## From the clinic to video-recorded goalongs: connecting milieus

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Understanding the relations between psychosis and urban milieus: an experience-based approach (Swiss National Science Foundation – Interdisciplinary Commission – 2014-2018)

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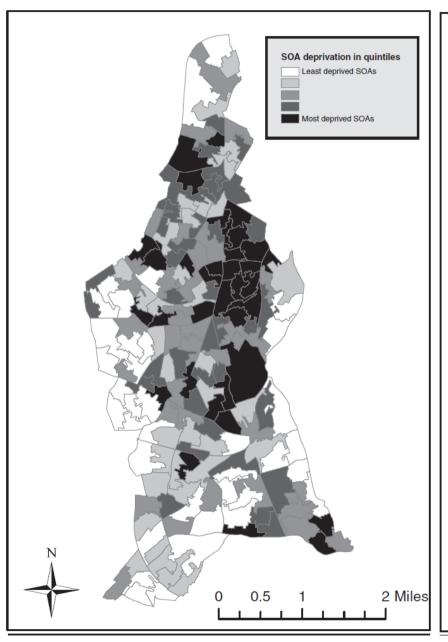
### Outline

- 1. Designing a common laboratory
- 2. Doing co-laboration
- 3. Video-analyses: managing difference
- 4. Conclusion: on interdisciplinary articulations

### 1. Designing a common laboratory

Limits of epidemiology as starting point of the collaboration:

- > the (old) problem of ecological fallacy
- > the absence of the embodied, affective encounter with the urban
- the analytical decomposition (and eventual loss) of the urban
- ➤ Hypothesis: an analysis of young patients' residential biographies and experience of urban space will generate new hypotheses to advance the understanding of how urban milieus influence the emergence of psychosis





## 1. Designing a common laboratory (continued)

- ➤ An experiment in 'co-laboration' (Niewöhner 2015) as a transformative process rather than interdisciplinarity
- ➤ Resulting in a reciprocal unpacking of analytic categories (Söderström et al., 2016)

### Designing a common laboratory (continued)

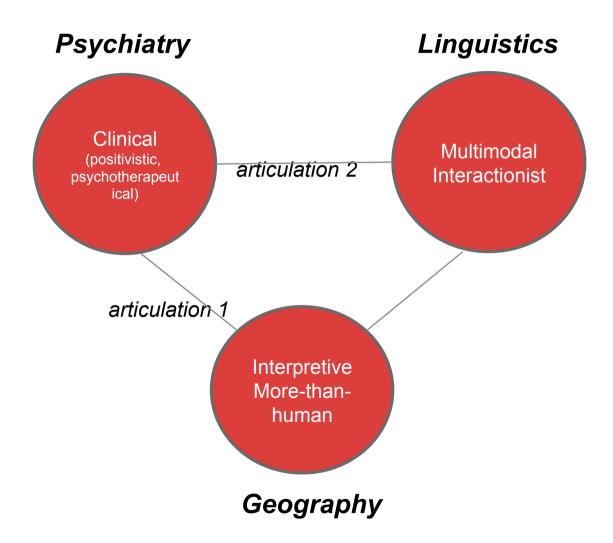
#### **Transformation 1: re-specifying 'schizophrenia':**

Beyond social constructionism: schizophrenia as 'salience dysregulation' (Kapur 2003; van Os 2009)

#### **Transformation 2: res-pecifying 'the city':**

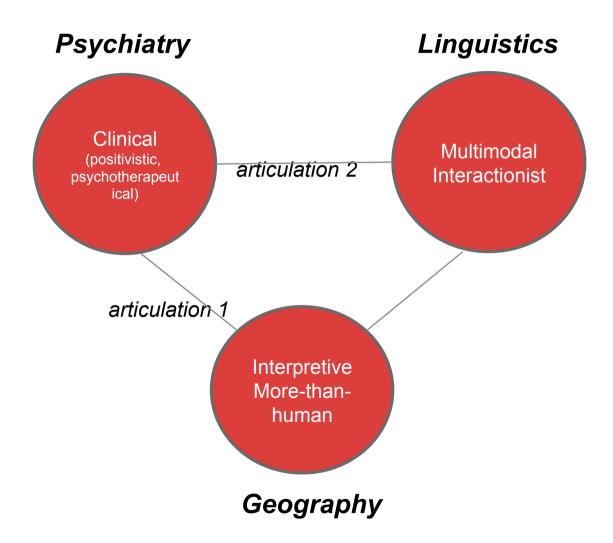
- From 'the city' or 'urbanicity' to the urban as a relational, mobile, and heterogeneous phenomenon
- > From 'urban exposure' to the encounter with urban situations

### 2. Doing co-laboration



Articulating epistemological difference...

