'Who Is a Creative Person?'

– cross-cultural studies of creativity (implicit approach)

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abstract presentation

In our research:

- 1.we won't specify the characteristics of paintings in two cultures
- 2.we don't study the performance in creativity tasks in two cultures
- 3.we are not interested in opinions and views held by experts about creativity in two cultures
- 4.we don't search for the best definition of creativity in two cultures



What we intend to do is to discover the implicit belief systems held by people about creative person and creativity.

why this approach focused on implicit theories is crucial in intercultural research

Because

- a/ it is the only way to discover the common cultural views on creativity and
- b/ to reveal what people in a given community mean when referring to creativity and
- c/ it accounts for cross-cultural differences in human behavior
- this, in turn, is possible because the implicit theories about creativity:
- 1. are a kind of tacit knowledge held by an individuals
- 2. are the constructions of lay people
- 3. are derived from their belief systems (from inside of the mind)
- 4. they need to be discovered rather than invented
- 5. they function as internal standards to judge and assess both ourselves and others as creative ones
- 6. encapsulate the common cultural views on creativity and reveal what people in a given community mean when referring to creativity

Example 1.

In one study 60 adjectives were presented to people. 24 adjectives represented personality attributes of a creative person (has original ideas, innovative, flexible), 17 described traits linked with Chinese personality ("follows tradition", "submissive", "concerned with face", "obedient", and "conforming") and 11 with Western personality (motivated, willing to take a stand, self-confident, determined) and others

Respondents were asked to rate how well the given adjective describes a creative person. the scale ranged from 1 = not at all to 5 = extremely well

In Western studies frequently listed characteristics of a creative person include:

free spirit, non-conformist, individualistic, confident, assertive, daring, artistic, good aesthetic taste and sense of humour (Sternberg, 1985; Runco & Bahleda, 1987; Runco et al., 1993; Westby & Dawson, 1995).

In Mainland China, Hong Kong and Taiwan characteristics relating to sense of humour and aesthetics were almost non-existent (Rudowicz & Yue, 2000; Lam, 1996; Chan & Chan, 1999).

Example 2.

In the implicit studies researches try also to determine which domains of human activity are perceived as expressions of creativity.

One study showed that Hong Kong Chinese, in contrast to North Americans, identified creative achievement with financial and political accomplishments rather than with aesthetic or artistic ones. When responding to the request to nominate Hong Kong person(s) outstanding for creativity, they listed businessmen, fashion designers and politicians as the most creative (Rudowicz & Hui, 1998). Chinese university undergraduates from Mainland China, Hong Kong and Taiwan rarely nominated artists, writers and composers as creative persons (Yue & Rudowicz, 2002).

Conclusion: It seems that Chinese people care more about the creator's social influence, status, fame, charisma and contribution to society than for his/her contribution to culture.

presentation of our studies

1. our goals

2. methodology

- to choose the drawings of the most/least creative authors
- to rank these drawings
- to explain the choices
- to fill in the given questionnaires

3. main results

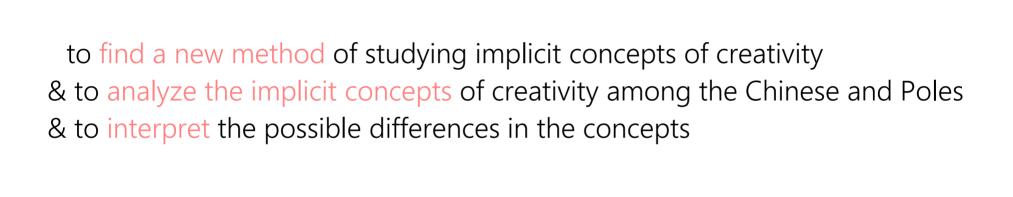
- choices and ranks
- verbal explanations
- questionnaires

4. interpretation

- convergent-divergent model of creativity (Guilford, 1967)
- enactivist model of creativity (Rucińska, 2018)

