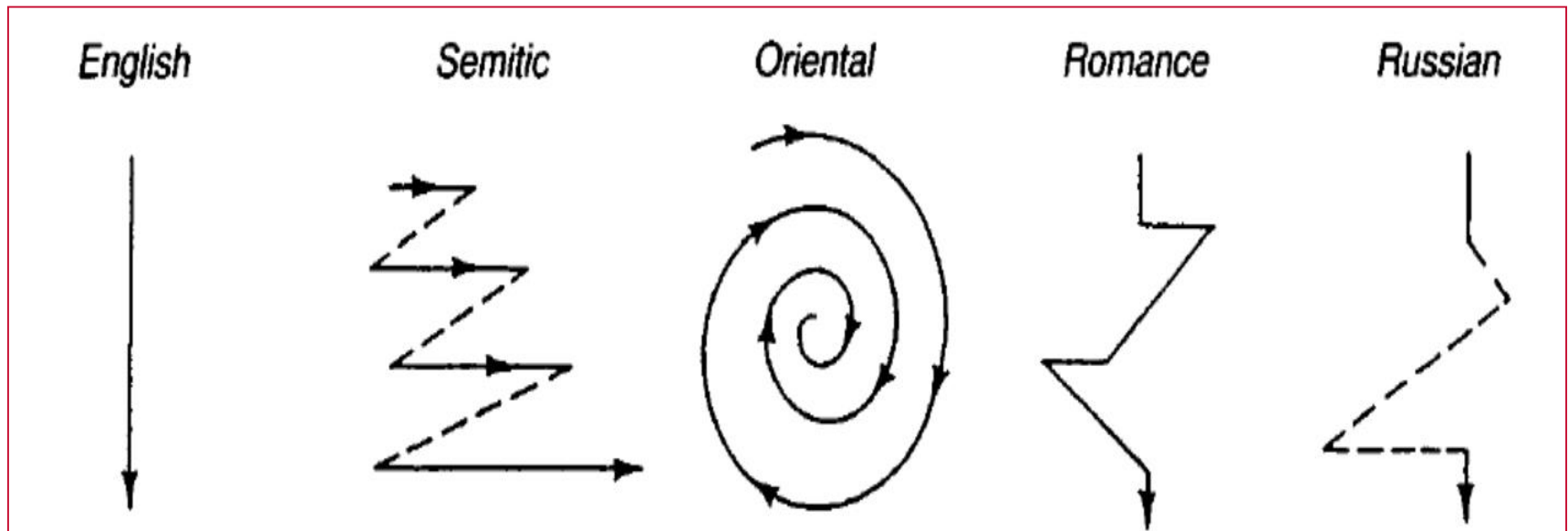


Figure 1 Diagram on cross-cultural differences in paragraph organization in Kaplan's (1966) study on cultural thought patterns in intercultural education.

Kaplan's two statements turned into two arguments

Argument 1: Rhetorical differences reflect different patterns of thinking.

Argument 2: Rhetorical differences reflect different writing conventions that are learned in a culture.





Questions

- (1) If rhetorical differences in writing **reflect different patterns of thinking**, at what bilingual proficiency level can the differences be observed?
- (2) If rhetorical differences in writing **reflect different writing conventions learned across different cultural contexts**, at what language proficiency level can the differences be minimized?
- (3) What are **consciously and unconsciously** changed in a bilingual's linguistic behaviour that might suggest the reshaping of the bilingual mind?

**The first paragraph of a letter to relatives and friends
by a well-balanced Chinese-English bilingual**

Greetings from Singapore! Without knowing it, another year has passed! While most of the US and China are unusually cold, we are blessed with warm weather, gratifying life, and good health on this tropical island.

Our daily routine is more or less the same without much change. We would prolong our work hours during the week. On weekends, we would take a long walk around campus and then to a nearby wet market to buy grocery and entertain friends at home

with Shin's gourmet cooking. **Phil and Lisa are now very much settled down in upstate New York and have gotten used to the extreme winter there.**

Phil has been an assistant professor at the University of Rochester for more than a year and is quite preoccupied with his research and teaching. Last year, he had a good start at the academia, having been awarded the first research grant from the National Science Foundation (NSF) in the US and a couple of other competitive grants elsewhere. Lisa took the year off from her dental practice, spending time learning new things she liked, such

as computer programming. **We managed to squeeze time out to travel to exotic places in the region.**

We went to Eastern Malaysia to climb Mount Kinabalu and took short vacations in Sabah and Sarawak. Last December, we flew to New Zealand for the Christmas-New Year holidays. On New Year's Day, we went on a 5-day trekking trip in the unimaginably beautiful Milford Track in the South Island with our hiking buddies from Los Angeles (Mina didn't make it because she had to return to Singapore earlier

than scheduled for a major grant interview). **In retrospect, we feel immensely gratified that life treats us well in this hot and humid yet lushly green garden city.**

Our use of languages is changing but are we aware of it?