### 2. Doing co-laboration



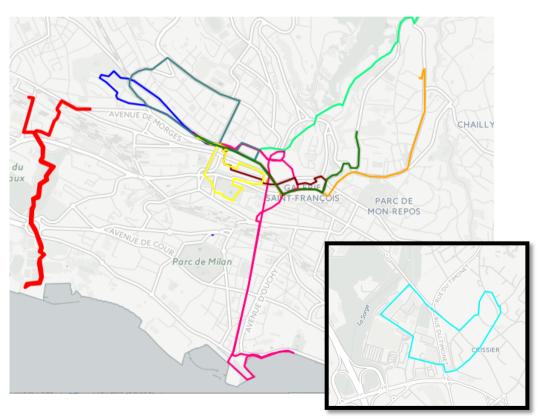
Articulating epistemological difference...





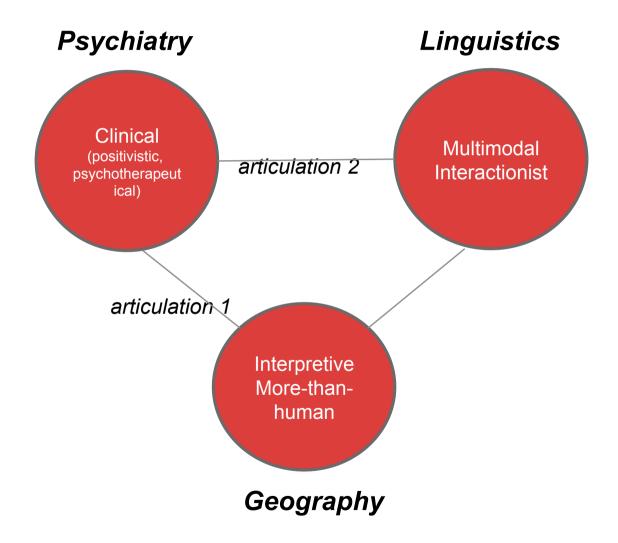






## City / psychosis nexus: a "safe place" for an encounter?

- How to get around the lack of spontaneous evocation?
- ➤ Are there specific patterns linking salient dimensions of urban contexts and psychopathological indicators?
- ➤ Can they be generalized and understood in the light of comprehensive theories?
- ➤ How the research findings can be translated into therapeutical interventions: a new insight, a new tool?



Articulating epistemological difference...

## 3.1. Conversation Analysis and the study of walk-alongs

- ☐ Conversation Analysis (CA) is a sociologically-inspired approach to language and social interaction
- ☐ Study of typical and atypical interactions (Goodwin, 1995, 2003; Wilkinson 1998, 2013; Mates et al. 2010; Egbert & Depperman, 2012; McCabe et al. 2002, 2012)
- Based on qualitative analyses of language and body conduct through audio and video-recordings it searches for systematic patterns ("collections" of recurrent phenomena)
  - During the project, a first analysis of the entirety of the corpus (10 patients), made difficult the establishment of these collections (also due to time-consuming microanalyses)
  - We then decided to focus on two patients (A, B) selected according to two different profiles – neurodevelopmental (patient A) and sociodevelopmental (patient B)
  - These analyses allow for the observation of systematic and comparable interactional behaviours in patients' verbal and non verbal conduct

# 3.2. Focus on in situ handling of the walkalong



Issues of decision-making, planning, coordination

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Issues of decision-making, planning, coordination