5. discussion

our goals



methodology

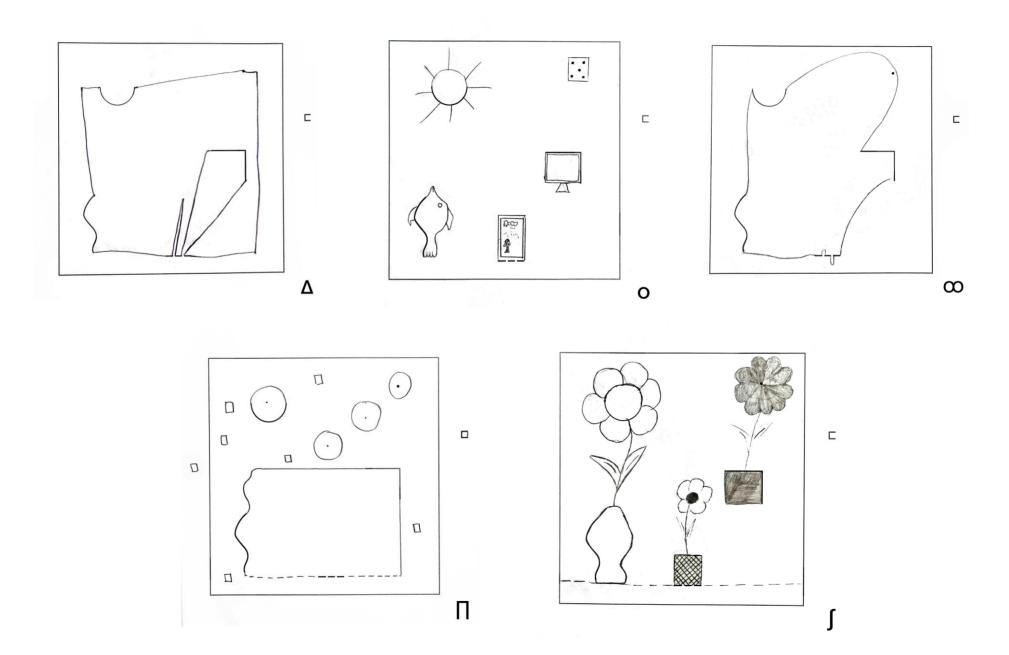
participants:

102 students from Poland, age 19-24 108 students from China, age 19-22

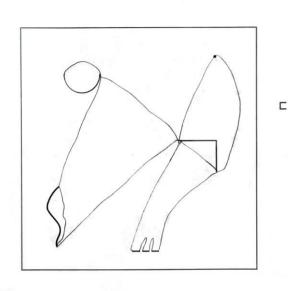
(in process: studies on students from Hong-Kong)

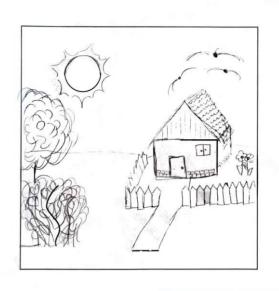
1. our participants saw some drawings (all drawings are grouped in 4 sets: 5 drawings per each set)

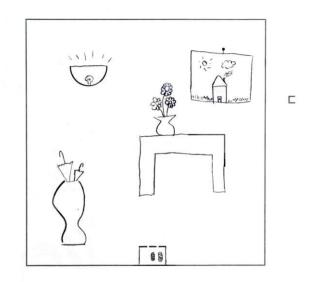
drawings in the set 1.

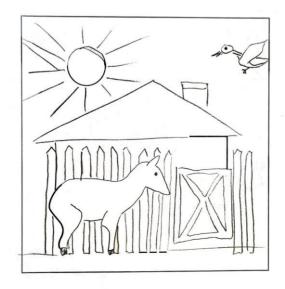


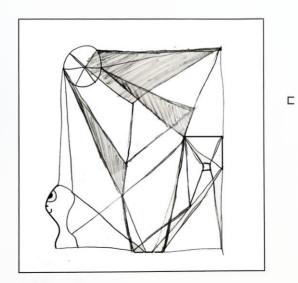
drawings in the set 2.











