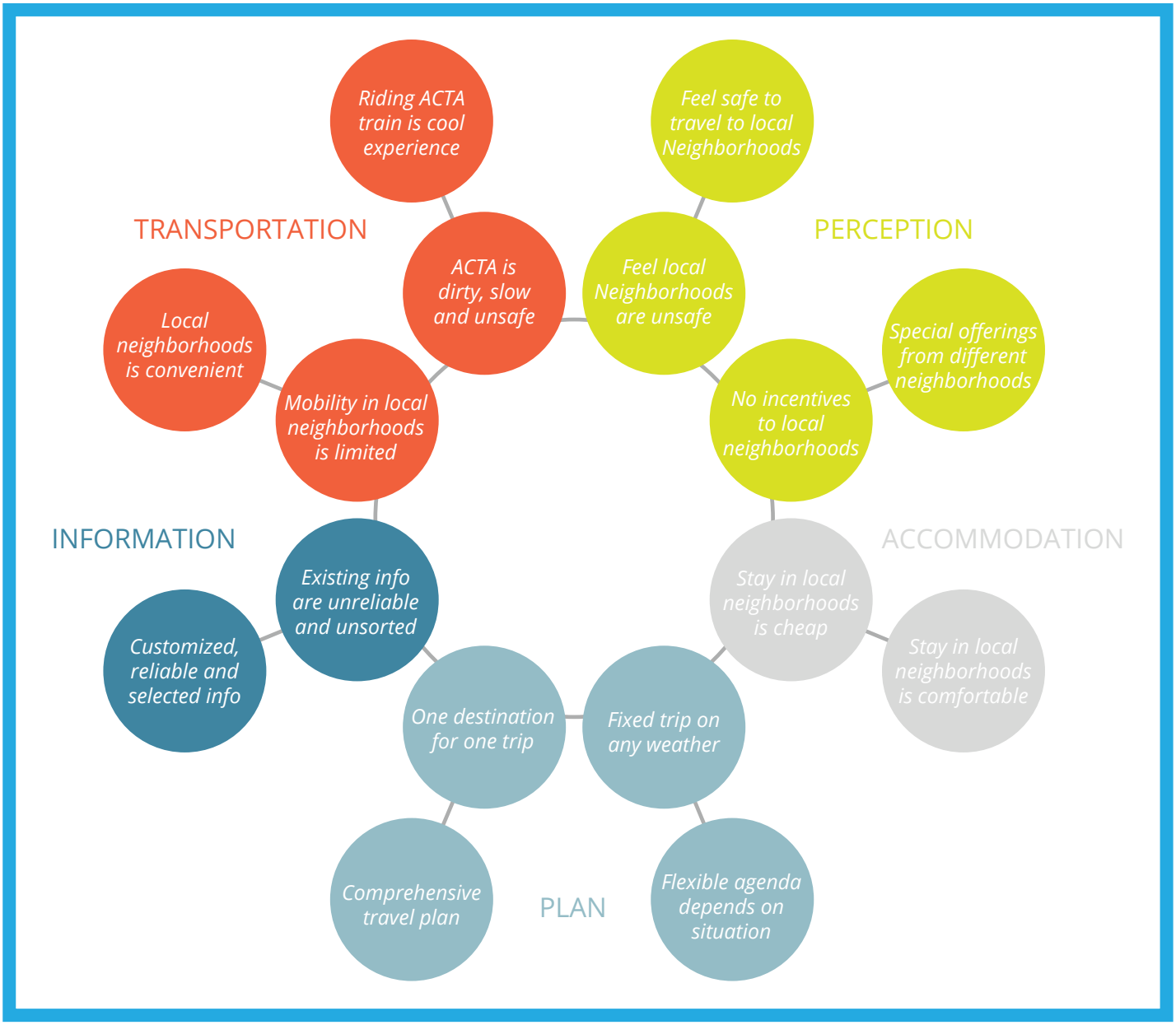
Human-System Integration: Action for Self