# 3.3. Observing difficulties arising during the walk-along



3.1

• Large amount of anticipatory work

 Abundant talk about the route: lot of planning and « rehearsing » the route

 Very specific criteria (e.g. avoiding to cross without zebras)

```
et après tu veux rentrer par où?
1 VIN
         and then how (from where) do you wanna go back home?
2
         (0.4) \dagger (0.3)
   vin
               tlooks lau-->
         ben juste†me:nt ça chuis pas encore sûre #ºparce que
 LAU
         well actually I'm still not sure about this because
         >>looks fwd-->
   lau
                                                    ºhand to the mouth→>
   lau
                                                    #im1
   fiq
  vin
               -->tlooks fwd-->
         °euhr:° y::: [y a pas º#de
         euhr there [there are no
  lau
                           -->ºpoints--->
   fiq
                                #im2
5 VIN
                      [on peut rebrousser chemin
                      [we can turn back (by the same route)
         (0.2)
         .h::y a pas de::: de #ºpassages piétonº#il me semble par là
6 LAU
         there are no zebra crossings I think over there
                         -->Phand to the chinPretracts hand, mid-high arm-->
  lau
   lau
                               #im3----#
   fiq
7 VIN
         (non)
         •#(0.4)
         •looks to the L-->
   lau
   fig
         #im4
8 VIN
         (mais) on peut •rebrousser chemin
         (but) we can turn back (by the same route)
                     -->•look fwd-->
   lau
9
         (0.2)
10 LAU
         oui: il va falloir °ouiH:°
         yes we have to yes
         bientôt
11 VIN
         soon
```







- Orienting to the task as difficult
- Doing being thinking
  - Solving a puzzle

```
25 LAU
         †a•ttends ºà moins que::,
          wait unless.
   lau
           •looks fwd-->
                 -->Phand to the chin-->
   lau
   vin
         tlooks fwd-->
26
         ·#(0.7)
         •looks to the L-->
   lau
   fig
         #im6
         .h:: sinon ∘on peut faire, (.) on peut alle:r à à
27 LAU
         .h:: otherwise we can do, (.) we can go at at
   lau
                  -->•looks fwd-->
                                     -->ºpointing and rotating gest-->
   lau
28
         la migros t' sais?
         the migros you now?
29
         (0.5)
30 LAU
         .h: passer •vers le parking,
         .h:: to pass towards the car park,
   lau
                  -->•turn H to the L, looks tot he L-->
31
         · (0.6)
   lau
         *turn H to vin-->
32 LAU
         pour revenir.
         to come back.
33
         (0.5)
34 LAU
         comme ca on: on repar- o- on retombe pas sur
         so that we we xxx w- we do not go back
35
         nos pas quoi.
         (by the same way) (concl. part.).
36
         · (0.7)
   lau
         •turns H fwd-->
37 VIN
         on [peut essayer oui
         we can try yes
38 LAU
            [(.tskH)
39
         (0.6)
40 LAU
         ºlà-ba::s,
         over there,
   lau
         opoints-->
41
         · (0.8)
         •turns H to the L, looks to the L-->
   lau
42 LAU
         •voilà,
         there you go,
         •turns H fwd-->
   lau
43
         (1)
         et puis on:: on va direction:: euh: migros,
44 LAU
         and then we we go in the direction of euh migros,
                          -->pointing-->º,,,,º
   lau
```

- The found-out solution is then again abundantly re-discussed
- New alternatives are searched and evaluated in detail ("rehearsing" the route again)



```
46 LAU
                              il faut juste faire attention quand on traverse la route
                               we just have to be careful when we cross the street
47
                               (0.3)
48 LAU
                              parce qu'il y a pas de passages •sauf erreur
                               since there are no zebra crossings unless I'm wrong
                                                                                                                                         •H fwd. looks to the L-->
         lau
49 VIN
                              ouais
                              ves
50
                             (0.2)
                              .h:: ºsi:: y en a peut-être un juste: (là)
51 LAU
                               .h:: yes there is one maybe right (over there)
         lau
                                              opoints of the state of the st
52
                               (0.4)
53 VIN
                              no:n y a pas
                              no there is none
54
                               9(0.3)9
                              oretracts point gesto
         lau
55 LAU
                               (ben déjà) on va regarder
                               (well first) we're gonna see
56
                               (0.6 * #0.4)
                                               *steps to the L-->
         lau
         fig
                                                  #im7
                               #*>oui oui< je crois qu'y a
57 LAU
                                 >yes yes< I think there are
         lau
                                 *steps to the L-->
         fig
58
                               (0.7)
                               [>OUI OUI< tre#garde [>*y a<
59 LAU
                              [>YES YES< look
                                                                                                         [>there are<</pre>
60 VIN
                               ſlà?
                                                                                                        [ah oui là
                               [there?
                                                                                                        [oh yes there
         vin
                                                                   tpoints-->
         lau
                                                                             opoints-->
         lau
                                                                                                               *changes traj-->
         fig
                               #*++º(0.7)+º
61
         vin
                               +changes traj-->
         vin
         lau
                               0,,,,,,
         lau
                               *crosses-->
         fiq
                               #10
```