- 2. our participants evaluated creativity of the authors of the drawings. In each set:
 - a) they chose the drawing of the most creative author
 - b) they chose the drawing of the least creative author
 - c) they shortly explained their choices
 - d) they ranked all the drawings in each set

instruction: to choose, to explain, to rank

1. The author of which drawing is the most creative? Circle the symbol of the chosen picture.

$$\infty$$
 - \lceil - \rceil - \circ - \triangle

2. Why – in your opinion – is the author of this drawing the most creative one?

.....

3. The author of which drawing is the least creative? Circle the symbol of the chosen picture.

$$\infty$$
 - \int - \bigcap - \circ - \triangle

4. Why – in your opinion – is the author of this drawing the least creative one?

.....

5. Please evaluate and arrange the drawings according to the different degrees of the author's creativity which are reflected from the drawings. [...]

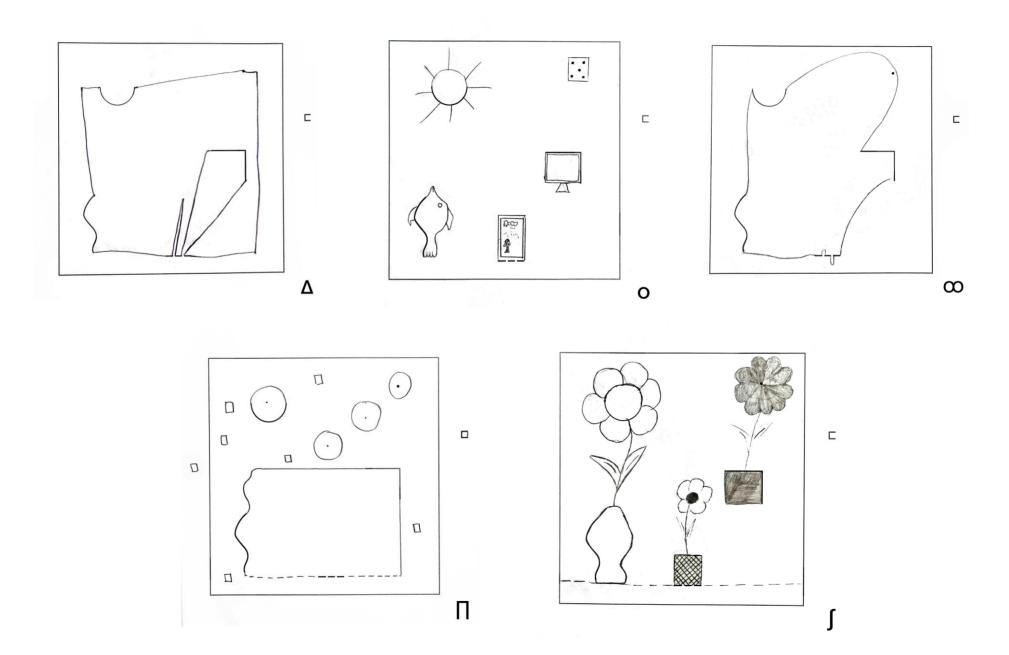
..... → → →

(the most creative) (the least creative)

3. our participants filled in the additional questionnaires

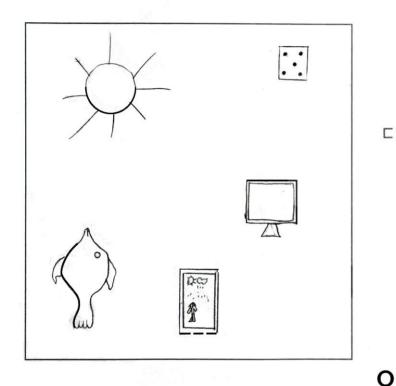
(Creative Mindset Scale, Creative Behaviour Questionnaire, Short Scale of Creative Self & Cultural Orientation Scale)

drawings in the set 1.



the choices of the drawings

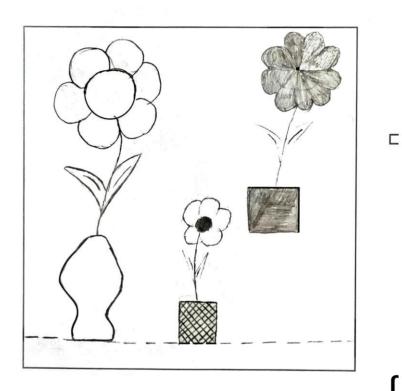
in the set 1.



