Do political metaphors really matter ?

Two experiments assessing the political impact of metaphors on citizens' opinions towards Belgian federalism

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Introduction

- Interdisciplinary project
  - Linguistics & political science
  - Metaphors in political discourse
    - Context: Belgian federalism
  - Use of metaphors
    - Different kinds of political corpora
  - Production and reception
    - Political impact of metaphors?

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Belgian federalism?

3

La UE acerca posiciones con Valonia para salvar el acuerdo con Canadá

ÁLVARO SÁNCHEZ

El líder valón Paul Magnette habla de que aún hay "pequeñas dificultades" por resolver

BUSINESS NEWS | Tue Oct 11, 2016 | 11:54am EDT

Belgian region set to block EU-Canada free trade deal

Belgium

Ceta: les Belges se retrouvent à 10h, Justin Trudeau reste au Canada

C'est ce même jeudi qu'était prévu le sommet UE-Canada où le Ceta aurait dû être signé.

EU-Canada trade deal still delayed by Belgian regional parliament

Paul Magnette, head of the Belgian region of Wallonia, refuses to sign off on Ceta and says a visit from Justin Trudeau would seem like 'a confrontation'

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Du. "Normale partijen die een staatshervorming willen enzovoort die willen eigenlijke hetzelfde als we zo zeggen een ernstige *LAT relatie* in dit land." (PBN, M5, 3130-3131)'

c'est comme dans un *ménage*, on ne règle jamais les solutions une fois pour toutes. On *se marie, ou en vit ensemble*, peut importe, à 20 ans, puis on a des enfants, puis les enfants deviennent grands, puis le bonhomme fait sa crise de la quarantaine, puis on se dit que tout compte fait, on se dit que c'était quand même pas si mal et puis rien, et puis entre, temps, madame est ménopausée et puis... (...) puis...... Puis elle a perdu son job, puis les enfants se sont mariés, voilà que la maison est trop grande... les situations évoluent et je ne pense pas qu'on va rêver d'avoir une situation immuable. (PBF, B8, 1968-1977).

L2: "het is vergelijken met dat *huwelijk* he. De Belgische staat is een *gearrangeerd en geforceerd huwelijk* geweest." *(2263-2266)* (...)
L6: "het is inderdaad een *gearrangeerd huwelijk* en het is *gearrangeerd* door de internationale gemeenschap" (2268-2269) (...)
L6 : "een *gearrangeerd huwelijk* kan ook ontbonden worden, zo moeilijk is dat allemaal niet. Het moet gewoon erkend worden door de internationale gemeenschap." (2279-2280)
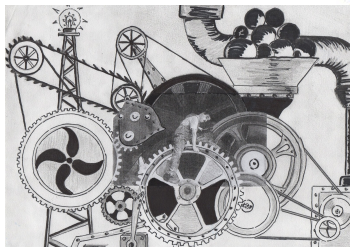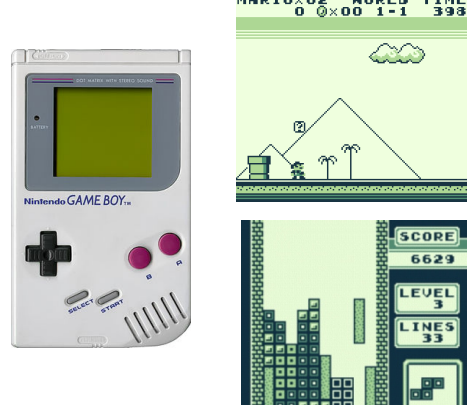L2: "ja maar dat *is getrouwd voor goede en kwade dagen* en wij zijn nu in kwade dagen." (2281-2282)
L6: "maar bij een *gearrangeerd huwelijk* is het niet *in goede en kwade dagen* vrijwillig, maar is het verplicht in *kwade* dagen. (...) ik hoop tch dat we zover zijn *dat huwelijken niet meer verplicht* zijn ofwel? " (2283-2287)

From Perrez & Reuchamps (2014, 2015) 5

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Fr. *On a coupé le citoyen du* fonctionnement *d'une espèce de* mécanisme, *de* machine folle lancée sur elle-même. (PBF, B8, 839-840)

Du. "Maar ik denk dat je kunt concluderen dat het federalisme zoals het nu is dat het niet *werkt*" (PBN, N4, 3318-3319)

From Perrez & Reuchamps (2014, 2015) 6

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La nouvelle répartition des compétences en Belgique

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Slide 8
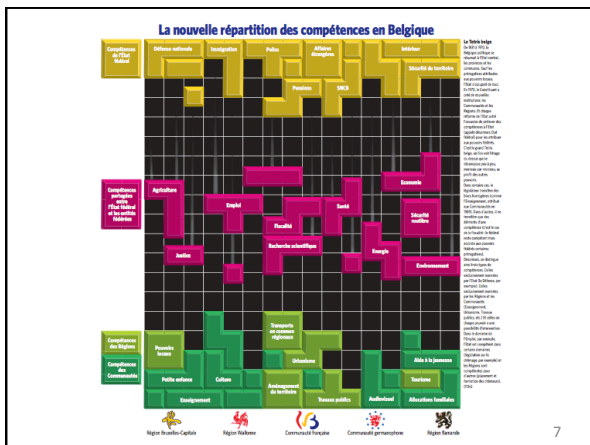
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Research question

- What political impact(s) could this metaphor have on the people to which it is addressed.
- Crucial question in CL
  - CMT (Lakoff & Johnson 1980)
  - Metaphors have the ability of highlighting and hiding specific aspects of a target concept
- **Framing**
  - "[…] select[ing] some aspects of a perceived reality and mak[ing] it more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the described item" (Entman, 1993: 52)
  - "Metaphor helps construct particular aspects of reality and reproduce (or subvert) dominant schemas (Koller 2009: 121)
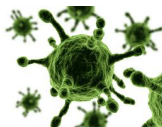
9

Do metaphors influence reasoning?

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CRIME

Thibodeau & Boroditsky 2011, 2013

MORE SOCIAL INTEGRATION
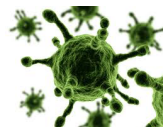
MORE REPRESSION

11

CRIME

Thibodeau & Boroditsky 2011, 2013

MORE SOCIAL INTEGRATION

« even minimal metaphors can significantly shift people's representations and reasoning about important real-life domains »

MORE REPRESSION

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Do metaphors influence reasoning?

- Thibodeau & Boroditsky 2011, 2013
  - Crime = virus => more social integration
  - Crime = beast => more repression
- Steen, Reijnierse & Burgers 2014; Reijnierse, Burgers, Krenmayr & Steen (2015)
  - Reading about crime increases people's overall preference for enforcement, regardless of the metaphorical frame
  - => Under which circumstances do metaphors influence reasoning?

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XP design

- Central questions
  - Does the Tetris metaphor have an impact on the **representations** of Belgian federalism by the citizens?
  - Do these representations lead to different opinions about **regional autonomy**?
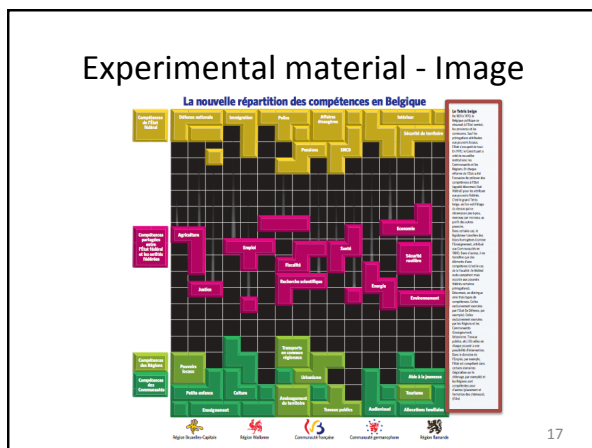
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Tetris Metaphor

- 2 experiments (Online, limeSurvey protocol)
  - Experiment 1 (2013)
    - Linguistic analysis
    - Political scientific analysis
  - Experiment 2 (2014)
    - Linguistic analysis
    - Political scientific analysis

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Experiment 1

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Experimental material - Image

La nouvelle répartition des compétences en Belgique

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Experimental material - Text

