Disorientation has been a huge concern for mankind since the earliest uses of a space that is not just proximal or peripersonal. Popular wisdom has it that disorientation is no longer a problem, because of assistive, GPS based devices. However, the idea that disorientation will disappear from the human landscape is wishful thinking at best. Cases of device-induced disorientation (intensive use of GPS based navigation devices) are documented with increased frequency; disorientation pathologies will continue to exist, related to aging, dementia and various disorders, with no therapy in sight; and technology is not a universal or definitive solution (due to failure, power shortage, accidents, poor ergonomics, inherent complexities of the devices or improper use.) Finally, even though information is the key remediation for disorientation, contemporary environments are prone to information overload – in particular an overload of information aimed at remediating disorientation.

Although a large literature exists that is devoted to what people do when they are disoriented, or to the neural underpinnings of disorientation and orientation, very little is know about what people think or believe or feel subjectively in disorientation conditions. A lot is known about third person disorientation, but very little about first person disorientation.

We shall address many aspects of disorientation. Students are expected to read and present book chapters or articles from the following list, or to contribute with an autonomous project on disorientation. I especially welcome surveys of the historical record, narratives (real or fictional) of lost travelers, of feeling disoriented in new environments, of estrangement in hotel rooms, of being lost at sea, in the woods, in deserts, in cityscapes, and of actively searching for disorientation, of orienteering. According to the conditions, we may be able to run a practical class in Fontainebleau forest.

Course timeline
Students taking class for credit (depending on class size):
- Presenting one large or two small items from the bibliography (15 minutes) as if it was written by you.
- A paper min 8000 max 10000 characters, in either English or French, spaces included, bibliography excluded.

As usual, some experimenting with modalities for credit: the important part is to show that you are making sense of the class.

Some instruments we are working on:

Disorientation Questionnaire (Pablo Fernandez Velasco)
Sea Hero Quest
Sea Hero Quest
Map semantics – Spring seminar on **Mental maps, paper maps, e-maps**

Attention; not all “natural dates” are class dates: 14, 21, 28 sep; 5, 12, 19, 26 oct; 2, 9, 16, 23, 30 nov, 7, 14 et 21 dec; and there is an extra class on Oct 4th. Mind the different locations for the classes. Two classes are “terrains”, to be discussed.

<table>
<thead>
<tr>
<th>Date</th>
<th>Name</th>
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<tbody>
<tr>
<td>Sep</td>
<td>Roberto Casati, IJN</td>
<td>Introduction</td>
<td>BS1_05</td>
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<tr>
<td>Sep</td>
<td>Roberto Casati (IJN)</td>
<td>Ways of disorientation and of disorientation remediation</td>
<td>ASI_24</td>
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<td></td>
<td>Ed Hutchins, Francesca Cozzolino, Laurent Cohen, Beatrice Fraenkel, Valeria Giardino, Hugo Mercier</td>
<td>Is cognition still in the wild? One- day workshop with Ed Hutchins</td>
<td><a href="https://goo.gl/forms/AiSFIdzvOVXqPrCe2">https://goo.gl/forms/AiSFIdzvOVXqPrCe2</a></td>
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<td>Oct</td>
<td>Giuseppe Attoma</td>
<td>Wayfinding in an urban context: the case of Chatelet-Les Halles</td>
<td>BS1_05</td>
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<tr>
<td>Oct</td>
<td>Goffredo Puccetti (NYU)</td>
<td>Wayfinding in a city in the desert</td>
<td>ASI_23</td>
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<td>Nov</td>
<td>Roberto Casati (EHess)</td>
<td>Disorientation in the woods</td>
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<td>Nov</td>
<td>Roberta de Monticelli (HSR Milan)</td>
<td>Phenomenology of spatial values</td>
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<td>Nov</td>
<td>Barry Smith (SUNY Buffalo)</td>
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<td>Nov</td>
<td>Joëlle Proust (IJN)</td>
<td>Metacognition and disorientation</td>
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<td>Nov</td>
<td>Robin Champenois (PSL)</td>
<td>Sea Hero Quest: a game for studying disorientation</td>
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<td>Dec</td>
<td>Pablo Fernandez</td>
<td>Characterizing Disorientation</td>
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<tr>
<td>Dec</td>
<td>Michel Denis (LIMSI-CNRS, Orsay)</td>
<td>The psychology of wayfinding</td>
<td>BS1_05</td>
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<tr>
<td>Dec</td>
<td>Roberto Casati (EHess)</td>
<td>Conclusions/ Students’ presentations</td>
<td>BS1_05</td>
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</table>
Reading list

Students should present a long article or two short articles or a book chapter from the following. I'd be happy to consider other (relevant) proposals!

A general framework for understanding assisted navigation:


General on disorientation:


Research on the cognitive and neural underpinnings of navigation:

Cheung, A., Ball, D., Milford, M., Wyeth, G., & Wiles, J. (2012). Maintaining a cognitive map in darkness: the need to fuse boundary knowledge with path integration. PLOS Computational Biology, 8(8), e1002651.

Denis, M., 2016, Petit traité de l'espace. Mardaga.


History of disorientation:


Primitive or low-tech navigation:


On metacognition:


Lost person behavior:
Clinical aspects of disorientation:


Landmarks and head direction:


Universal design: