

« Trace » notion in the interaction multimodal analysis in multi-players videogames context : a CA point of view

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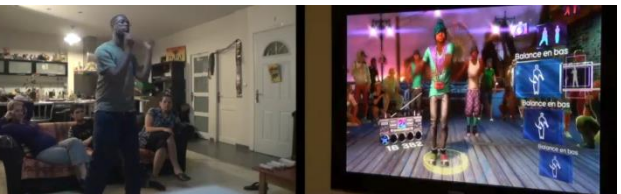
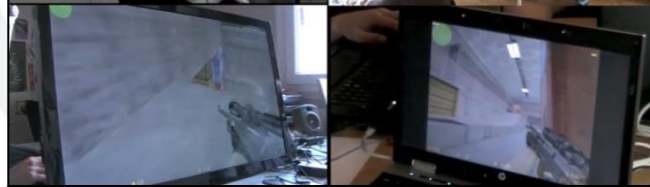
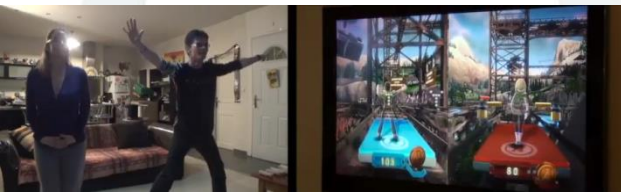
1. LUDESPACE project
2. What is a digital trace of interaction in the video/digital games context ?
3. Example 1: the management of disagreement
4. Multimodal analysis in CA
5. Example 2: identification work analysis
6. Additional remarks

1. LUDESPACE project

- ANR program « Young Researchers » (2011-2014).
- Pluridisciplinary reflexion with researchers on geography, sociology, education sciences, philosophy.
- **Aims:** to provide an overview and a mapping of video games practices in France.
- 4 issues:
 - Players diversity: who play ?
 - Players practices: where and on what spatial configuration?
 - Games activities, games commitments: how play the gamers?
 - Interactions: nature of the exchanges (between players; between players/consoles) in the time and space of game
- **Methodology:**
 - National survey
 - Semi-conducted interviews
 - Audiovisual recording of natural situations of videogames

1. LUDESPACE project

- 9 on 12 videogames situations recorded ([Colón de Carvajal, 2013](#))
- 5 variables : game places (bedroom, sitting room, etc.); geographic situations (country, city, etc.); number of players; console/support medium; type of games



1. LUDESPACE project

- Changes in or out the game
- Return on the gaming experience, memorable moment in game, debrief after game, nostalgia.
- Space diversion vs appropriation (in + out the game)
- Pleasure vs displeasure
- Identification / reference questions (players, avatars, objects, etc.), what results for the current activity
- Disagreement: managements and results
- Space perception in game
- Player skills, at what level
- Cross conversations, unfinished interactions
- Competition in game (even in a cooperative game)

2. What is a digital trace of interaction in the video/digital games context ?

- Digital traces = « digital *footprint* » ? ... NOT in Conversational Analysis
- In CA, digital traces
 - are transcriptions of vocal clues
 - are transcriptions of non-vocal clues
(both aligned temporally)
 - are created by a human work
 - can be temporally & synchronously aligned to the audiovisual signal
 - are a qualitative work that can be linked to a semi-automatic encoding
 - can be digitally represented by pictures aligned to the vocal clues
- **Digital traces for a multimodal analysis, from a CA point of view, in video games context = importance of screen, avatar and/or player activity... linked to linguistic issues**

3. Example 1a: the management of disagreement

1/ MARIO_ils sont horribles

Sync mario codage « type énoncé > ils sont horribles »