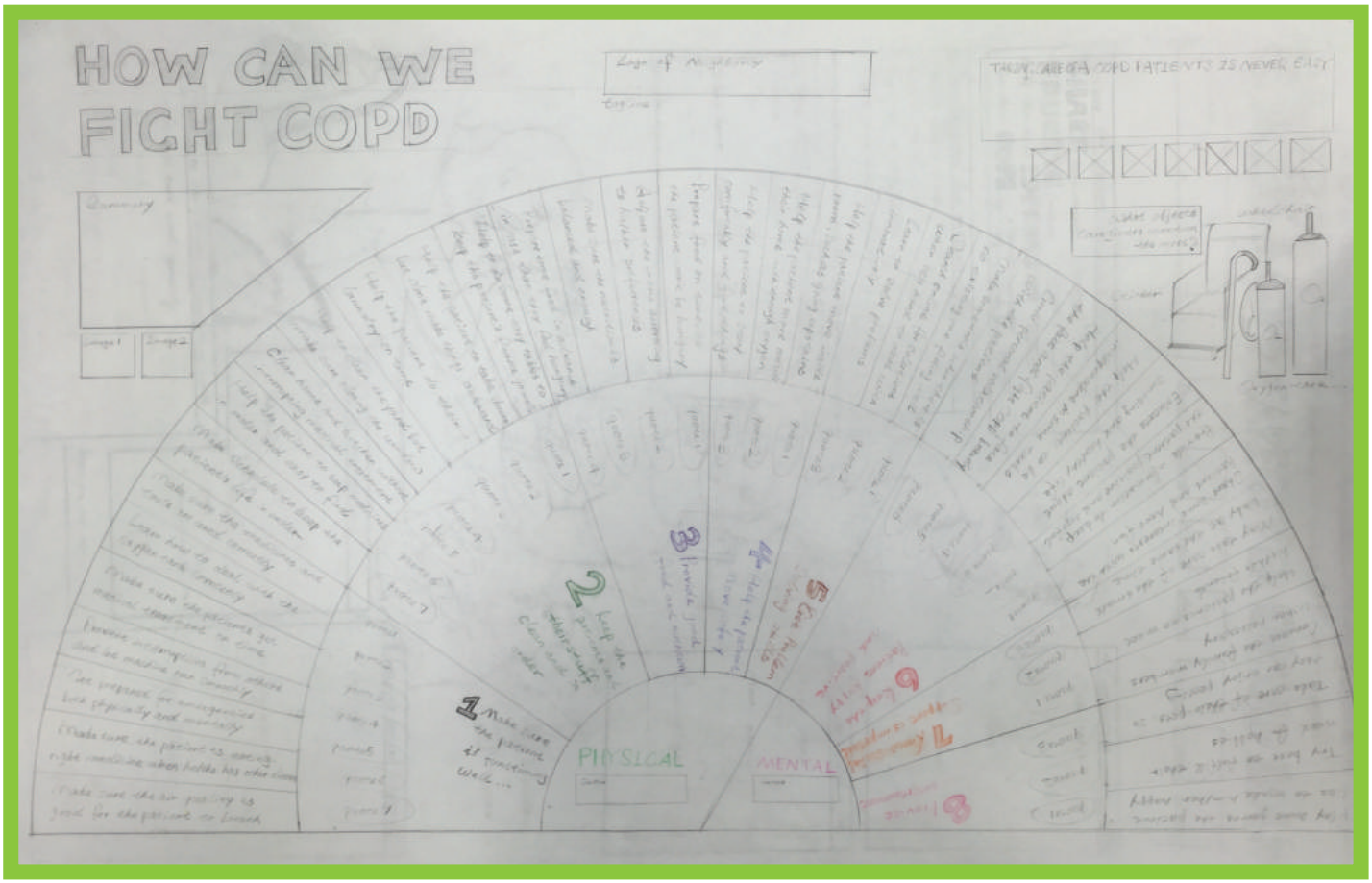
What it is?

This is a summery framework I created for human system Integration class. After analyzing data, we generated this diagram to organize our insights and opportunities.

How was it used to promote change?