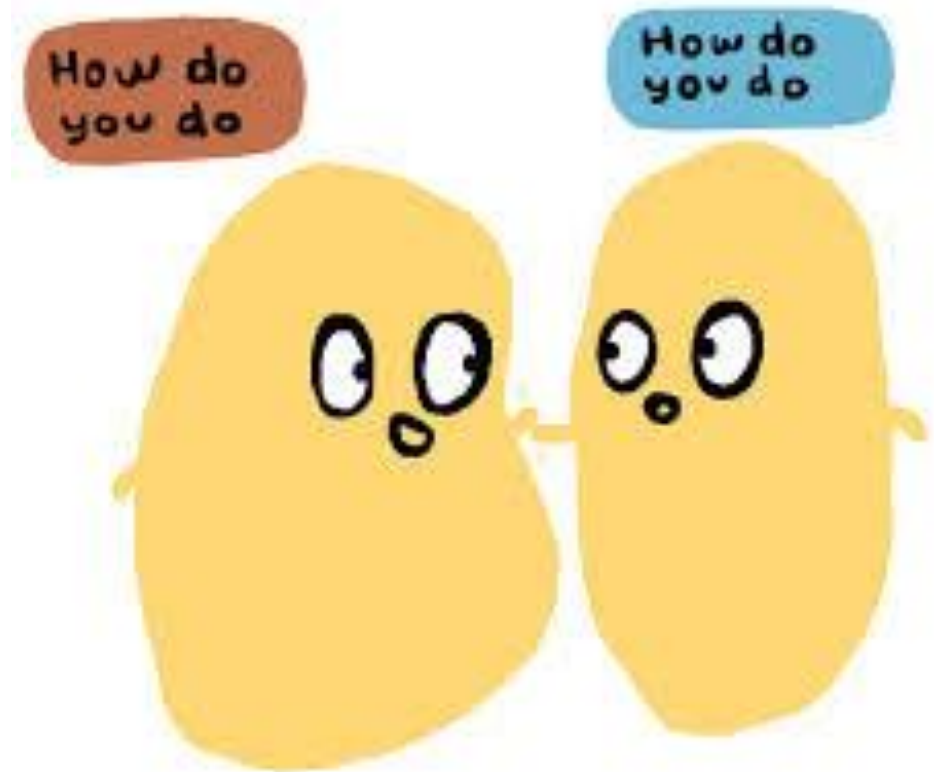
Since when did we
Chinese speakers
stop greeting people
by “你吃了吗?”
(have you eaten)?

Since when did
English speakers
stop greeting
each other by
saying “How do
you do?”?



Sounds like aliens?

Ah! That's
how they use
our language!



We simply say
“Hello!”



© Can Stock Photo - csp15040255



Since when did Chinese married couples stop referring to each other as “爱人” (lover) ?

这是我全家，我们有两个小孩。
我的爱人非常疼爱他们。

This is my family.
We have two
children. My **lover**
loves them very
much.



We learn and use another language when we need to.

- When did we begin to notice that we have been **shaped by the languages we speak?**
- Or have we ever **noticed it?**

Understanding the mind shaped by two languages

Does acquiring a second language
influence learning, behavior, and even the
very structure of the brain itself?

the dog-chien dilemma

- encountering an object, action or concept and instantaneously toggling between two different words to describe it. (Bialystok, 2004)

dog

狗

“Speak Chinese. 华语
is easy for me la.”



Is it because the Chinese language
was activated at the time of thinking
and talking about it?

What are lifelong changes in bilinguals?

- Social communication skills
- Learning behaviour
- Joint attention
- Cognitive flexibility
- Memory capacity
- Brain plasticity
- Knowledge increase
- Awareness increase
- Possibly more?

Bilinguals spend measurably shorter time than monolinguals in **Stroop test**.

Stroop test

Again, state the colors as fast as you can

Row 1 **Red** **Blue** **Green** **Yellow**

Row 2 **Yellow** **Green** **Blue** **Red**

Row 3 **Green** **Red** **Yellow** **Blue**

From John Gosbee, MD, MS, VA National Center for Patient Safety

A Case Study of Singaporean Bilinguals



Introduction

- This study takes the **social identity approach** to the study of **bilingual development** in **English-Chinese speakers** in Singapore.
- It applies both **social identity** and **self-categorization** theories to explore a possible correlation between bilingual speakers' **language proficiency** and **silent shifts of social identities**.

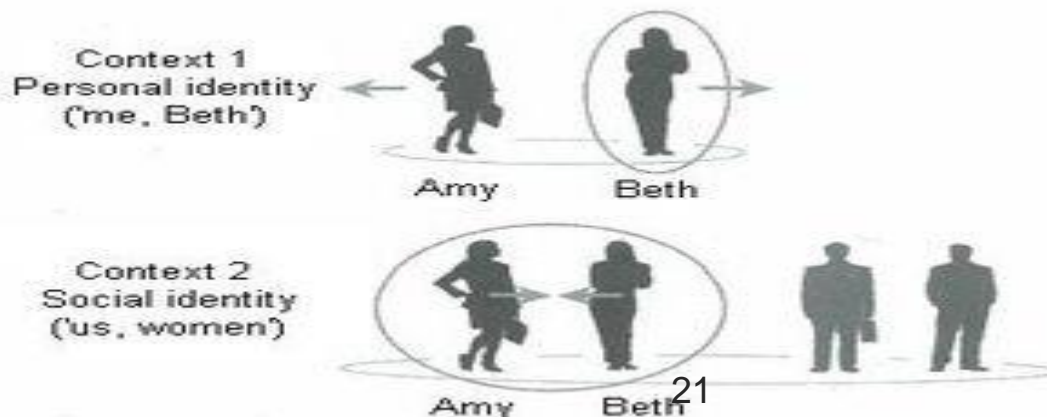
Social Identity Theory

- **Social identity theory** predicts certain **intergroup behaviors** on the basis of perceived group status differences, the perceived legitimacy and stability of those status differences, and the perceived ability to **move from one group to another** (Tajfel & Turner, 1979; Turner, 1999).
- The theory introduced the concept of a **social identity** as a way to explain intergroup behavior. (Tajfel & Turner, 1979; Turner, 1999; Turner & Oakes, 1986).



Self Categorization Theory

- **Self categorization theory** was developed as a companion theory to the social identity theory to produce a more **general account** of **self** and **group processes** (Turner & Reynolds, 2010).
- It views the **self** as an outcome of **cognitive processes** and an **interaction** between the **person** and the **social context** (Hogg & Turner, 1987).



Objectives

- To assess the **bilingual proficiency** in **English-Chinese bilingual young adults** whose dominant language is **English**;
- To explore features of **unconscious or silent changes in speakers' perspectives** with regard to social and personal values, family values, and relationships, in **expressing their opinions in a particular language**.



Research Questions

- 1
Can young adult **English-Chinese bilinguals** in Singapore **freely express** their **social identities** and **opinions** in both English and Chinese when being interviewed?
- 2
Are they **quietly re-forming** their **social identities** because of their switch between the two languages on a daily basis?

Research Questions

3. Can we assess their **bilingual proficiency** by identifying the **features** of their **expressions** when describing their self and social values in the two languages?

4. Is there a **correlation** between an English-Chinese bilingual speaker's **proficiency** in **English** and the level of his or her **awareness** of the difference in **self** and **social values** between Western and Asian societies?

