Cognitive geography asks the question whether “tabletop” entities (e.g. bowls, apples, tables) are cognized differently from entities on the geographic scale (e.g. mountains, villages, rivers) (e.g. Mark 1993; Smith & Mark 2001, 1999). Cognitive geographers such as David Mark and colleagues suggest that the answer is YES. They claim that geographic entities “are tied intrinsically to space in such a way that they inherit from space many of its structural properties” (Smith and Mark 1999: 248). They go on to assert that these “structural properties” may affect the way such entities are categorized. Independently of cognitive geography, a few semanticians, including Lyons, have also suggested an ontological disparity between geographic and tabletop entities. Lyons and Whorf foresaw, for instance, that the linguistic encoding of the two types of entities could be different (e.g. Lyons 1977; Whorf 1945; Landau & Jackendoff 1993). Keeping these theoretical points in mind, together with the participants of the meeting I would like to look at linguistic data from three unrelated languages: Lokono (Arawakan, Suriname), Makalero (Papuan, East Timor), and Marquesan (Oceanic, French Polynesia). The data show that in these languages geographic and tabletop entities are grouped into distinct linguistic categories. Importantly, spatial language—the locative phrase itself in fact—is the locus of the distinction in question. As such, the analysis of this grammatical phenomenon offers us insights into the types of parameters that are relevant to the cross-linguistic encoding of spatial relations and the spatial cognition in general.

Zooming in on the data, we observe that the three languages group nouns into two distinct grammatical categories defined on the basis of the locative marking they receive in a spatial expression. Let us first have a look at the central concepts of spatial language. In a spatial description there are three indispensable elements: the Figure—the entity to be located, the Ground, the entity with respect to which the Figure is located, and the spatial relation that holds between the Figure and Ground. On closer inspection, the spatial relation can be split into two elements: configuration and directionality (Lestradé 2010; Jackendoff 1990; Talmy 2000). Configurational elements encode the spatial relation that holds between the Figure and Ground. There are topological, relative, intrinsic, and absolute types of spatial relations. It is here that languages show the greatest variation of spatial forms and meanings. Directionality in turn encodes the change of configuration over time, and has only three primary distinctions:

1. Location: the absence of change of configuration
2. Goal: the change into a configuration
3. Source: the change out of a configuration.
Lestrade (2010) claims that the three distinctions are universal in nature, although languages show quite some variation in how they express them linguistically. Let us illustrate the difference between configuration and directionality on English examples:

(1) Location: The diver is at 50 meters under the sea level.
(2) Goal: The diver ascends to 50 meters under the sea level.
(3) Source: The diver descended from 50 meters under the sea level.

In all three examples above diver is the Figure and the sea level is the Ground. The configurational element under tells us where the Figure is with respect to the Ground. The additional modifier 50 meters makes it more specific. The Location directionality element at in (1) indicates that the Figure is at the Ground. When we change to Goal directionality, the element to signals that the Figure moves into the configuration. When we change to the Source directionality, the element from signals that the Figure moves out of a configuration.

Interestingly too, while configuration may be specified or not (try removing 50 meters under), a directional choice is always required. The grammatical distinction that we will look at manifests itself only in the directionality component of the spatial expression, not in the configurational component. Let us look at examples from Lokono, in which there are two markers of Location directionality, exemplified below:

(4) Dayo bithi−ka=de
   my.mother LOC−PFV=1SG.S
   “I am at my mother’s.”

(5) Kasuporhi−n−ka=de
   Cassipora LOC−PFV=1SG.S
   “I am at Cassipora.”

In both (4) and (5), the Figure is expressed by the enclitic =de, preceded by the perfective suffix –ka which is necessary to form a complete predicate. In both (4) and (5), there is no configurational element, which means that the relation is unspecified. In (4), the Ground is expressed by dayo “my mother” and the Location directionality element is bithi. In (5), the Ground is expressed by a place name Kasuporhi and the Location directionality element is the suffix –n. In sum, if we remove all the elements that are the same in (4) and (5), we are left with two Location markers bithi and –n that select different types of Grounds. Both markers encode Location directionality but select different noun types. Since bithi can combine also with the question word hama “what,” I call nouns that combine with it what-nouns. Since –n combines also with the question word halo “where,” I call nouns that combine with it where-nouns. The question arises which nouns combine with which marker and what motivates this type of nominal categorization? In order to answer this question, I look at two more languages, for which there are enough data on the what/where split and inventory which nouns take which marker. I would like to discuss with the participants of the meeting the patterns that emerge from the comparison of the three languages—shown in the table below—as well as data from more familiar languages such as English, in which a similar, though less conspicuous, pattern is attested.
<table>
<thead>
<tr>
<th>Nouns denoting</th>
<th>Example</th>
<th>Lokono</th>
<th>Marquesan</th>
<th>Makalero</th>
</tr>
</thead>
<tbody>
<tr>
<td>animate beings</td>
<td>Mary, dog</td>
<td>what</td>
<td>what</td>
<td>what</td>
</tr>
<tr>
<td>objects</td>
<td>chair, tree,</td>
<td>what</td>
<td>what</td>
<td>what</td>
</tr>
<tr>
<td>structures</td>
<td>school, house</td>
<td>where</td>
<td>what/where</td>
<td>what/where</td>
</tr>
<tr>
<td>landscape features</td>
<td>island, mountain</td>
<td>where</td>
<td>what/where</td>
<td>what/where</td>
</tr>
<tr>
<td>places</td>
<td>Amsterdam, inside</td>
<td>where</td>
<td>where</td>
<td>what/where</td>
</tr>
</tbody>
</table>

The data suggest that a cline from tabletop entities to places (which include geographic entities) underlies the grammatical pattern. The cline shows the likelihood of a noun being categorized as a *what*- or *where*-noun. Yet, the cut-off point between the two categories is language-specific. What motivates this distribution? Is it the ontological features of the referents as Mark and Lyons predicted? Yes, but not directly. Interestingly, in all three languages the *what*-marking is always more marked than *where*-marking, suggesting that the cline ranges from nouns that are quite marked in the function of Grounds to nouns that are unmarked as Grounds. Not forgetting that this is a linguistic categorization, the cline should be seen as a reflection of the Figure/Ground dichotomy, as generalized over the speakers of a language, rather than a direct translation of the ontological features of the entities. By analyzing the cline, we can observe the types of ontological features that change from prototypical Figures to prototypical Grounds. Instead of defining the concepts of Figure and Ground *a priori*, which has been the case until now, we can therefore let these concepts crystalize from the language data itself. Following this method and by enlarging the language sample, we can also analyze the language-specific cut-off points on the cline to investigate whether cross-linguistically speakers of different languages prioritize different features of Figures and Grounds, leading to the different *what*- and *where*-groupings, and whether there are any universal parameters to the categorization.