Le Tetris belge

De 1831 à 1970, la Belgique politique se résumait à l'Etat central, les provinces et les communes. Sauf les prérogatives attribuées aux pouvoirs locaux, l'Etat s'occupait de tout. En 1970, le Constituant a créé de nouvelles institutions : les Communautés et les Régions. Et chaque réforme de l'Etat a été l'occasion de prélever des compétences à l'Etat (appelé désormais Etat fédéral) pour les attribuer aux pouvoirs fédérés. C'est le grand Tetris belge, où l'on voit l'étage du dessus qui se décompose peu à peu, morceau par morceau, au profit des autres pouvoirs. Dans certains cas, le législateur transfère des blocs homogènes (comme l'Enseignement, attribué aux Communautés en 1989). Dans d'autres, il ne transfère que des éléments d'une compétence (c'est le cas de la fiscalité : le fédéral reste compétent mais accorde aux pouvoirs fédérés certaines prérogatives). Désormais, on distingue ainsi trois types de compétences. Celles exclusivement exercées par l'Etat (la Défense, par exemple). Celles exclusivement exercées par les Régions et les Communautés (Enseignement, Urbanisme, Travaux publics, etc.). Et celles où chaque pouvoir a une possibilité d'intervention. Dans le domaine de l'Emploi, par exemple, l'Etat est compétent dans certains domaines (législation sur le chômage, par exemple) et les Régions sont compétentes pour d'autres (placement et formation des chômeurs). *
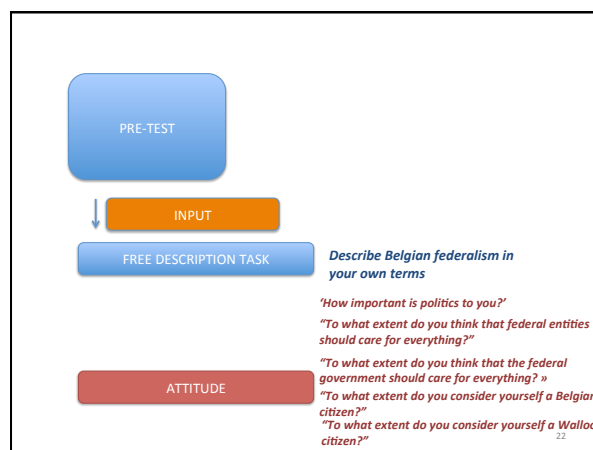
18

The Belgian tetris

From 1831 to 1970, Belgium came down to the central state, the provinces and the municipalities. Except for the prerogatives devolved to the local authorities, the State took care of everything. In 1970, the constituent power created new institutions: communities and regions. And every state reform has been the occasion to take competences from the state (from there on called the federal state) to redistribute them to federal authorities. This is the big Belgian Tetris, where we see the upper floor that is falling apart (decomposing) , block by block, at the benefit of other authorities. In certain cases, the legislator is transferring homogeneous blocks (like education, handed over to the communities in 1989). In other cases, what is involved is just transferring some elements of a competence (it's the case of tax system: the federal state remains competent but assigned certain prerogatives to the federal entities). From now on, we therefore make a distinction between three types of competences. The ones that are exclusively exercised by the federal state (like Defense, for example). The ones that are exclusively exercised by the Regions and Communities (Education, Town planning, Public works, and so on). An the ones for which each power has some possibility of intervention. In the area of employment, for instance, the (federal) State is competent for certain domains (unemployment legislation, for instance) and the Regions are in charge of other ones (training courses of unemployed people).
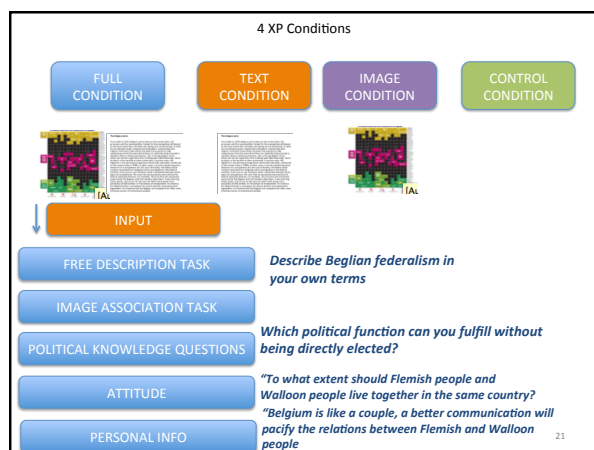
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The Belgian tetris