1/ MARIO_ils sont horribles

```
1  DOM  [attends Lucas/ °atten:ds/] Lucas/°
2  VER  [attendez-moi::// ]
3  LUC  ben attends attends/ xxx [xxx ]
4  DOM  [non:::/]
5      (1.7)
6  LUC  t` as peur hein/
7      (0.4)
8  →LUC [((rire)) (1.2) (2.5)]
9  →VER [((rire)) ] [((rire))]
10 →LEA [((rire)) ] [eh oh/ ] vous vous mettez tous en A/
11      d'accord//
12      (0.3)
13 →evt <((rire général des 4 joueurs)) (0.5) (2.8)>
14 LEA  VITE EN A/ VITE VITE VITE EN A VERO/ EN A VERO// EN-
15 →DOM <((rire)) (0.5)>
16 →    [((rire)) ]
17 →LUC [<mais non pas en A::/ ((en riant))>] [((rire)) (2.6)]
18 →DOM [((rire)) (2.6)] <i`s sont
19 →    horribles ((en riant))>
20 →evt <((rire général des 4 joueurs)) (2.5)>
21 LUC  tu nous dis de mettre en A/ mais mario i` fait pas l` boulot//
22 LEA  [ouais/ ben ouais/ mario merde/]
23 →VER [((rire)) ]
24      (0.2)
25 DOM  ben oui mais si vous êtes pas en- là j` suis bloqué/ j` peux pas
26      avancer//
```


1/ MARIO_ils sont horribles

```
1  DOM  #[attends Lucas/ °atten:ds/] Lucas/°
2  VER  [attendez-moi:://      ]
3  LUC  $ben attends attends/ xxx [xxx      ]
4  DOM  [non::://]
    Aluc  $saute cinq fois vers l'anneau sans le toucher-->7
5      (1.7)
6  LUC  t` as peur hein/
7      (0.4)$
    Aluc  -->$

8  →LUC  [((rire)) (1.2) $#(2.5)]
9  →VER  [((rire))      ] [((rire))]
10 →LEA  [((rire))      ] [eh oh/  ] vous %vous mettez tous en A/$%
    Aluc  $saute trois fois vers l'anneau sans le toucher $
    ecr   #Aver rejoint le groupe
    Adom  %s'approche de Aluc      %
11      $d'accord//
    Aluc  $saute vers l'anneau et le touche-->
12      (0.3)$
    Aluc  -->$
13 →evt  $<((rire général des 4 joueurs)) (0.5) %(2.8)>
    Aluc  $se met en bulle
    Adom  %court pour éviter les
          blocs qui tombent-->
14  LEA  VITE EN A/ +VITE VITE VITE EN A %VERO/ @EN A VERO// EN-
    Alea  +se met en bulle
    Adom  -->%se fait tuer par un bloc
    Aver  @se met en bulle
15 →DOM  <((rire)) (0.5)>
16 →      [((rire))      ]
17 →LUC  [<mais non pas en A::/ ((en riant))>] [((rire)) (2.6)]
18 →DOM  [((rire)) (2.6)] <i`s sont
19 →      horribles ((en riant))>
20 →evt  <((rire général des 4 joueurs)) (2.5)>
```

4. Multimodal analysis in CA

- **First constraint:** to explicit / describe the non-vocal clues in the transcriptions to ensure the understanding of the analysis the most clear, complete but brief as possible without playing the video (in an article for example),
- **Second constraint:** explicitation or description of non vocal clues are still not all generalizable in our conversationalist community. It depends of the datas analyzed,
- **Third constraint:** in video games context, explicitation or description of non vocal clues are not systematically relevant. It depends of our researchs problematics.

Example 1b: the management of disagreement

2/ TRaider_nan mais ouais mais elles sont trop hautes

(19 mai « saute y a des parois »)

