The Stereochemistry of Boats and Chairs

I would like to add some observation to the intriguing notion of cyclohexane mentioned in Robert Ausubel's response to "Boats and Deckchairs". One might add that the terms "boat" and "chair" are international standard in teaching the peculiarities of cyclohexane in stereochemistry. We find the terms "Boot" (boat) or "Wanne" (tub) and "Sessel" (chair) in German, "bateau" and "chaise" in French study books, to mention just those I cared to check. According to the dictionary the terminology developed between 1890 and 1918 (when it was firmly established), hence well into the time when Duchamp put together the majority of his notes for the "White Box." I find it hard to believe that he was not somehow aware of the origin of this specific pair of terms. Maybe he learned of the bateau-chaise conformations of cyclohexane through some popularisation in a book or an article for non-scholarly readership. It would be helpful to track down possible source material. It is, however, easy to understand why he should find it intriguing. It was probably sufficient to him that the interconversion of the conformations of cyclohexane, metaphorically termed "boat" and "chair," is indeed a fold-back operation, hence a member of the family of rotations. For that alone it remains another fascinating clue to how Duchamp's perceptive mode was conditioned.

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