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4 XP Conditions

| FULL CONDITION | TEXT CONDITION | IMAGE CONDITION | CONTROL CONDITION |

INPUT

FREE DESCRIPTION TASK — *Describe Beglian federalism in your own terms*

IMAGE ASSOCIATION TASK

POLITICAL KNOWLEDGE QUESTIONS — *Which political function can you fulfill without being directly elected?*

ATTITUDE — *"To what extent should Flemish people and Walloon people live together in the same country?*

PERSONAL INFO — *"Belgium is like a couple, a better communication will pacify the relations between Flemish and Walloon people*

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PRE-TEST

INPUT

FREE DESCRIPTION TASK — *Describe Belgian federalism in your own terms*

'How important is politics to you?'
"To what extent do you think that federal entities should care for everything?"

"To what extent do you think that the federal government should care for everything? »

ATTITUDE — *"To what extent do you consider yourself a Belgian citizen?"*
"To what extent do you consider yourself a Walloon citizen?"

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Hypotheses

H1. In the absence of metaphor, identitarian accounts would prevail in the participants' representations of Belgian federalism

H2A. In the absence of metaphor, participants are more unitarist

H2B. When exposed to the metaphor, participants are more regionalist.

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XP design

- Central questions
  - Does the Tetris metaphor have an impact on the representations of Belgian federalism by the citizens?
  - If it does, what type of impact?
- Independent variables
  - 4 xp conditions (various degrees of exposure to input material)
  - Pre-test – post-test
- Dependent variables
  - Representation of Belgian federalism
    - Description task
    - Image association
  - Attitude towards Belgian federalism
    - Statements on a Likert-scale

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Participants

- 1st y. French-speaking bachelor students
- Modern Languages + social and political sciences
- Pre-test: N = 493

	Pre-test		Post-test	
	N	%	N	%
Control condition	126	25.6	82	27.4
Full condition	125	25.4	79	26.4
Image condition	114	23.1	65	21.7
Text condition	128	26.0	73	24.4
Total	493	100.0	300	100.0

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Participants

Table 1. Participants' profile across the experimental conditions

	N	%	PK (0-5)	PI (0-10)	Gender (% Men)	Belgian (0-10)	Walloon (0-10)
Control	131	25.8	2.85	5.96	49.2	8.15	6.44
Full	131	25.8	2.88	5.88	47.7	8.61	6.84
Picture	120	23.6	2.90	5.67	41.8	8.76	6.63
Text	126	24.8	2.83	5.64	44.4	8.51	6.34
Total	508	100.0	2.87	5.79	45.9	8.50	6.56
Chi² test	-	-	$F_{(0.127)}$=.078 p=.927	$F_{(3.16)}$=.551 p=.648	$F_{(0.138)}$=.554 p=.646	$F_{(8.22)}$=1.51 p=.328	$F_{(6.237)}$=0.458 p=.712

Key: PK= political knowledge, PI=political interest

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XP1 - Results

- Analysis of the description task
  - Thematic domains

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Table 2. Coding scheme for the free description task about representation of Belgian federalism

Thematic domains	Content
Control	No text / plagiarism
History	Reference to the 1831 creation and/or early process of federalization in the 1970s
Institutions	Federal (but not federalism), unitary, central/national, substate, community, region, province/commune
Identity	Belgium, Flanders, Wallonia, Brussels, Wallonia-Brussels and Europe and all their related adjectives
Linguistic	Dutch-speaking, French-speaking and German-speaking
Organization (balance of power)	Distribution of competences/powers, autonomy, centripetal nature, centrifugal nature and the number of specific competences mentioned in the response.
Dynamics	Federalism is perceived positively, federalism is perceived negatively, complexity, conflicts, linguistic/cultural nature, community nature and territorial nature

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XP1 - Results

Table 4. Percentage of the six thematic dimensions of participants' representations of Belgian federalism by group