Hypotheses

1. Young adult **English-Chinese bilinguals** in a multi-lingual and multicultural environment unavoidably **undergo** a process of **reformation of their social identities**. As a result their perception of certain aspects of **social identities**, such as self and gender roles, can be **re-shaped quietly** based on the level of involvement of the **daily use** of the **two languages**, and by the influence of the **social and ideological perspectives** of **Western culture** through the English language and globalization in Singapore.

2. The **speed** of the **re-shaping process** and the **observable result** can be affected by **factors** such as biological age, the number of years as an active bilingual, and the speaker's proficiency in both languages.

Methods

Participants

50 English-Mandarin bilingual speakers (male=25; female= 25)

- **Age range:**
 - 21-27 (M = 23.80, SD = 1.40)
- **Language competence**
 - English-dominant: 58%; Chinese-dominant: 40%
- **Education:**
 - GCE A Level or Diploma and above university students: 38%; professional workers: 62%
- **Religion:**
 - Buddhism: 60%; Christianity: 14%; Taoism: 6%; Free Thinker: 20%

Methods

Materials

- Questionnaire consisting of
 - **40 sentence completion questions** adapted from The Washington University Sentence Completion Test (Hy & Loevinger, 1996)
 - **Demographic information** (age, gender, education level, occupation, religion, language proficiency, language environment)

Methods

- Procedures
 - Participants submitted their completed demographic form and consent form prior to data collection
 - Participants complete the 40 sentences first in English and then in Chinese, or vice versa.
 - Maximum 1-hour time limit for each version.
 - No word limit for completing each sentence.
 - Participants were encouraged to elaborate their answers as much as they can

Sentence Completion Test

Please complete the following sentences, elaborating as much as possible.

1. When a child will not join in group activities _____.

2. Raising a family _____.

3. When I am criticized _____.

4. A man's job _____.

5. Being with other people _____.

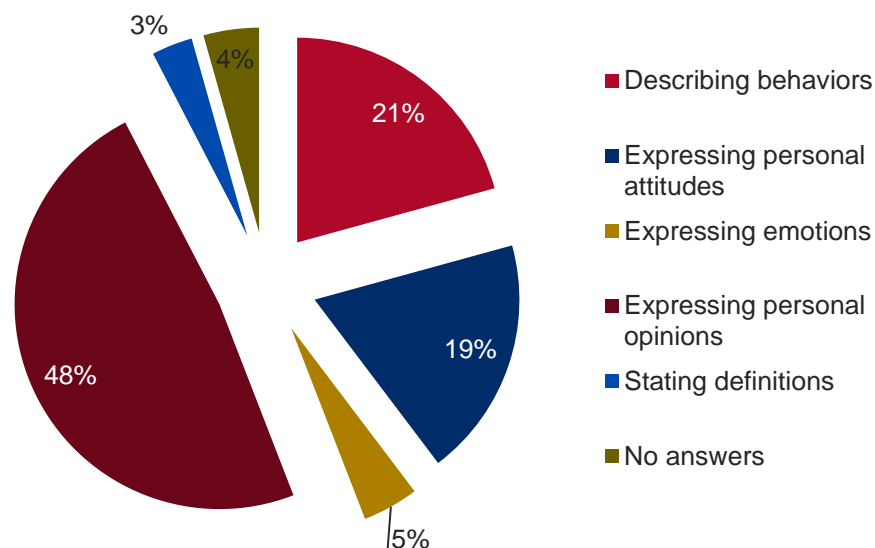
6. The thing I like about myself is _____.

Results

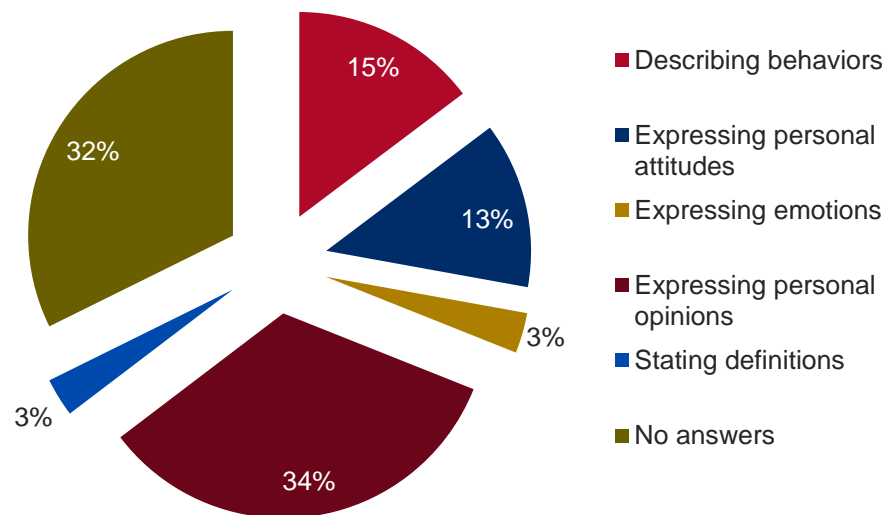
What the participants expressed in their completed sentences