2/ TRaider_nan mais ouais mais elles sont trop hautes

1 LUC tu peux pas sauter là//
2 (2.3)
3 GRE sauter où/
4 (0.3)
5 LUC ben là// t`as la paroi// <((souple)) (2.0)>
6 GRE °°de quoi x°°
7 (..)
8 LUC là\ retournes toi\
9 (0.9)
10 LUC tourne toi là\
11 (1.1)
12 LUC voilà\ là le le le t- LÀ::://
13 (0.7)
14 LUC là\
15 (0.7)
16 LUC là\ tu sautes/ et tu t'accroches\ où y a des parois\
17 (1.3)
18 LUC saute/
19 (4.2)
20 LUC °°là saute\ nan t`es trop loin j`pense\°°
21 (1.3)
22 LUC nan là y en a pas\
23 (5.5)
24 LUC [tu comprends/ c`que j`veux dire/]
25 →GRE [nan mais ouais ouais mais elles sont] trop hautes/ là les parois\
26 (0.3)
27 LUC (un bon) ben j`pense qu'il fallai::t sauter xxx xx

1 LUC \$tu peux pas sauter là// \$
lucG \$pointe du doigt vers la télé\$



ecr #vue A -->5

2 (2.3)
3 GRE sauter où/
4 (0.3)

5 **LUC ben \$là// t` as la paroi// \$ #<((souple)) (2.0)>**
lucG \$pointe de la main vers la télé\$



ecr -->#vue B -->10

6 GRE °°de quoi \$x°°
lucG \$redresse son buste et se recale dans le canapé-->8

7 (...)
8 **LUC là\ retournes toi\ \$**
lucG -->\$

9 (0.9)
10 **LUC \$#tourne toi là**

lucG \$rotation de la main droite -->12

ecr #vue C -->12



11 (1.1)
12 LUC voilà\ là \$#le le le t- LÀ: :// \$#
lucG -->\$signe de la main gauche vers la gauche\$
ecr #vue D #



13 #(0.7)
ecr #vue E -->>

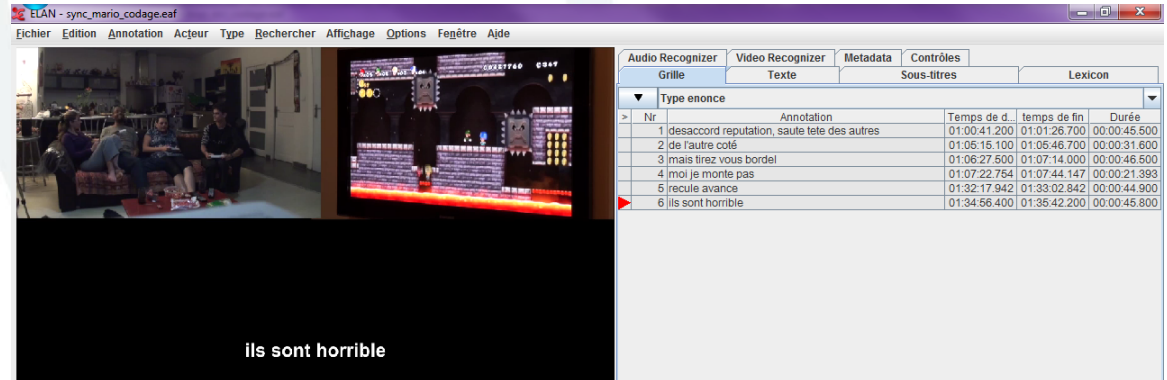


14 LUC \$là\
lucG \$pointe vers la gauche-->16
15 (0.7)
16 LUC là\ tu sautes/\$ et tu t'accroches\ où y a des parois\
lucG -->\$
17 (1.3)
18 LUC saute/
19 +(4.2)
Agre +saute pour essayer de s'agripper à la paroi-->22
20 LUC °°là saute\ nan t` es trop loin j` pense\°°

5. Example 2: identification work analysis

- For a multimodal analysis in CA, how to collect digital traces ? With what tools?
 - ELAN software:
 - Allows to multiply the coding/description/annotation lines,
 - Allows to create lists of preset item (via drop-down menus),
 - Etc.