62 LAU

lau

on va \*là\*
we go there

\*points\*

- In the evaluation of the solution, crossing with/out zebras is treated as a crucial (obsessional?) criterion
   Until a zebra-crossing is
- discovered this new solution is adopted
- Abrupt change in trajectory



- Complex and lenghty reasoning about very specific features of the route, conferring specific relevances to environment and traffic details (and relying on a precise knowledge of this very special geography)
- Emerging problems, difficulties and obstacles during the « rehearsal » of the route (absence of z.c. is a recurrent one)

### 3.2



1 †(1)†(14)†(8.2)°(0.8)°†(5) †(5) †(6) †(2) tlooks downtfwdtdowntfwd, R, L tdowntfwd, L, down, Rtdown vin lau •looks down--> •lks fwd•looks down-->  $\dagger(2)\dagger(4)$   $\dagger(6)$   $\dagger(4)$   $\dagger(2)+(3)\circ(1)$ vin tL tdowntL, dwn, R tdowntfwd, L, R--> vin +slows down--> lau •looks fwd--> .tsk LAU (0.2)\* • AH MINCE: LAU oh damn \*step on the R, walks hesitantly--> lau •looks from R to L--> lau  $\bullet$  (0.9) +† (0.2) 5 •looks from L to R--> lau vin +slows down--> vin tlooks R--> 6 LAU •y a pas de passaq.H:es there are no crossings •looks R--> lau \*†(0.6)\*(1.3) 7 •looks from R to L•hand to the front, lks fwd--> lau vin tlooks from R to L--> 8 LAU euhm: \*:: \*chg traj,step tws sidew--> lau 9 \* • (1.5) lau \*pivots, •looks back lau •\*(ben) on va traverser là •†alors• 10 LAU

(well) we're going to cross here then

•looks in front, points w hand•looks L, retires gesture•

tlooks back-->

\*stands in front of the street-->

lau

lau

vin

- Search for an alternative
   Projects the crossing
   Announces it
   Checks traffic
   <- Lots of precautions</li>
  - <- Preparatory work</li>



• Inspection of the environment

Neg assessment + high

Hesitations, self-repair

volume/prosody

Neg noticing

Hesitant walk

Gazing around

Thinking gesture

### 3.4. Psychopathology of psychosis (PP)

- Psychopathologic description focus on psychotic anxiety, defence mechanism and trauma.
- Psychotic defense mechanisms (against inner or outer reality) is a dynamic process of dealing with a situation (Berney et al. 2009), in this case urban milieu.
- High interest for PP: See in 3.1 how the defense mechanism emerge, the degree of anxiety, and the interaction with the accompanying person.

#### EX. 3.2 From the perspective of Psychopathology

```
1
         †(6)
                     †(1)†(14)†(8.2)•(0.8)•†(5) †(5)
                                                                †(2) †
         tlooks downtfwdtdowntfwd,R,L
                                            tdowntfwd, L, down, Rtdownt
   vin
          •looks down-->
                                      •lks fwd•looks down-->
   lau
         \dagger(2)\dagger(4) \dagger(6) \dagger(4) \dagger(2)+(3)\circ(1)
         tL tdowntL, dwn, R tdowntfwd, L, R-->
   vin
   vin
                                       +slows down-->
   lau
                                           •looks fwd-->
         .tsk
2 LAU
         (0.2)
4 LAU
         * • AH MINCE:
            oh damn
         *step on the R, walks hesitantly-->
   lau
         •looks from R to L-->
   lau
         \bullet (0.9) +† (0.2)
         •looks from L to R-->
   lau
   vin
                 +slows down-->
   vin
                 tlooks R-->
6 LAU
         •y a pas de passag.H:es
         there are no crossings
         •looks R-->
   lau
         •†(0.6)•(1.3)
         •looks from R to L•hand to the front, lks fwd-
   lau
         tlooks from R to L-->
   vin
8 LAU
         euhm:*::
               *chg traj,step tws sidew-->
   lau
9
         * • (1.5)
         *pivots,
   lau
   lau
          •looks back
         •*(ben) on va traverser là •talors•
10 LAU
         (well) we're going to cross here then
         *stands in front of the street-->
   lau
          •looks in front, points w hand•looks L, retires gesture•
   lau
   vin
                                       tlooks back-->
```