- Opinions > behaviors > attitudes > emotions > definitions

English

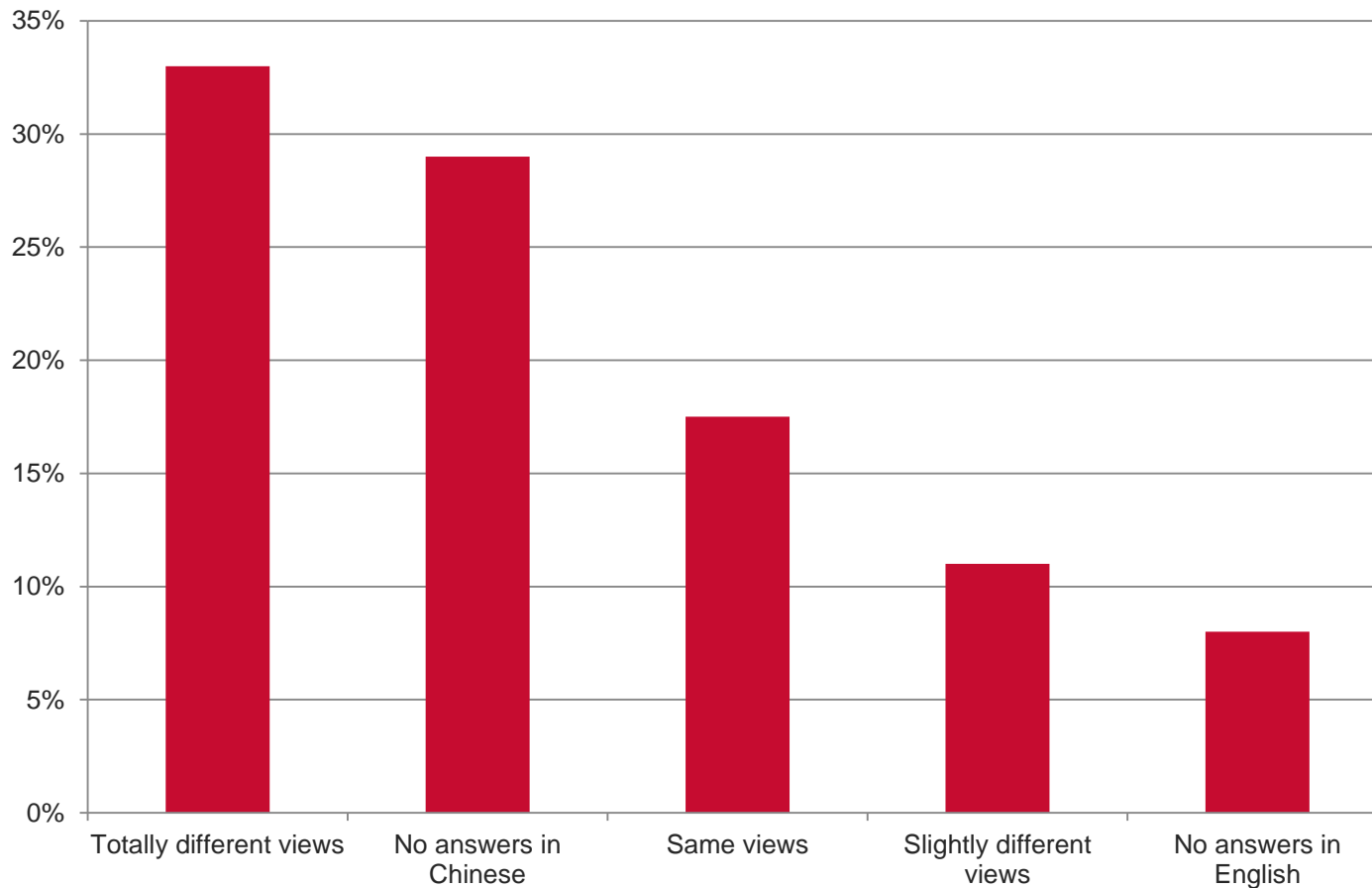


Chinese



Results

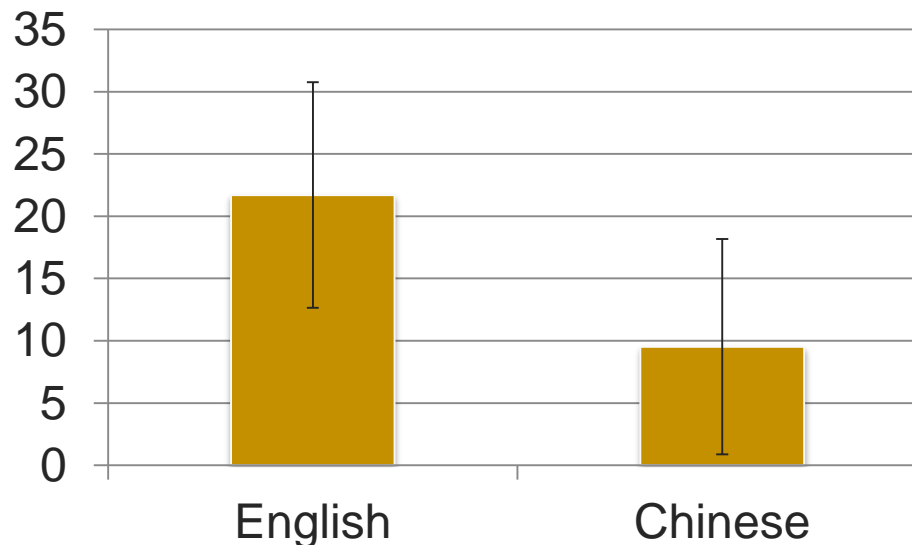
- Inconsistent views in Chinese and English



Participants' answers	%
Totally different views	33
No answers in Chinese	29
Same views	17.5
Slightly different views	11
No answers in English	8