This is a diagram we will use to guide our actions. After clustering our insights and opportunities, we make more sense about who should we talk to and where should we play next. This diagram seems like an ending of analysis but a beginning of synthesis, so it is an anchor where we will base on to generate concepts and ideas. Without this diagram, our brainstorming may be not disciplined but chaotic. With this diagram we can continuously refer back to our research and make our decision more informed.

Communication in Planning Process: Action for Others



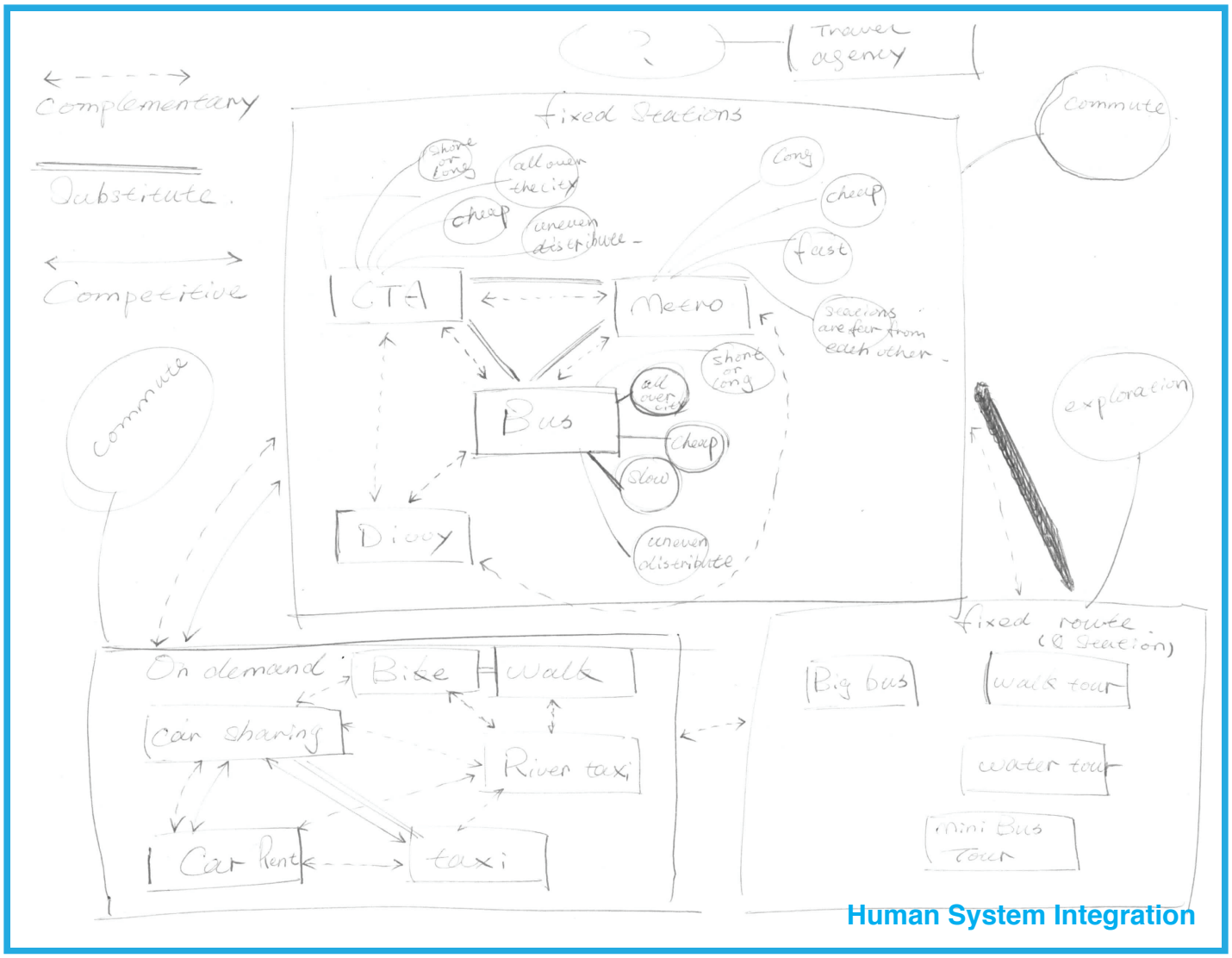
What it is?