The main choice of Poles 42 (41%)

(the Chinese: 18%)

$$z = 2,57, p < 0,01$$



The main choice of the Chinese 54 (50%)

(Poles: 25%)

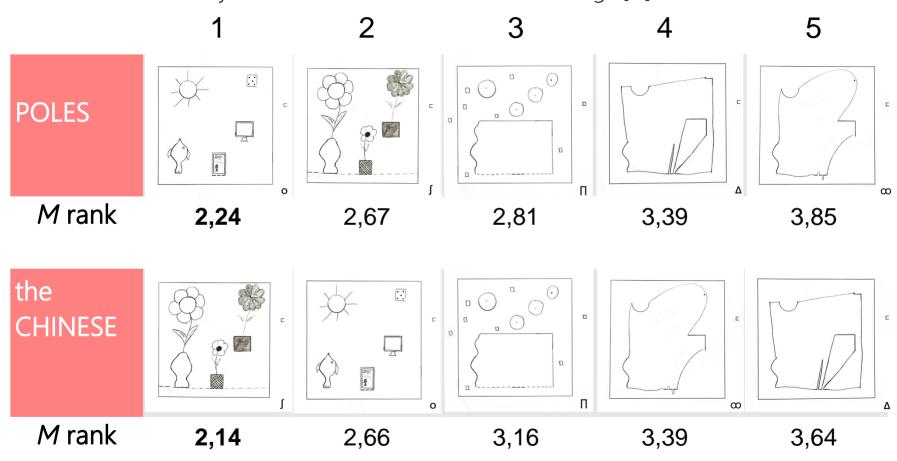
$$z = 2,63, p < 0,01$$

results: ranks

the ranks of the drawings

in the set 1.

"Please evaluate and arrange the drawings according to the different degrees of the author's creativity which are reflected from the drawings [...]"



the ranks of the aspects of the drawings

Our participants ranked the drawings.

These drawings have several aspects that have been earlier evaluated by experts,

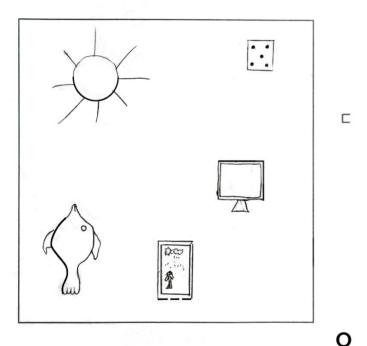
e.g.:

linear connections thematic connections non-stereotypicality unconventional manipulation

By ranking the drawings, our participants have also implicitly ranked the aspects of these drawings.

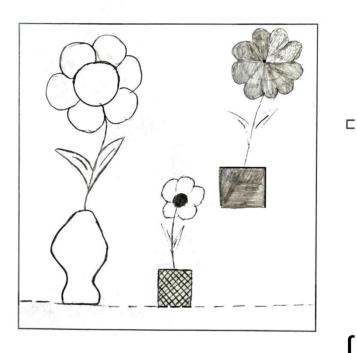
the ranks of the aspects of the drawings

Which aspects of the drawings chosen by our participants were the most essential in the expert evaluation?



- O
- 1. unconventional manipulation
- 2. originality (non-stereotypicality)

The main choice of Poles 42 (41%)



- 1 linear connections
- 2. thematic connections

The main choice of the Chinese 54 (50%)

the ranks of the aspects of the drawings in the set 1.

	POLES M rank	the CHINESE <i>M rank</i>
linear connections	94,8	115,6
thematic connections	94,5	115,9
unconventional manipulation	115,7	95,9
non-stereotypiciality	119,1	92,6

results: explanations

the explanations of the choices

Why is the author of this drawing the most creative one?

The most common tendencies in the explanation

Author has drawn many different elements that are not connected to one another.

The author associates things well.

He/she had many different ideas that were used in many different ways.

This picture has **united the fragmented draft** and thus it became **thematically coherent**.