- Pronom IL [3]
- Identification [218]
- Production [218]
- Reponse [221]
- Type Jeu [217]
- Equipe Producteur [217]
- Resultat Partie [216]
- Moment Partie [217]
- Phase Jeu/Hors jeu [217]
- Delai Reponse [217]
- Forme identification [217]
- Regard [1]
- Action Avatar [2]
- Info Ecran [1]

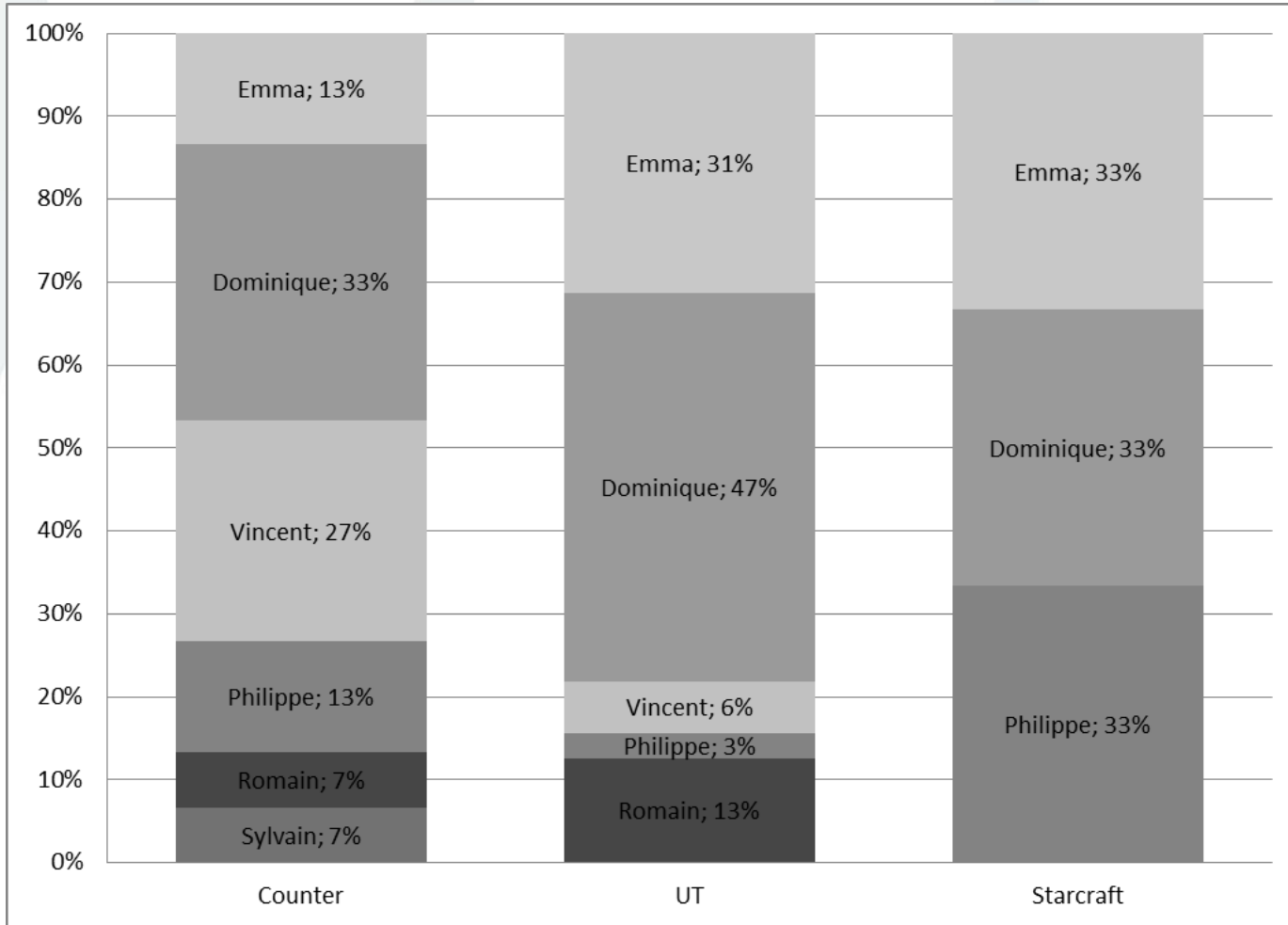


This screenshot shows a detailed view of the ELAN software interface, focusing on the timeline and annotation tracks. The timeline is marked with time intervals from 01:34:50.000 to 01:35:50.000. The annotation tracks include:

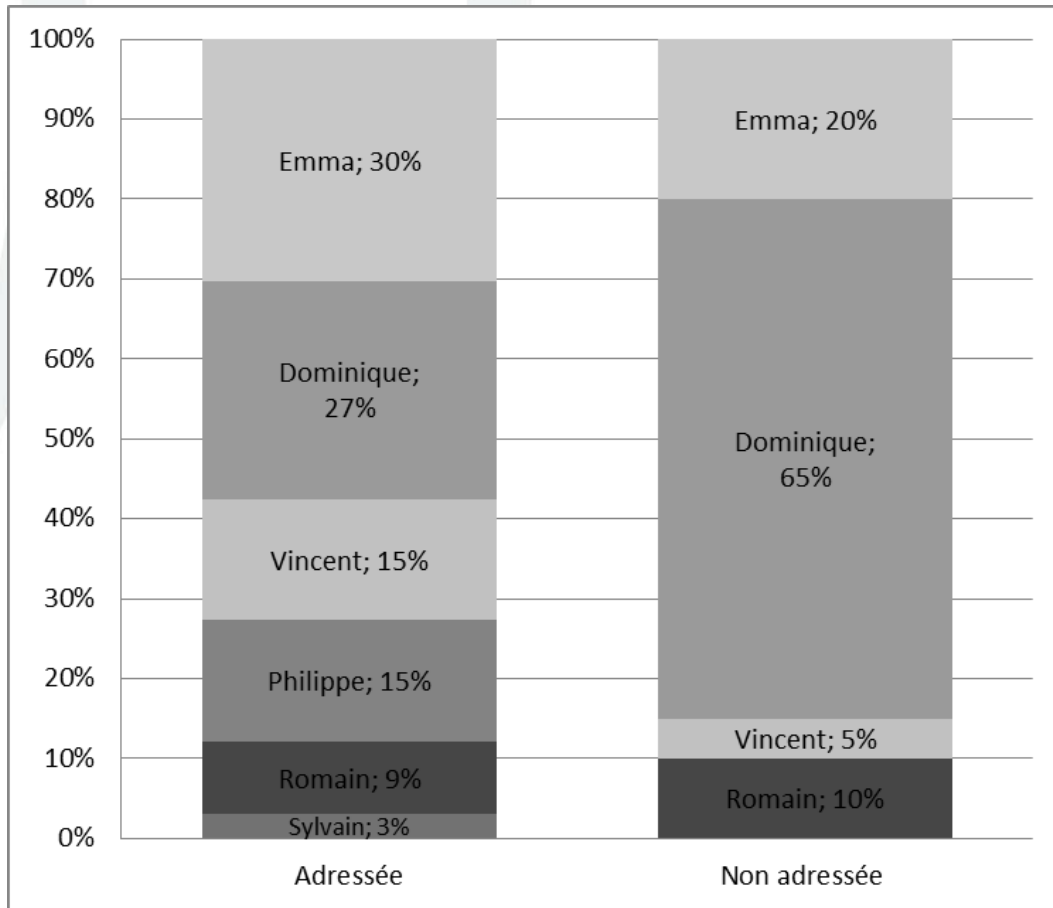
- Pronom IL [4]
- Identification [36]
- Production [36]
- Reponse [37]
- MomentPartie [36]
- DelaiReponse [36]
- Silence [6]
- Alloc action [6]
- Adom action [7]
- Alea action [4]
- Ayer action [3]
- Type enonce [6]

The timeline shows various annotations such as "saute cinq fois v", "saute trois | s |", "cours pou | s |", "Av", and "se". The text "ils sont horrible" is also visible on the timeline.