This is a draft of story platform I drew for communication in design planning class last semester. This diagram came after I analyzed diary study data to persuade behaviors and attitudes of patients and also health givers.

How was it used to promote change?

I was provided raw data at the beginning of the class, then I coded the data and made models to present my findings. After that I tried to use this diagram to educate multiple stakeholders. Compared with diagrams I made to guide my own actions, this diagram is more detailed and self-explanatory, so people can get it immediately. I also tried to tell a compelling story which can attract readers' attention and act on it.

Diagrams which try to change readers behavior should not only be easy to understand and act on, but also trigger users' interests and tell them why they should care in a compelling way. When readers see my diagram, I want to give them a clear title, summery and visual hierarchy, so they can get my point immediately. Then I also want to provide them actionable guidelines so they can act on without confusions. Format and content are both important to promote behavior change in sublime ways.



Descriptive

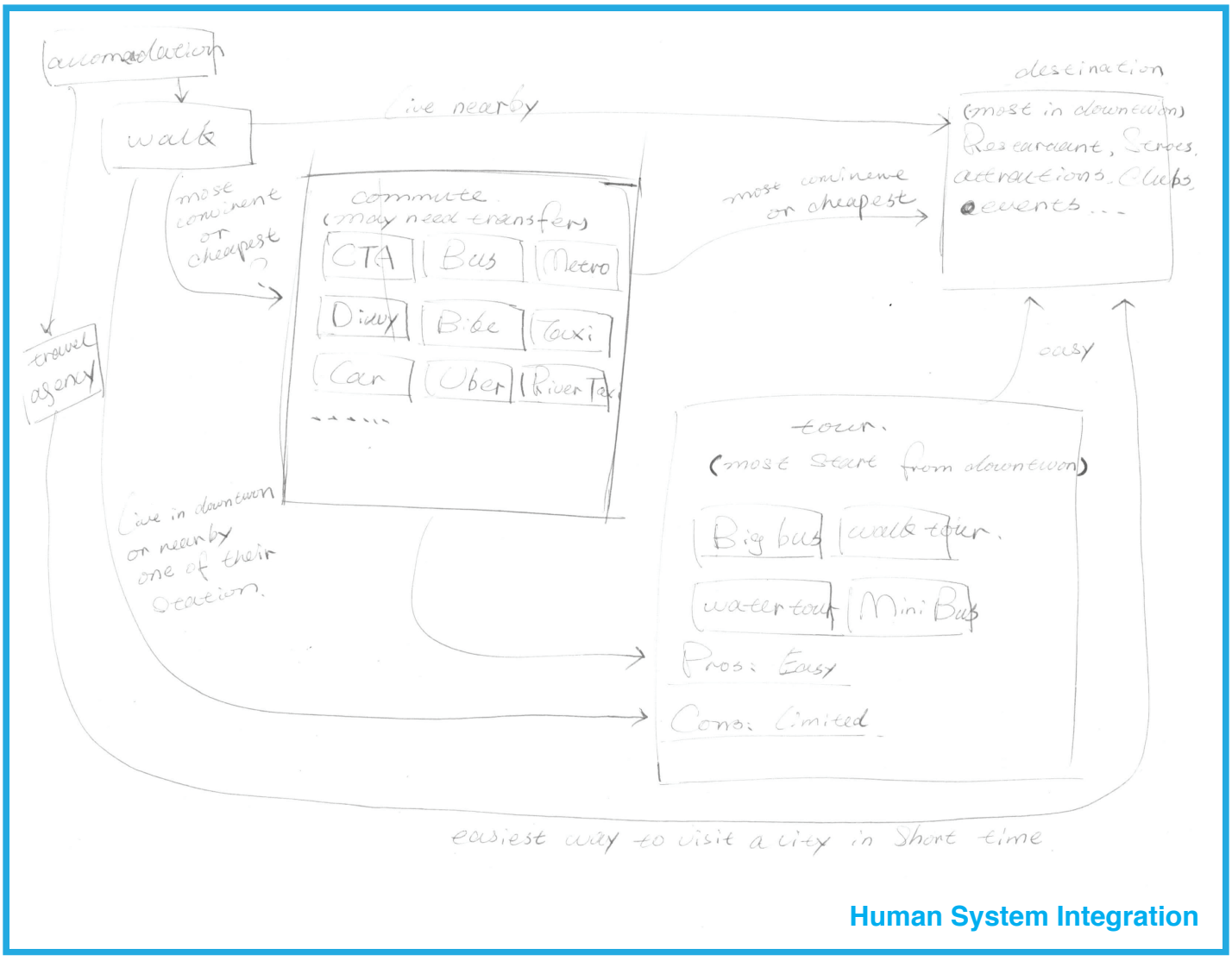
This diagram shows (trying to show) the transportation-tourism ecosystem of Chicago. I cluster all the transportation means into three sub-systems (fixed stations, fixed routes, and on demand). I draw relationships (supplementary, competitive, and substituted) both between subsystems and inside subsystems to gain a overview of the whole big system from macro to micro.