	G1 (Control group)	G2 (Picture +Text)	G3 (Picture only)	G4 (Text only)	Chi-square tests
History	5,0%	**12,8%**	0,6%	**25,8%**	(57.82, df = 3)****
Institutional	56,1%	**68,6%**	48,5%	**68,4%**	(19.274, df = 3) ****
Identity	**51,1%**	32,1%	21,5%	25,2%	(34.99, df = 3) ****
Linguistic	**7,2%**	3,2%	4,3%	2,6%	(4.45, df = 3)
Organization	61,9%	**66,0%**	46,6%	**65,8%**	(16.866, df = 3) ****
Dynamic	**40,3%**	19,9%	22,7%	18,7%	(23.27, df = 3) ****

Sig. codes: ****p<.000

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Hypotheses

H1. In the absence of metaphor, identitarian accounts would prevail in the participants' representations of Belgian federalism

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XP1 - Results

- Attitude towards **regional autonomy**?

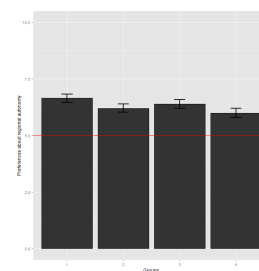*"To what extent do you think that federal entities should care for everything?"*

1 ●———●———●———●———●———●———●———●———●———● 10

"To what extent do you think that the federal government should care for everything? »

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XP1 - Results

Figure 4. ANOVA of participants' preferences about regional autonomy

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XP1 - Results

Table 5. Multivariate linear regression of participants' preferences about regional autonomy

	Beta	Std. error	Pr(>|t|)	
(Intercept)	6.105	0.474	0.000	****
Gender	0.258	0.199	0.196	
Belgian	0.082	0.043	0.054	*
Walloon	-0.093	0.031	0.003	***
Political knowledge	-0.143	0.083	0.085	*
Political interest	0.124	0.045	0.006	***
Groups (Ref= control group)				
G2 (text + picture)	-0.469	0.265	0.077	*
G3 (picture only)	-0.248	0.273	0.365	
G4 (text only)	-0.658	0.267	0.014	**

N=481 observations

F-statistic: 3.894 on 8 and 462 DF (****)

R²= 0.063, Adjusted R²=0.047

Sig. codes: ****p<.000, ***p<.001, **p<.01, **p<.05, *p<.10

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Hypotheses

H2A. In the absence of metaphor, participants are more unitarist

H2B. When exposed to the metaphor, participants are more regionalist.

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Political knowledge*xp condition
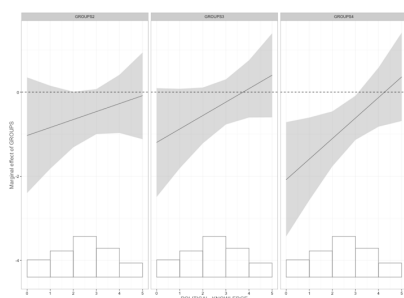
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XP1 – Main findings

- Subject who have been submitted to the textual stimulus tend to:
  - Highlight **different aspects** of Belgian federalism in their descriptions
    - System vs. identity
  - Express different preferences vis-à-vis regional autonomy
  - Important **interaction** between **political knowledge**, text condition and political preferences
    - Low level of political knowledge = greater inclination towards more regional autonomy

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30/03/17

XP1 – Main findings

- BUT
  - Effect of the text >< effect of the metaphor
    - However, reading the text appears to have an impact on the representations of the participants, which might suggest an indirect impact of the metaphor.
    - Our xp design does not allow us to determine the specific role of the Tetris metaphor

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Experiment 2

- 2 versions of the experimental text
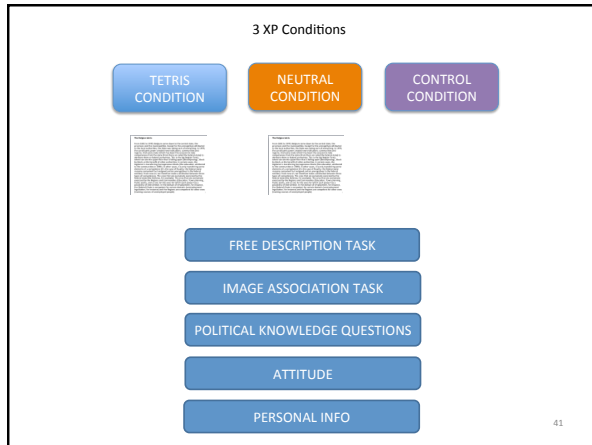 - Original version with the Tetris metaphor
  - Neutral version without the Tetris metaphor