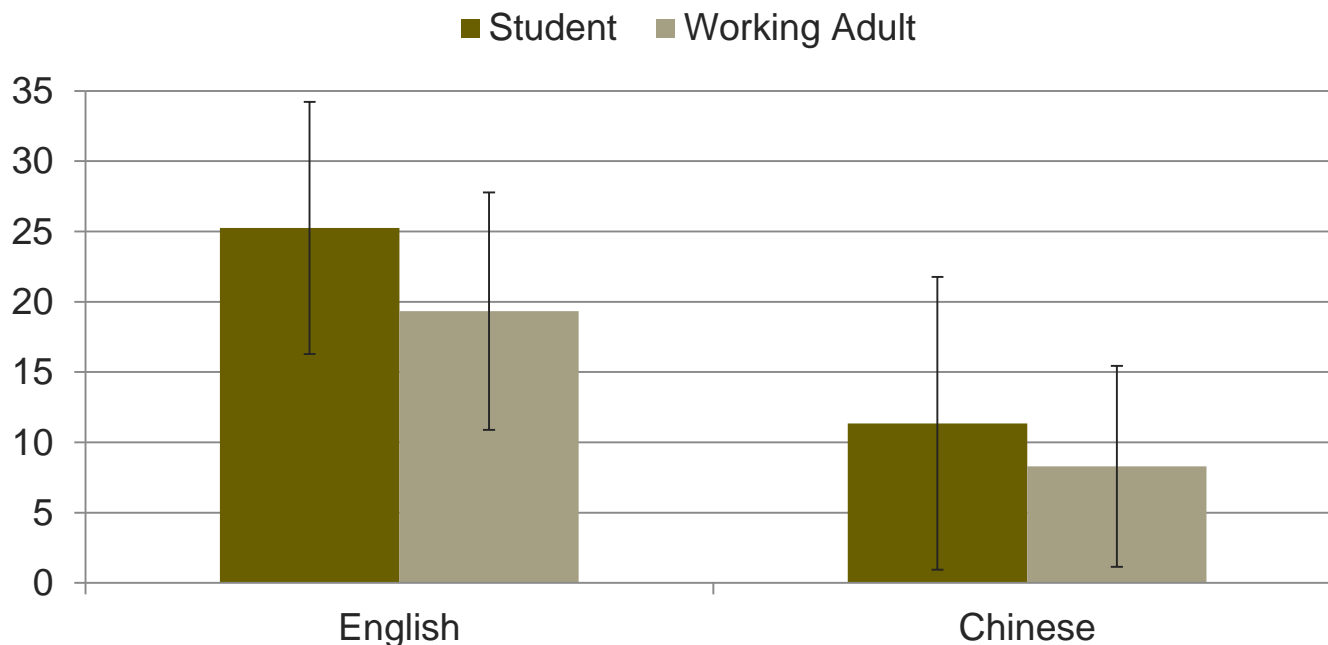
Results

- Features in relation to **language** and **age**
 - **More elaborations** were found in **English** than in Chinese, $t(49) = 8.98$, $p = .000$
 - **Younger** participants had more elaborations in **English** ($\beta = -2.39$, $p = .01$) than in Chinese



Results

- Features of elaborations in relation to **occupation**
 - **Students** performed **better** than **working adults** in elaborations in **English**, $t(48) = 2.37$, $p = .02$ than in Chinese.



Results

- Gender differences in views

- A married man should _____

Summary of answers	Female	Male
be faithful to marriage	62.5%	37.5%
place family as his priority	35%	65%
be himself	40%	60%
be faithful and provide financial support for family	50%	50%
place work as his priority	66.7%	33.3%
balance well between work and family	100%	0%

Results

Inconsistent views in Chinese and English

- S20: A married woman should _____.
- S20: 一个身为他人妻子的女人应该_____.
- S21: A married man should _____.
- S21: 一个身为他人丈夫的男人应该_____.

View types	S20				S21			
	Female		Male		Female		Male	
Different views	13	52%	8	32%	15	60%	10	40%
Expressed less in English	1	4%	0	0%	1	4%	0	8%
Expressed less in Chinese	7	28%	13	52%	7	28%	13	52%
Same	3	12%	3	12%	2	8%	1	4%

Inconsistent views in Chinese and English

S20: A married woman should _____.

S20: 一个身为他人妻子的女人应该_____.

- F: still be who she is and not be someone her husband wants her to be. 洁身自爱 (**keep self respect**).
- M: do housework, take care of children and have high tea with other married women. 懂得怎样体贴老公(**know how to take care of his husband**).

– S21: A married man should _____.

– S21: 一个身为他人丈夫的男人应该_____.

- F: be faithful. 是有所为有所不为 (**do what he should do**)
- M: work hard and earn more than enough for the family. 懂得哄老婆开心 (**know how to please his wife**).

Inconsistent views in Chinese and English

S20: A married woman should _____.

S20: 一个身为他人妻子的女人应该_____.

- Working adult: caring, dutiful, reliable, interesting, 有爱
心, 关心 (**have a loving heart, caring for others**,)
- Student: be faithful to her husband. 尽责 (**be responsible**).

S21: A married man should _____.

S21: 一个身为他人丈夫的男人应该_____.

- Working adult: be faithful, strong, reliable, funny,
interesting, refreshing. 有责任感, 可靠 (**have a sense of responsibility and be reliable**)
- Student: protect his family and be faithful to wife. 听老婆
的话, 不让她受伤。(**listen to his wife and protect her from being hurt**)

Female participants' answers

My weakness _____.	我的弱点_____。
is that sometimes I give in too much.	有的时候我会对别人太好 (treat others too well)
is giving more than I take	是我不擅长用华语来沟通 (not good in expressing myself in Mandarin)
is I love branded stuff, and I spend a tad too much	信自己 (trust myself)
is finding it hard to reject others in their face	是偏执狂 (Paranoid)
is my temper and my nasty mouth when I get angry. Becomes an extremist	是太爱花钱 (enjoy spending money)
is I can change very fast	是不容易当面拒绝人 (find it hard to say no in front of others)
is being pessimistic in life and failing to appreciate just how blessed we are to ₃₈ be healthy and able to live normally	太凶 (too tough)