Evaluative

The diagram is more representative rather than exploratory. Also because the system is huge and the relationship between different elements is complex, I think I unconsciously put too much effort on the details of existing transportation methods rather than exploring potential opportunity areas. But by classifying, I know more about the system rather than simple touchpoints and channels.

Design Principles

1. Making sub-systems when a huge system has too many components
2. Diagrams should build relationships both between sub-systems and inside each sub-system. In other word, pay attentions to both macro level and micro level of the system.



Human System Integration

Descriptive

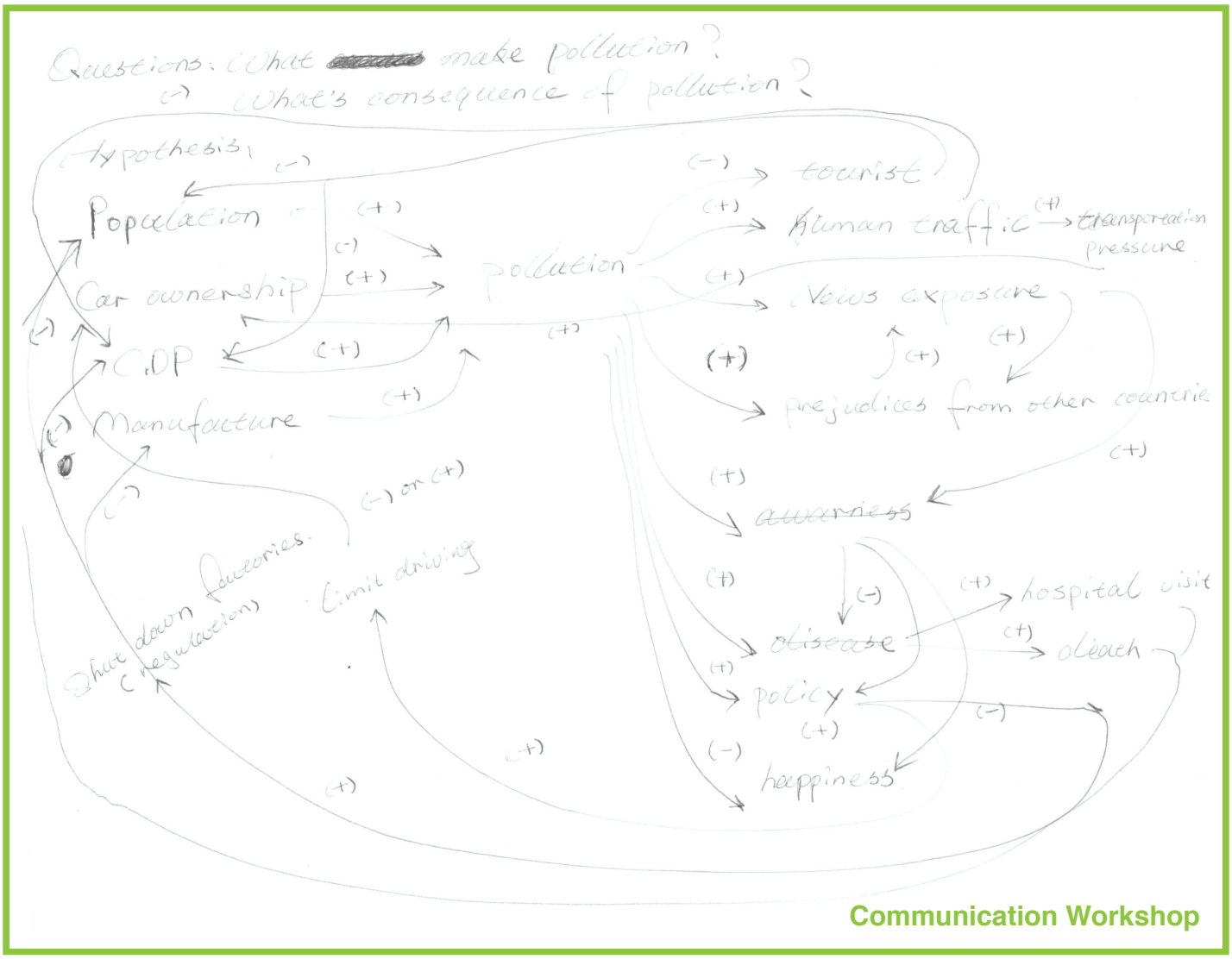
This diagram shows (trying to show) the transportation-tourism ecosystem of Chicago and how tourists make decisions about where to go, what to do, and how to get there. There are two main destinations for tourists, one is special destinations they want to go and the other one is the starting point of a tour. There are also cognitive processes when people are making decisions.