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The Belgian tetris

From 1831 to 1970, Belgium came down to the central state, the provinces and the municipalities. Except for the prerogatives devolved to the local authorities, the State took care of everything. In 1970, the constituent power created new institutions: communities and regions. And every state reform has been the occasion to take competences from the state (from there on called the federal state) to redistribute them to federal authorities. This is the big **Belgian Tetris**, where we see the **upper floor** that is **falling apart** (decomposing) , **block** by **block**, at the benefit of other authorities. In certain cases, the legislator is transferring homogeneous **blocks** (like education, handed over to the communities in 1989). In other cases, what is involved is just transferring some elements of a competence (it's the case of the tax system: the federal state remains competent but assigned certain prerogatives to the federal entities). From now on, we therefore make a distinction between three types of competences. The ones that are exclusively exercised by the federal state (like Defense, for example). The ones that are exclusively exercised by the Regions and Communities (Education, Town planning, Public works, and so on). An the ones for which each power has some possibility of intervention. In the area of employment, for instance, the (federal) State is competent for certain domains (unemployment legislation, for instance) and the Regions are in charge of other ones (training courses of unemployed people).

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The Belgian tetris federalism

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3 XP Conditions

| TETRIS CONDITION | NEUTRAL CONDITION | CONTROL CONDITION |

FREE DESCRIPTION TASK

IMAGE ASSOCIATION TASK

POLITICAL KNOWLEDGE QUESTIONS

ATTITUDE

PERSONAL INFO

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Participants

- 1st y. French-speaking bachelor students
- Modern Languages + social and political sciences
- N = 340

Participants / xp condition	
Control condition	110
Neutral condition	114
Tetris condition	116
Total	**340**

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Participants

Table 2. Participants' profile across the experimental conditions

	N	%	PK (0-4)	PI (0-10)	Gender (% Men)	Belgian (0-10)	Walloon (0-10)
Control	110	32.5	2.19	5.71	47.4	9.45	7.41
Neutral	114	33.1	2.40	5.77	49.8	9.51	7.30
Tetris	116	34.5	2.41	5.58	46.4	9.80	7.29
Total	340	100	2.33	5.69	47.8	9.59	7.33
Chi² test	-	-	$F_{(2)}=3.152$ p=.04*	$F_{(2)}=.399$ p=.671	$F_{(2)}=.226$ p=.798	$F_{(2)}=1.063$ p=.346	$F_{(2)}=0.07$ p=.933

Key: PK= political knowledge, PI=political interest.

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XP2 - Hypotheses

H1. In the absence of metaphor, identitarian accounts would prevail in the participants' representations of Belgian federalism

H2A. In the absence of metaphor, participants are more unitarist

H2B. When exposed to the metaphor, participants are more regionalist.

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XP2 - Results

- Analysis of the description task
  - Thematic domains

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Table 2. Coding scheme for the free description task about representation of Belgian federalism

Thematic domains	Content
Control	No text / plagiarism
History	Reference to the 1831 creation and/or early process of federalization in the 1970s
Institutions	Federal (but not federalism), unitary, central/national, substate, community, region, province/commune
Identity	Belgium, Flanders, Wallonia, Brussels, Wallonia-Brussels and Europe and all their related adjectives
Linguistic	Dutch-speaking, French-speaking and German-speaking
Organization (balance of power)	Distribution of competences/powers, autonomy, centripetal nature, centrifugal nature and the number of specific competences mentioned in the response.
Dynamics	Federalism is perceived positively, federalism is perceived negatively, complexity, conflicts, linguistic/cultural nature, community nature and territorial nature