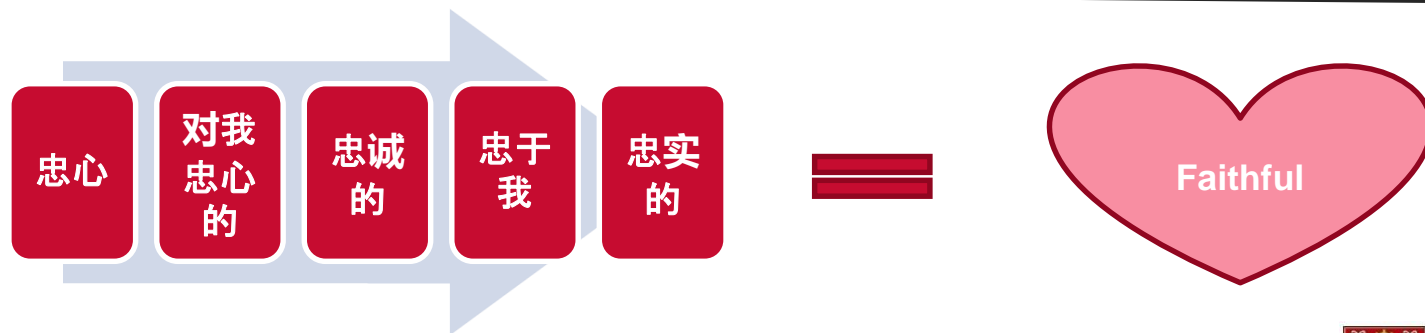
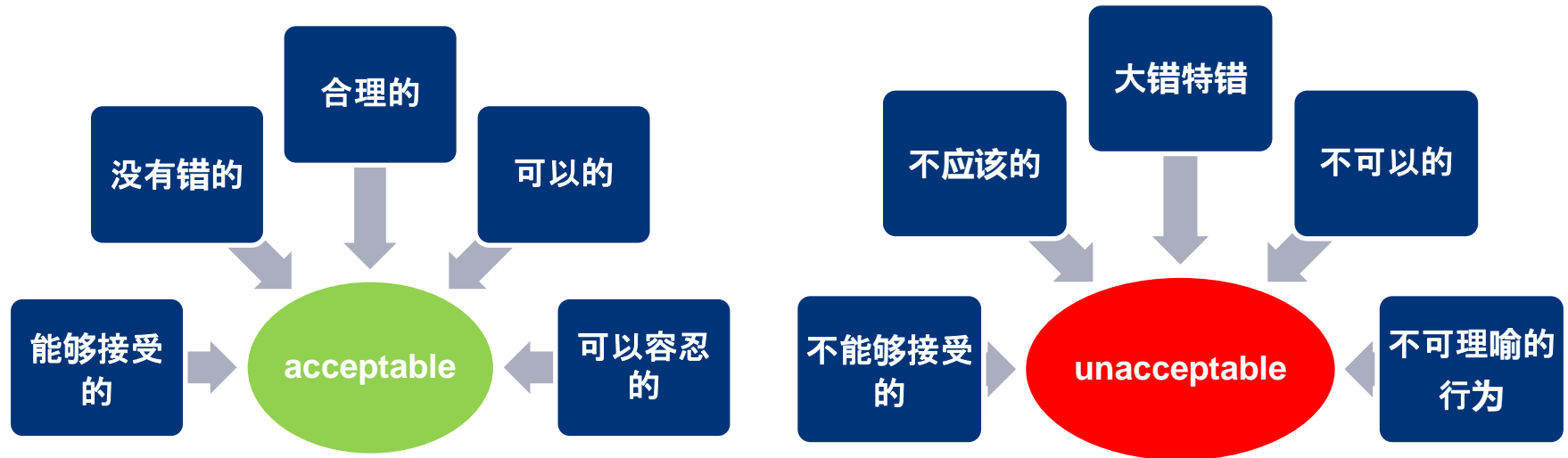
Male participants' answers

My weakness _____.	我的弱点_____。
is not willing to compromise	是不会表达自己的想法。(I do not know how to express myself)
is I procrastinate too much	是不善于表达 (I am not good at expressing myself)
is imperfect because we are born to learn	太过高傲 (I am arrogant)
is low confidence and too easy-going. Over compromising	不够信心, 勇气 (I am lack of confidence and courage)
is more of what makes me love the way I am	是不懂得如何与周围的人交往 (I don't know how to be social with the people around me)