He/she has presented many different motifs connected with different topics. This diversity looks to be creative.

The picture puts the fragmented drawings **together**, which gives it a **coherent theme**.

The author has created five pictures **unrelated** to one another.

The author deals well with the details on the vases. The flower on the right shows that the author was **careful** with that issue.

many, different, unrelated, diversity	unity, coherence, associations, carefulness
49 (48%) of Poles	52 (48%) of Chinese
22 (21,3%) of Chinese	27 (26,5%) of Poles

UTTERANCE CLASSIFICATION	Concrete	Abstract
因为这幅画画得比较真实具体。(12.1.2) Because this picture was painted more realistically, specifically.	1	-1
完全摸不透作者想要表达什么。太抽象了。(42.1.4) It's completely unclear what the author wants to say. Too abstract.	-1	1
极向往田园生活,而且这幅画让我联想到了真实的画面,并非虚构。(65.2.2) I very much yearn for the pastoral life, and this painting reminds me of the real picture, and not something fictional.	1	-1
安排也不合理,而墙壁上的图画比电脑放置的地方还要低,这很不合理。(52.1.4) The arrangement is unreasonable, and the position of the picture on the wall is even lower than the computer, it is very irrational.	1	-1

Concrete = drawing showing concrete objects taken from everyday life

Abstract = emergence of abstract, surreal, or fictional figures.

UTTERANCE CLASSIFICATION	Reality	Concrete	Fiction	Abstract
因为这幅画画得比较真实具体。(12.1.2) Because this picture was painted more realistically, specifically.	1	1	-1	-1
完全摸不透作者想要表达什么。太抽象了。(42.1.4) It's completely unclear what the author wants to say. Too abstract.		-1		1
极向往田园生活,而且这幅画让我联想到了真实的画面,并非虚构。(65.2.2) I very much yearn for the pastoral life, and this painting reminds me of the real picture, and not something fictional.	1	1	-1	-1
安排也不合理,而墙壁上的图画比电脑放置的地方还要低,这很不合理。(52.1.4) The arrangement is unreasonable, and the position of the picture on the wall is even lower than the computer, it is very irrational.	-1	1	1	-1

Reality (presenting sth known to the receiver) \neq Fiction (sth made up, not real) Concrete (sth recognizable to the receiver) \neq Abstract = (sth unrecognizable) Reasons for splitting –

- 1. Not concordant
- 2. 'abstract' but not 'fictional' when choosing the least creative work.

UTTERANCE CLASSIFICATION	Reality	Concrete	Fiction	Abstract
∞ Π Δ 三幅 过于抽象并且毫无美感,O显得过于简单。而∫虽然是画一朵普通的花[] (41.1.2) The three images ∞ Π Δ are too abstract and lack beauty, O is too simple. While ∫ painted an ordinary flower []		1		-1
其次是画中的河流 显来自于一个漏洞的锅,虽然这 个我看不懂 ,但觉得新奇。 (52.3.2) Secondly, the river flows from a leaky pot, although I don't get it, but it seems novel to me.	-1	1	1	-1
他将现实与想象两者结合起来,将现实的一些东西夸张化,将无可能发生的东西转化。(65.3.2) He combines both reality and imagination, exaggerates some real objects, and transforms into what may not have possibly happened.	-1	1	1	-1

Reasons for splitting -3. it is usually pointed out, that it does not matter whether it is fictional, as long as it is concrete for a painting to be creative.

CATEGORY - AESTHETIC IMPRESSION	
Positive	Negative
这幅画画得最好看。 (21.1.2) This painting looks best.	毫无结构美。(3.1.4) There is no structural beauty.
给予人美的感受。(4.4.2) It gives a feeling of beauty.	这幅画看起来毫无意义,也无美感。(41.4.4.) This painting does not seem to be meaningful or aesthetically pleasing.
好看但普通。(74.2.4) Pretty, though ordinary. 虽然美观,但体现不出创造。(37.3.4.) Although beautiful, it reflects no creativity. 虽然看上去不是十分丑,但是就给我一种很随便的感觉。(38.3.4) It's not that ugly, but gives me a careless impression.	[aesthetical value is a necessary condition (but not sufficient) to recognize creativity in a piece of work]
(?)喜欢几何作画。(39.2.2) I like geometrical paintings. (?) 十分趣味性。(60.3.2.) Very interesting.	(?) 没有任何可欣赏的地方。(61.4.4.) There is nothing to admire. (?) 画面没有强力,没有想象的空间。(14.4.4) No power, there is no room for imagination.