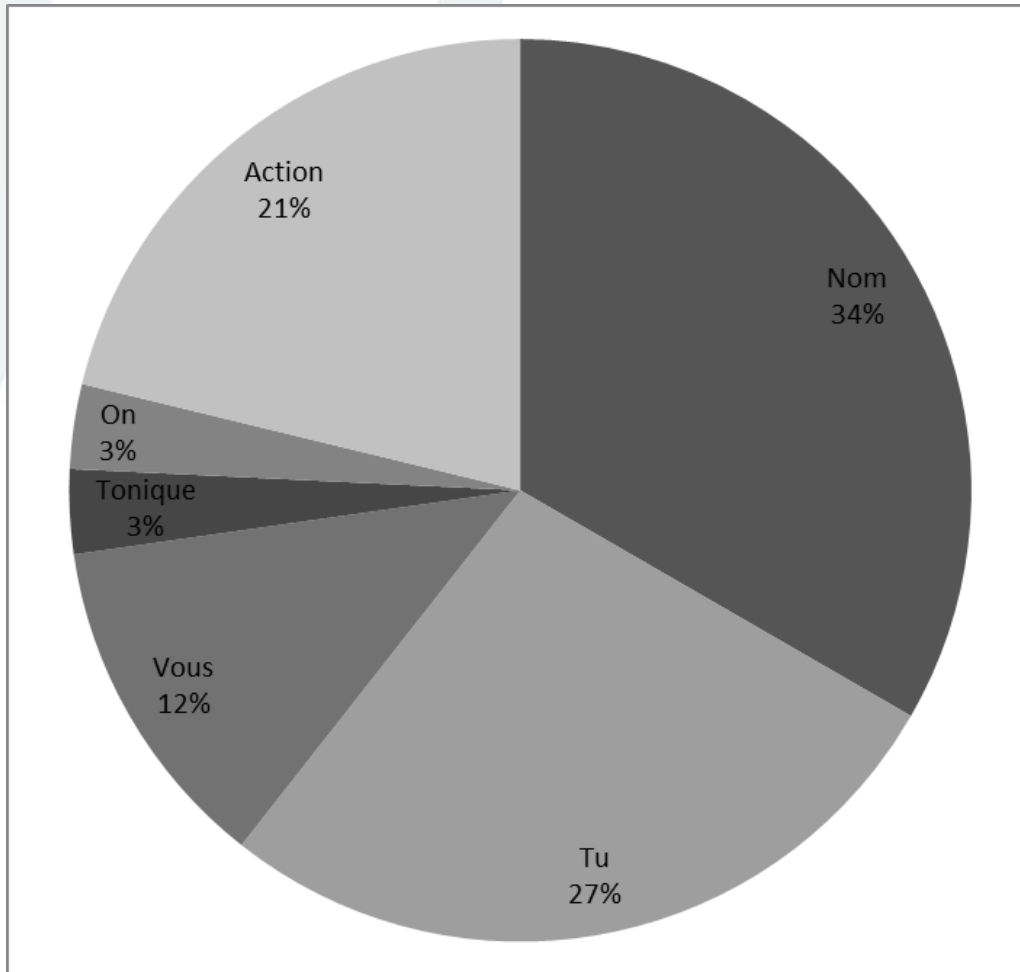
5. Example 2: identification work analysis



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5. Example 2: identification work analysis



6. Additional remarks

- **What indicators should be used to analyze digital traces? What analysis tools use?**
 - Indicators choice depends of the analytic issue. Cf. example 2.
 - In my video games context, for a multimodal analysis, importance of
 - The avatar activities,
 - The screen references/activities,
 - The player orientations/commitments in / front of the game
- **For the aims to conduct this collection and analysis of digital traces?**
 - To make collections of same phenomenon
 - To make quantitative analysis
 - To link the non vocal with vocal clues in an embodied representation of the game activity (player and/or screen)