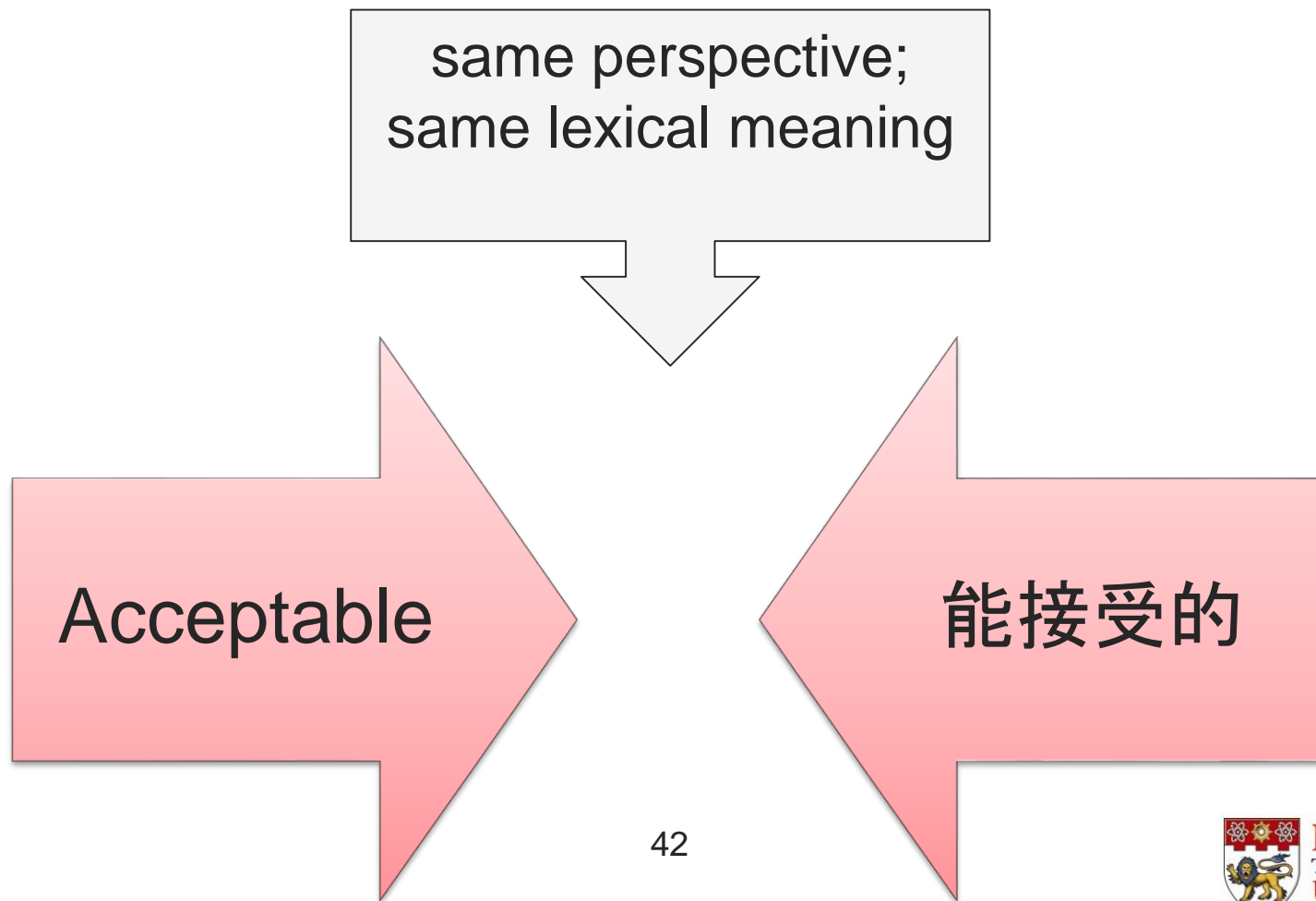
Features of word use

English	Chinese
More nouns used to express one's own stances or opinions	More adjectives and verbs used to express the same meanings in English
More general words used	More concrete words used
Words that are more polysemous used	Words that are more specific used
More antonyms used	More “不” used as negation
More metaphors used	More colloquial expressions used
Set phrases used	Paraphrases of the English set phrases

- Same word in English vs. different words in Chinese



Same word in English vs. different words in Chinese



- Same word in English vs. different words in Chinese

What does this reflect?
social values?

Acceptable

沒有錯的

- Same word in English vs. different words in Chinese

What does this reflect?
reasoning?

Acceptable

合理的

- Same word in English vs. different words in Chinese

What does this reflect?
personal
opinions/judgements?

Acceptable

可以的

Same word in English vs. different words in Chinese

What does this reflect?
social acceptance,
values, or
Judgement?

Acceptable

可以容忍的

Dimensions to discriminating Throw verbs in English, Chinese and German

	Force	Initial hand height	Initial Arm Pose	Horizontal direction of hand movement	Vertical direction of hand movement
English throw, fling, chuck, cast, toss, hurl	✓	✓	✓		
Chinese 扔rēng, 丢diū, 抛pāo, 投tóu, 摔shuāi, 甩shuǎi	✓	✓	✓	✓	✓
German werfen, schmeissen, stossen, schleudern, pfeffern, schmettern	✓	✓			✓

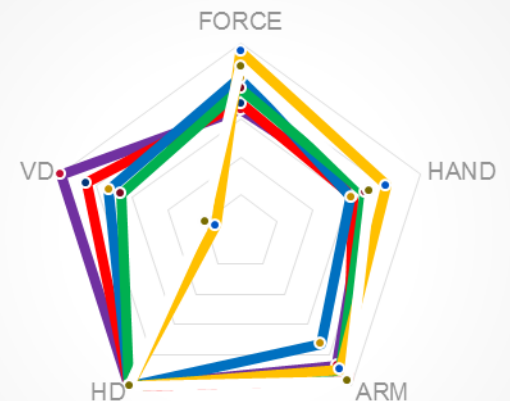
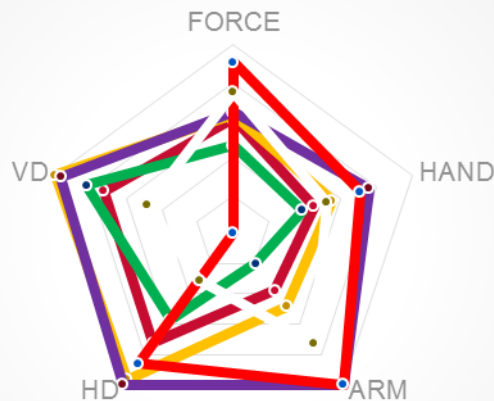
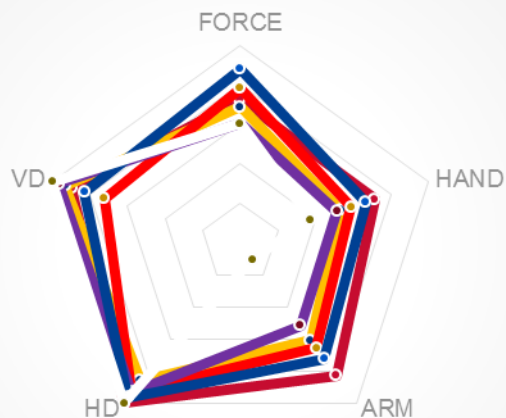
(Wang & Gao, 2013)

The semantic distribution of Throw Verbs

English

Chinese

German



(Wang & Gao, 2013)

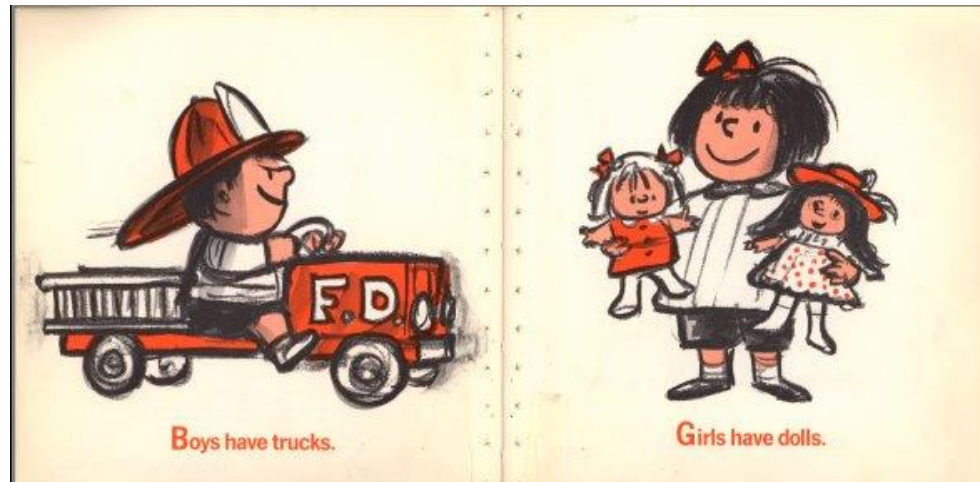
Discussion I

- The participants' perception of their **social identities**, such as self, gender, and family roles, was found to be typical of the **collectivist ideas** of a **Chinese-speaking society**.
- However, the **relative proficiency** in the two languages **correlated** with the participants' **perception of self value** and **gender roles** in particular.



