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ARTF2223: 5D Fundamentals – Experience and Drawing

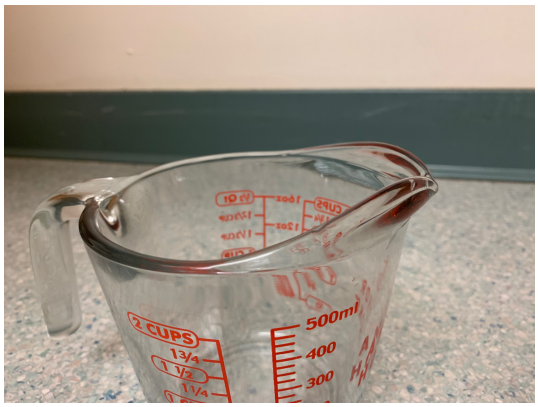
Assignment 1: The Designed Object, Utility and Constraints

Object chosen: Pyrex measuring cup

Over the course of the many decades that the famous Pyrex measuring cup has dominated the kitchenware marketplace, the object itself has undergone an extensive timeline of development and physical changes, as most products do with the passage of time. In terms of the measuring cup's utility, its sizable amount of volume and space within the cup as well as the accessible handle attached to the side of the cup allows the user to firmly hold on to, as well as lift, move and transfer, the contents of the cup.

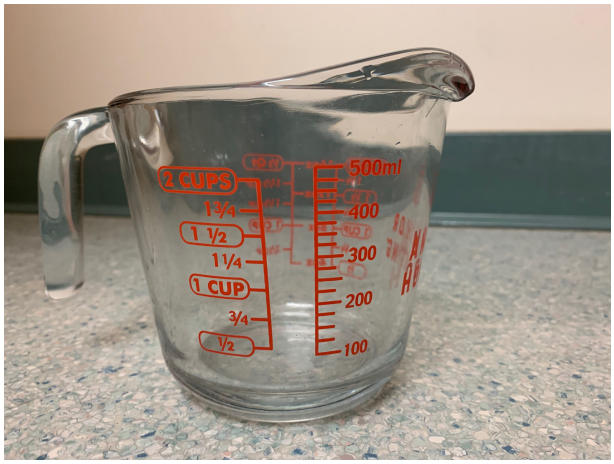
Julia Child's Pyrex measuring cup, now in the collections of the National Museum of American History.

In its earlier iterations, such as the version of the cup that Julia Child used among her set of cooking supplies, the Pyrex's handle was attached to the side of the cup at two separate points, creating a constrained space between those points through which the user was meant to place their hand to grasp the object. The original handle affords the user the ability to grasp and maneuver the entire cup throughout a wide range of motion. Much like the current version of the cup, it also affords visibility. The cup is made of glass, and therefore allows the user to fully see the cup's contents, whether they be solid or liquid. The Pyrex cup is made of glass, which affords exposure to heat without the problems that come with plastic alternatives. The cup affords the ability to fill its container with small forms of food such as rice or pasta, as well as a variety of liquids, but it also affords drinking. The user could feasibly use the cup as a container for their drink, much like a traditional drinking glass.



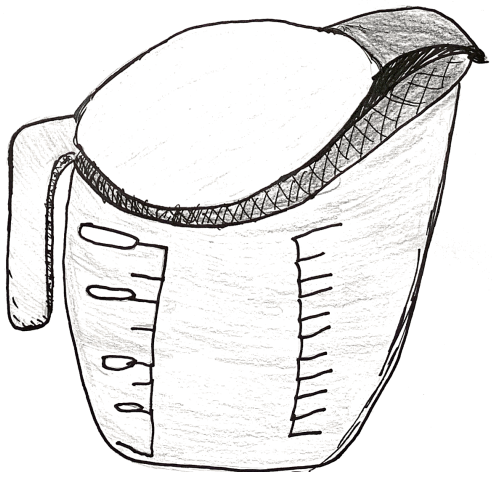
Historically speaking, measuring cups were created to assist users in physically calculating the precise amount of food or liquid they needed to set aside for the contents of a particular recipe. Since the main behavior involved in using the cup is the actual act of holding it with your hand, the handle's evolution into a handle that merely drops off the side from its singular attached location most likely affords better mobility.

An open handle not only affords greater mobility and movement of the object by the user, but also eliminates the physical constraint posed by the limited hand-gripping space created by the older handle. Perhaps people with larger hands found it uncomfortable to grasp the older Pyrex cup, which could have even affected the degree of control they had over the object itself, as such motion is dictated by the individual's ability to grip the cup. The glass composition of the cup may be an affordance, as previously mentioned, but it can also be a material constraint as glass is significantly more fragile than plastic, and is thus more prone to damage if not used with proper care. Material constraints intersect with environmental constraints here as the size amount of food or liquid (material) has a direct relationship with the information regarding how much of the food or liquid is physically present in the cup itself (environment), which is illustrated through the markings on the sides of the cup.



My drawings of the current version of the Pyrex measuring cup can be found below.

Pyrex 2-cup measuring cup, in context



Pyrex 2-cup measuring cup