3-Dimensional Cartography and Language Disorder

1. Main point. This paper explores novel research which showcases the enduring potential of cartography in the decades to come by demonstrating that the functional categories in the CP zone proposed by Rizzi (1997) has the tone strength and weakness, and suggests the possibility of constructing a new 3-dimensional model of cartography of syntactic structures.

2. Background. Bayer and Obenauer (2011) propose that in German, the relationship between Force, which is a projection of clause types such as imperative, declarative, interrogative, etc., and particles is established by AGREE, where agreement is expressed by an arbitrary feature value like 1, 2, 3, etc. that fills the empty slot, through the operation of feature sharing proposed by Pesetsky and Torrego (2007). Coniglio and Zegrean (2012) show that German particles can function to regulate the speaker's tone of imperative sentences such as a simple suggestion, an order, a compelling command, etc.

3. Proposal. Based on these, I propose that the shared values 1, 2, 3, etc. between Force and particles indicate how strongly the sentence type is uttered by the speaker on the scale of aggression, where the value 1 represents the weakest speaker tone, while the value 2 and 3, etc. represent stronger speaker tone. This suggests that the cartography of Force has a 3-dimensional structure, that is, Force with a high value like 3 represents the Force shaped like a high mountain, while the Force with a low value like 1 represents Force shaped like a low flowing river.

4. Other CP projections. Using this idea, I will explore new possibilities for various functional heads in the CP zone to represent the strength of the speaker's tone by having high or low values. While Pesetsky's (1987) aggressively non-D-linking expressions like the hell, in the world, etc., and diavolo (lit: devil) and accidenti (a damn) in Italian (Giorgi and Poletto 2019) have high values in the projection of FocusP like a high mountain, while the element pure in Italian and the empathy particle ne in Japanese, which weakens the tone, has a low value like a low running river.

5. Language disorder. Using this idea, I will attempt to formally characterize some problems of language disorder, especially the language problems of autistic people. For instance, autistic people have difficulty with constant changes in the speaker's tone of voice triggered by particles.