Discussion II

- In giving their opinions on the sensitive issues, both males and females were **more expressive** and **open** in **English** than in Chinese, which indicates a tendency to **switch** between different **socialcultural** and **cognitive thinking patterns**.



Discussion III

- The **consistency** in the participants' English and Chinese views was found only in those that were **typical of Asian values**.
- **Longer** sentences showed a shift of **social identities** toward typical **Western values**, or a **struggle** between Western and Asian values.



Conclusion I

- The results of the study to date **support** the **second hypothesis**.
- There is evidence to **support** the **first hypothesis**. However, **more detailed analysis** needs to be conducted to determine more precisely the types of social identities that undergo a re-shaping process.

Conclusion II

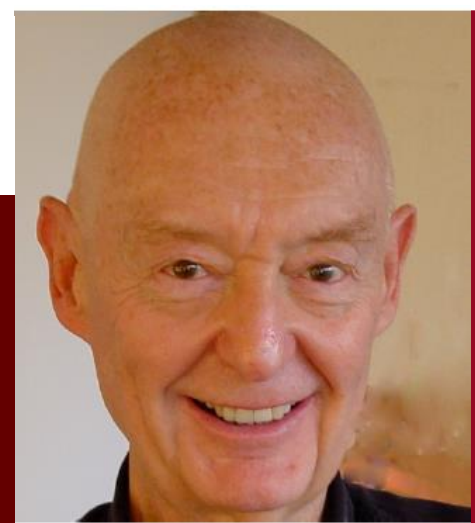
- The bilingual speakers were able to express their **social identities** and **values** in both languages.
- The participants did **not** show a **well-formed social and cognitive understanding** of **Western values**.
- However, They expressed more **inconsistent views** in English and Chinese, with **more elaborations of personal opinions** in English than in Chinese.

Conclusion III

- Many **linguistic, cognitive, and sociocultural features** were identifiable from the participants' use of English and Chinese.
- To some extent they reflect the **different patterns of thinking while speaking a particular language.**

Distinguished Public Lecture

Language and Thought *By Professor Georges-Maurice Halpern*



**Professor Georges M.
Halpern, MD, PhD**

Languages are human creations, tools we invent and hone to suit our needs. If people learn another language, they also learn a new way of looking at the world.

Language also plays a critical, causal role in cognition. Changing how people talk changes how they think: teaching a new way of talking about time gives them a new way of thinking about it. If people learn another language, they also learn a new way of looking at the world. When I switch from English to French, I start thinking differently. Not to mention when my wife switches from Japanese (for women) to French or English!

Date: 10 March 2016

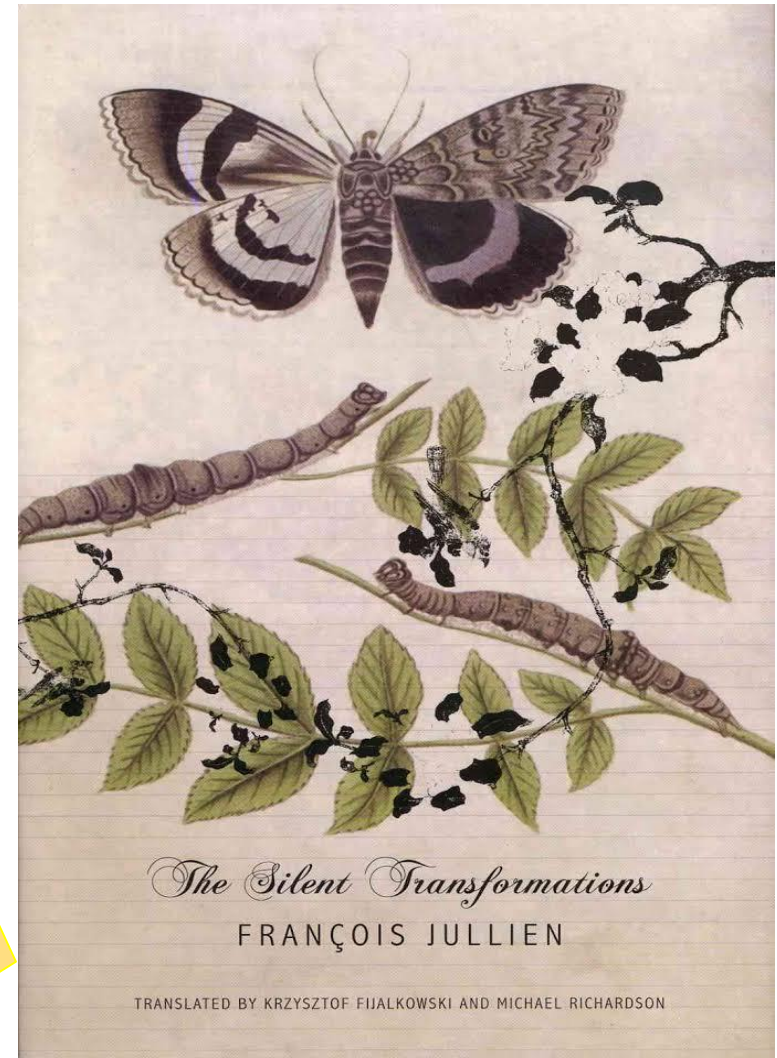
Time: 12:30pm to 2:00pm

**Venue: HSS Seminar Room
4 (HSS-B1-09)**

This book compares Western and Eastern - specifically Chinese - ways of thinking about time and processes of change. It argues that our failure to notice the effects of cumulative changes over time is due to Western thought's foundations in classical Greek philosophies.

How does our language grant and shape our sense of “being-ness?” What, if anything, is the beginning of things—and why does the answer matter?

“The Silent Transformations” reexamines “the basics” of epistemology and metaphysics and shows how it is possible to entertain and to profit from ideas that are often truly “alien” to western thinking. (Bill Churchill, 2015)



The Silent Transformations
by François Jullien

Thank you