Evaluative

The diagram is both representative and exploratory. Although the system is huge and the relationships between different elements is complex, I chose to ignore relationships inside each sub-system and focus more on the relationships between them. Then the diagram becomes easier to draw and also understand, by which I find some interesting areas to explore father.

Design Principles

1. When a system is complex, using several diagrams to represent it can be useful
2. Drawing diagrams is an exploring process. Drawing diagrams from macro level to define areas to explore. Drawing diagrams from micro level to dig into the relationships-



Descriptive

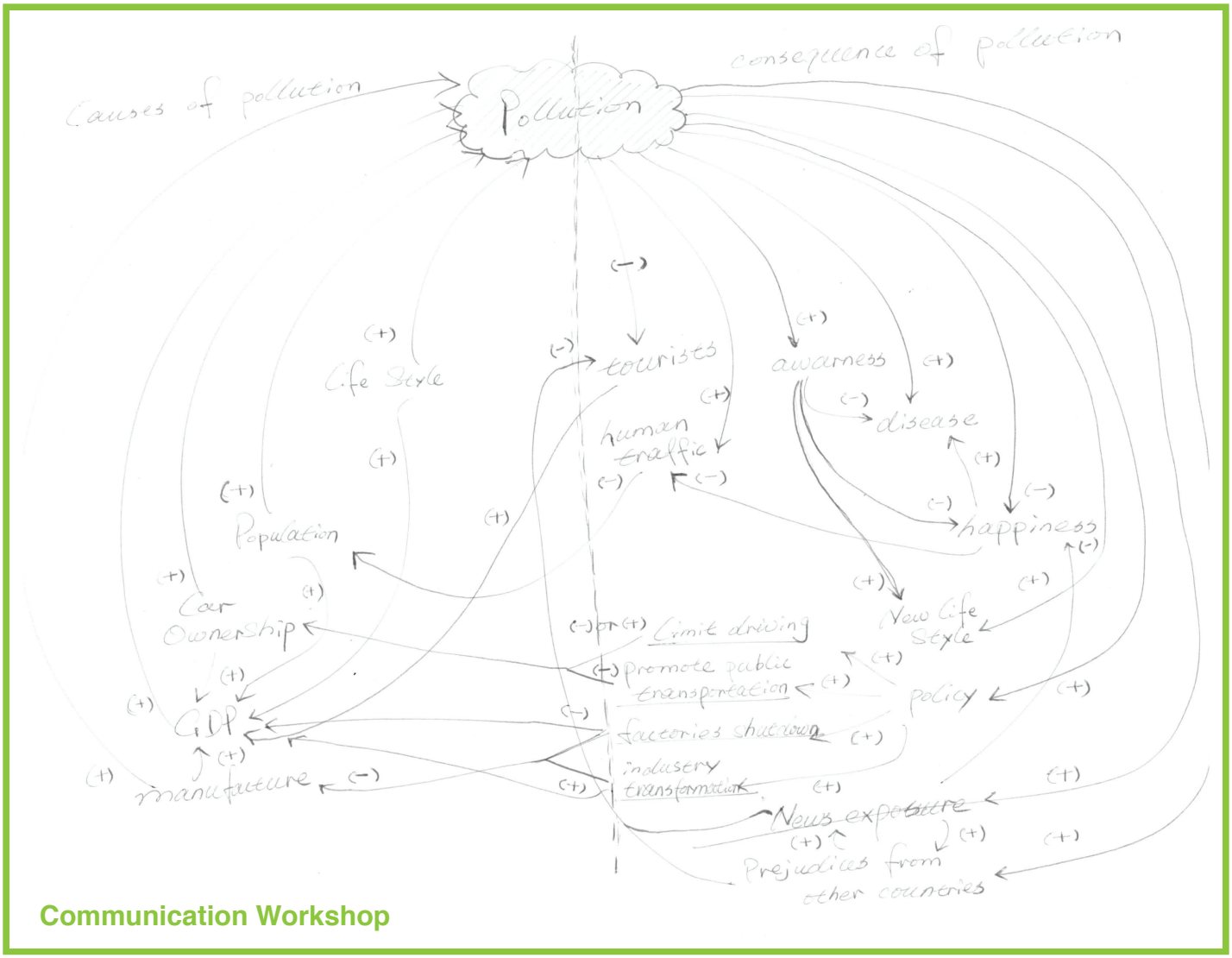
This diagram shows (trying to show) a big picture about cause-effect of China's pollution situation. I divided the diagram into two parts so I can cluster causes and effects. The plus sign means reinforcement, and the minus sign stands negative effects. There are also relationships between causes and effects, which make the whole system become a loop.

Evaluative

The diagram doesn't works very well when I try to draw relationships between effects and causes of pollution because lines intersects a lot which makes the diagram hard to read. It's easy for myself to understand, but maybe not easy for others to interpret. This diagram bases on lots of secondary research and makes invisible knowledge more visible, which also shows some controversies. This helps me to think more about the relationship between different elements.

Design Principles

1. Diagram can help to organize data from secondary research and connect them together
2. Diagrams can help to find controversies in existing data and facilitate further investigation