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XP2 - Results

Descriptive task	Control group	Neutral text	Tetris metaphor	Chi-square tests
History	10,9%	31,6%	27,6%	(14,903, df=2)****
Institutional	82,7%	90,4%	93,1%	(6,526, df=2)**
Identity	64,5%	40,4%	44,0%	(15,199, df=2)****
Linguistic	14,5%	3,5%	0,9%	(20,348, df=2)**
Organizational	54,5%	80,7%	89,7%	(40,11, df=2)****
Dynamic	8,2%	3,5%	4,3%	(2,7781, df=2)

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Hypotheses

H1. In the absence of metaphor, identitarian accounts would prevail in the participants' representations of Belgian federalism

// XP1

No differences between the neutral condition and the Tetris condition

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XP2 - Results

- Attitude towards **regional autonomy**?

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XP2 - Results

NS - $F_{(2,339)}$=.524, p=.593

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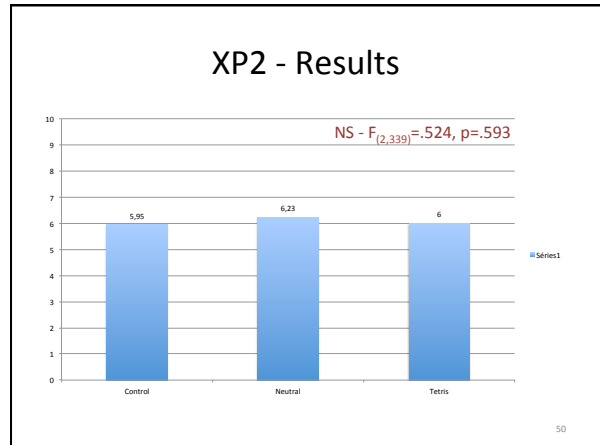
XP2 - Results

Determinants of participants' preferences about regional autonomy

	Beta
Gender	-0.240
	(0.226)
Belgian identity	0.051
	(0.050)
Walloon Identity	-0.025
	(0.038)
Political knowledge	0.089
	(0.124)
Political interest	0.068
	(0.057)
Neutral conditions(ref=control)	0.270
	(0.288)
Tetris conditions	-0.006
	(0.290)
Constant	5.431***
	(0.686)
Observations	340
R^2	0.020
Adjusted R^2	-0.0002
Residual Std. Error	2.151 (df = 332)

Hypotheses

H2A. In the absence of metaphor, participants are more unitarist

H2B. When exposed to the metaphor, participants are more regionalist.

>< XP1

No differences between the neutral condition and the Tetris condition

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Political knowledge*xp condition
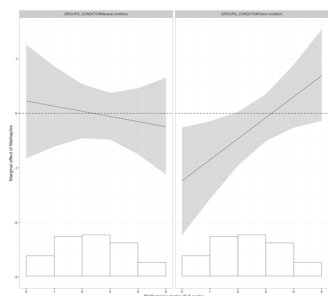
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XP2 – Main findings

- Subject who have been submitted to the textual stimulus do show different preferences vis-à-vis regional autonomy

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XP2 – Main findings

- Subject who have been submitted to the textual stimulus tend to:
  – Highlight different aspects of Belgian federalism
    - System vs. identity
  – // XP1
- Neutral vs. tetris conditions
  - Main effect: tetris metaphor **does not lead** the participants to have different political preferences regarding regional autonomy
  - Significant interaction with political knowledge

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Discussion

- **Framing?**
  - Under what conditions can a given metahor influence the perception of political issues?
    - 'Raising questions about when metaphors do and do not influence reasoning' (Steen et al 2014)
  - Important role of political knowledge on the possible effects of framing
  - Other parameters of metaphorical mappings
    - **Aptness?**
      » « the degree to which a metaphor vehicle captures important features of a metaphor topic » (Thibodeau & Durgin 2011: 206)
    - **Extendness?**
      » Support for a given metaphor?
    - **Frequency?**
      » How often have been exposed to a given metaphor
    - **Deliberateness?**
      » Has a metaphor been produced intentionally to achieve a particular goal in communication?

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Further work

- Replicate experiment 2
  - Representative sample of citizens
  - Aptness
    - Extension to other metaphorical domains
  - Deliberateness
- Design a new experiment
  - Socio-economic issues
  - Universal basic income
  - Under analysis

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