Row 1 & 2 – how is creativity and lack of it expressed in terms of aesthetic value

Row 3 – (left) aesthetic value is not sufficient for a painting to be creative (right) no choices of the most creative work whilst judging it 'ugly'.

Row 4 – is expanding the category into all possible impressions made on the receiver valid?

Carefullness and effort

Care +eff

难度大。(20.2.2)

High level of difficulty.

因为看上去没那么幼稚[...]**其余几幅画都是画一些我**们从幼儿园 **开始就有教**过的简笔画。(38.2.2)

Because it doesn't look as childish [...] the other paintings are like sketches we started learning since kindergarten.

因为画作的描绘很细致。(70.3.2)

Because the painting is very scrutinous.

因为作者只是把所有线条连起来。(6.1.4)

Because the author only linked all the lines.

线条虽清晰,感觉是随便连起来的。(9.1.4)

Although the lines are distinct, it seems they're randomly connected.

只是单纯连线。(37.2.4)

Just a simple connection.

只简单利用各部分线条,没有充分发挥其想象空间,依靠首尾相连。(43.2.4)

Just simple usage of each part of the lines, the imaginary space has not been elaborated completely, it was all based on connecting.

CAREFULNESS, EFFORT—the author has put a lot of effort in making the drawing; also, the drawing shows a meticulous manner

-1

results: questionnaires

CMS: The Creative Mindset (Karwowski, 2014)

The creative mindsets are beliefs about the stable (**fixed**) versus malleable (**growth**) nature of creativity. People with higher creative-growth mindset believe that creativity is conditioned by effort rather than an inborn quality.

The creative GROWTH MINDSET: I believe that creativity can be taught. The creative FIXED MINDSET: I believe that creativity is an inborn quality.

The Creative Mindset: items

The GROWTH mindset items

The FIXED mindset items

- 1. Everyone can create something great at some point if he or she is given appropriate conditions.
- 2. You either are creative or you are not even trying very hard you cannot change much.
- 3. Anyone can develop his or her creative abilities up to a certain level.
- 4. You have to be born a creator without innate talent you can only be a scribbler.
- 5. Practice makes perfect perseverance and trying hard are the best ways to develop and expand one's capabilities.
- 6. Creativity can be developed, but one either is or is not a truly creative person.
- 7. Rome wasn't built in a day each creativity requires effort and work, and these two are more important than talent.
- 8. Some people are creative, others aren't and no practice can change it.
- 9. It doesn't matter what creativity level one reveals you can always increase it.
- 10. A truly creative talent is innate and constant throughout one's entire life.

The Creative Mindset

	POLES <i>M</i>	the CHINESE <i>M</i>
GROWTH	3.79	3.83
FIXED	2.59	2.30

Stevenson & Stigler, 1992: in the collectivist Asian culture the focus on the possibility of growth and treating cognitive traits as malleable is stronger than in the West, which is characterized by higher individualism.

The Short Scale of Creative Self (Karwowski, 2012)

CSE (creative self-efficacy): It is a belief in one's creative capacities; a conviction about one's own capabilities to manage creative challenges (Bandura, 1997).

CPI (creative personal identity): It is a belief in importance of creativity for self-identity (Farmer, Tierney, & Kung-McIntyre, 2003). It is an appreciation of creativity and positive attitude toward it.

The Short Scale of Creative Self

CSE (creative self-efficacy)

CPI (creative personal identity)

- 1. I think I am a creative person.
- 2. My creativity is important for who I am.
- 3. I know I can efficiently solve even complicated problems.
- 4. I trust my creative abilities.
- 5. Compared with my friends, I am distinguished by my imagination and ingenuity.
- 6. I have proved many times that I can cope with difficult situations.
- 7. Being a creative person is important to me.
- 8. I am sure I can deal with problems requiring creative thinking.
- 9. I am good at proposing original solutions to problems.
- 10. Creativity is an important part of me.
- 11. Ingenuity is a characteristic which is important to me.