- Meeting complex stimuli. Negative reactions.
- Psychomotor signs of anxiety.
  - Overinvolvement in the interaction





Concrete analysis of the environment. Crossing is where one crosses. Difficulties in dealing with situation because cognitive and emotional stress. Disorganisation



### 3.5. Psychopathological observations

- Psychopathological analysis: when obsessive control to manage anxiety is overwhelmed, appears negativity and traumatic risk for the self
- Consequences: disorganisation and persecution.
- Dynamic observation of the pathological process. The thought process moves step by step from anxiety to perplexity and into delusion.

# 3.6. Putting together two perspectives on data – preliminary results

Attitudes and choices towards the urban environment and its local handling	Conversation Analysis	Patient A	Patient B	<u>Psychopathology</u>
Checking/ controlling, programming/ pre-planning	1.Verbal: comments, instructions, descriptions  2.Non-verbal: changes in walking trajectory, gestures, gaze orientation, prosodic features of voice	+ Short instructions, Non-verbal initiatives (change in waking trajectory)  Control of the path in case of request for changes	++ Several comments, descriptions, announcements and instructions  Abrupt changes in walking trajectory, monitoring gaze and pointing gestures	Coping with urban environment and its stimuli  Talking about the route/path as a defense mechanism / coping strategy in front of anxiety  Signs of anxiety  Over-control of the process, obsessive and sudden acting out.

## 3.6. Putting together two perspectives on data – preliminary results

Attitudes and choices towards the urban environment and its local handling	Conversation Analysis	Patient A	Patient B	<u>Psychopathology</u>
Handling urban landscape: circulation of cars	Verbal and non-verbal conduct  Cf. Merlino & Mondada, 2018	- Non problematic	++ Very problematic  Deep monitoring of the scene, preparation work (checking through gaze, giving instructions, announcements), Prudence/ Circonspection	Hyper-vigilance
Handling urban soundscape: sensorial stimulations (noise)	Verbal and non-verbal conduct  Cf. Merlino, Mondada, Söderström (submitted)	In echo places: hesitations, discontinuities in talk, delayed responses, repairinitiators, closing of conversation (silences).  More hesitant and solitary walk.	In noisy places: Silences, closing down of conversation with irritated tone, gaze aversion.	Vulnerability, fragmentation, cognitive disorganization Autistic withdrawal

# 3.6. Putting together two perspectives on data – preliminary results

Attitudes and choices towards the urban environment and its local handling	<u>Conversation</u> <u>Analysis</u>	Patient A	Patient B	<u>Psychopathology</u>
Interaction	Topic initiations and developments	++> (longitudinal observation)  At the beginning: very cooperative, long exchanges and topic initiatives. Towards the end: less cooperative (also following a change in path trajectory and noises)	Topic fragmentation  Minimally answers, does not develop topics introduced by the partner Silences accentuate in proximity to noisy areas	Exhaustion of defense mechanisms, which causes rupture, withdrawal and delusion. First steps of paranoid and autistic reaction.  Interaction protects from stimuli?

<sup>•</sup> Interaction as a locus for observing changes in patients' conduct following specific stimuli in the environment

But possibly also as a resource for handling these stimuli (therapeutic implications)

#### 3.7. Conclusion

- Interactional (verbal and non verbal) conduct can show at work underlying processes of the pathology and of its handling, especially in coping strategies – this suggests an enriching and fruitful exchange between CA and Psychopathology
- Dynamic model for psychopathology: very different from usual static models (questionnaire)
- See continuum between ordinary and pathological process of stimuli. See the psychotic defense mechanism and see disorganisation process (hypothesis city-psychosis)
- But need of keeping perspectives apart not confused

## 4. Conclusion: on interdisciplinary articulations

- Co-laboration/co-experimentation as a means to explore biosocial entanglements without reducing society to biology or biology to society
- ➤ The limits of co-experimentation and the value of epistemological difference