Communication Workshop

Descriptive

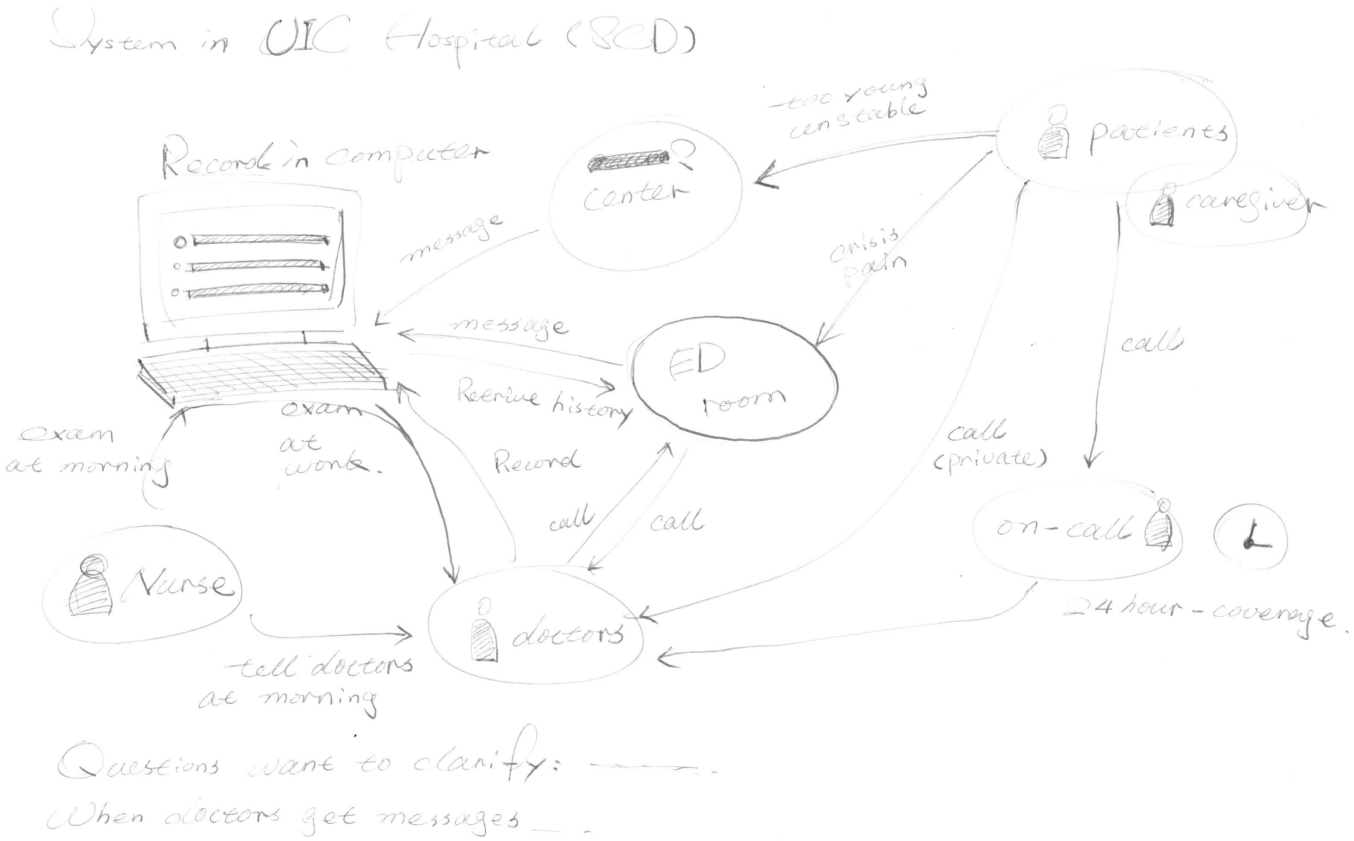
This diagram shows (trying to show) a big picture about cause-effect of China's pollution situation. I divided the diagram into two parts so I can cluster causes and effects. The plus sign means reinforcement, and the minus sign stands negative effects. There are also relationships between causes and effects, which make the whole system become a loop.

Evaluative

The diagram works a little better than the previous one, because lines in the relationship don't intersect as much as the previous one. It's easy for myself to understand, but maybe not easy for others to interpret. But this diagram bases on secondary research and makes invisible knowledge more visible, which shows some controversies when I take a system point of view. This helps me to think more about the relationship between different elements.

Design Principles

1. Making elements which have stronger relationship closer can improve readability
2. Drawing diagrams can be an iterative process which is also a valuable thinking process



Faculty Research: Design in Healthcare

Descriptive

This diagram shows the communication process inside the UIC hospital. This process involves human to human communication between multiple departments (ED, nurses, doctors, patients, etc) which is mediated by supportive computer system. This diagram shows both stakeholders, relationship between them and conditions under which certain communication will happen.

Evaluative

I drew this diagram when I was in a conversation with our interviewee. This diagram helps me capture important information and organize them in a fast manner. I gained a comparatively comprehensive understanding of the system when I was still talking with him. Then I could generate follow up questions quickly, because I knew which part of the system is still vague and I could add components according to his answer.

Design Principles

1. Drawing diagrams during interview can facilitate interviewers' understanding of complex system
2. Drawing diagrams can help researchers to generate more follow-up questions to ask