The Short Scale of Creative Self

	POLES M	CHINESE <i>M</i>
CSE (creative self-efficacy)	5.04	4.41
CPI (creative personal identity)	5.13	4.89

interpretation of the results

divergent / convergent model of creativity (Guilford, 1967)

divergent thinking: thinking in many different directions; the emphasis is upon variety and quantity of the output; a search for alternatives

convergent thinking: thinking about the best solution; the emphasis is upon appropriateness of the idea; a search for imperatives

aspects of **DIVERGENCE**

aspects of **CONVERGENCE**

1. DISPERSION

alternately, alternatively, fast, spontaneously, many directions, disconnection, chaos

QUANTITY

2.

3.

4.

a lot of, numerous, abundant, productively, smoothly

DIVERSITY

flexibly, complicated, differently, inconsistently, many aspects, mosaic, enrichment, hotchpotch

ORIGINALITY

novelty, uniqueness, extraordinarily, interestingly, differently, alternatively, surprisingly, phantasy, whim, freak, strangely, idea, imagination

CONCENTRATION

consistently, for a long time, persistently, concentration, connection, focus, attention, conception, order

QUALITY

thoroughly, specifically, meticulously, in detail, elaboration, refinement, time spent (on the activity)

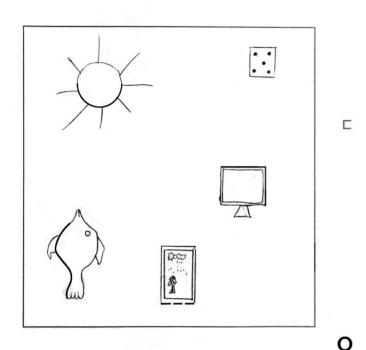
UNIFORMITY

coherently, homogeneously, simply, strongly, stubbornly

NORMALITY

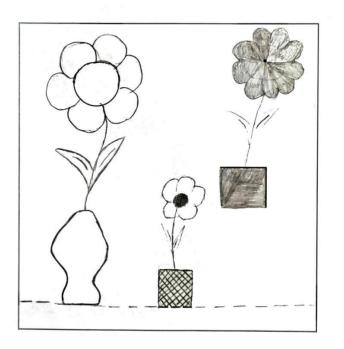
predictably, commonly, usually, comprehensibly, clearly, appropriately, thoughtfully

Which aspects of the most commonly chosen drawings were the most important during their evaluation by experts?



DIVERGENCE

- 1. unconventional manipulation
- 2. originality (not stereotyped)
- 3. no linear and thematic connections



CONVERGENCE

- 1. linear connections
- 2. thematic connections
- 3. supplementation (details)

Why is the author of this drawing the most creative one?

The most common tendencies in the explanation

Author has drawn many different elements that are not connected to one another.

The author associates things well.

He/she had many different ideas that were used in many different ways.

This picture has **united the fragmented draft** and thus it became **thematically coherent**.

He/she has presented many different motifs connected with different topics. This diversity looks to be creative.

The picture puts the fragmented drawings **together**, which gives it a **coherent theme**.

The author has created five pictures **unrelated** to one another.

The author deals well with the details on the vases. The flower on the right shows that the author was **careful** with that issue.

DIVERGENCE	CONVERGENCE	
49 (48%) of Poles	52 (48%) of Chinese	
22 (21,3%) of Chinese	27 (26,5%) of Poles	

Hypothetically, Poles (Polish students) have a more divergent concept of creativity, whereas Chinese (students) understand creativity in a convergent way.

the ranks of the aspects of the drawings in all sets

	POLES M rank	the CHINESE <i>M</i> rank
linear connections	97,2	113,3
thematic connections	96,0	114,4
unconventional manipulation	115,7	95,9
figurative and symbolic themes	115,7	95,9