

A++GREEN – The fridge from static object into living system

by Karin Ransberger and Antonio Sorbo

Tutor: Luigi Bistagnino

In the last years scenarios around food systems start being characterized by a retrieved consciousness and a new sensibility on the consequences of a complex industrialized food chain that causes more and more mistrust by the final consumer in what he or she lives off.

So called “conscious consumers” want those values to return reality, that distinguish human *savoir faire* and that conserve the meanings of the relationship between men and food.

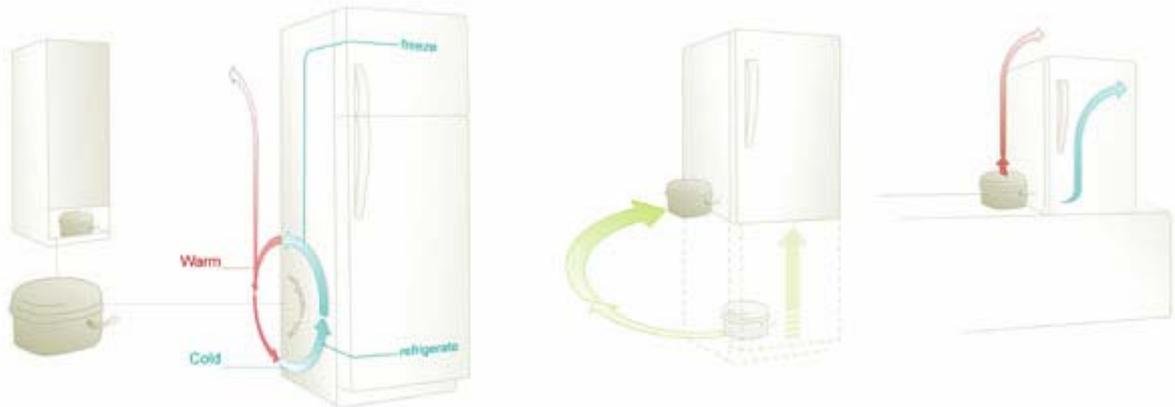
If we refer to the kitchen as the main contest where one gets in touch with food, we can notice that even most of the food processing tools are governed by the alliance with industrial food systems.

The refrigerator, in particular, already known as a passive instrument, is getting more and more “the grave of food.” One need only consider how different the relationship to preparation, transformation and preservation had been before the fridge has established itself within Western attitudes.

Starting with this assumption the intention of the project is not only to reconfigure this household appliance and its semantic value but also to create new tools for new actions which represent an interactive connection between operating procedure and consumer. While holding steadily energy consumption an additional significance is being performed by the fridge.

The analysis of the refrigeration cycle has shown that electricity as input generates two different outputs, or better to say coldness and warmth. Only the low temperature, however, is being used in the refrigerated area as opposed to the the high temperature that is emitted by the compressor and dispersed without being turned into a resource.

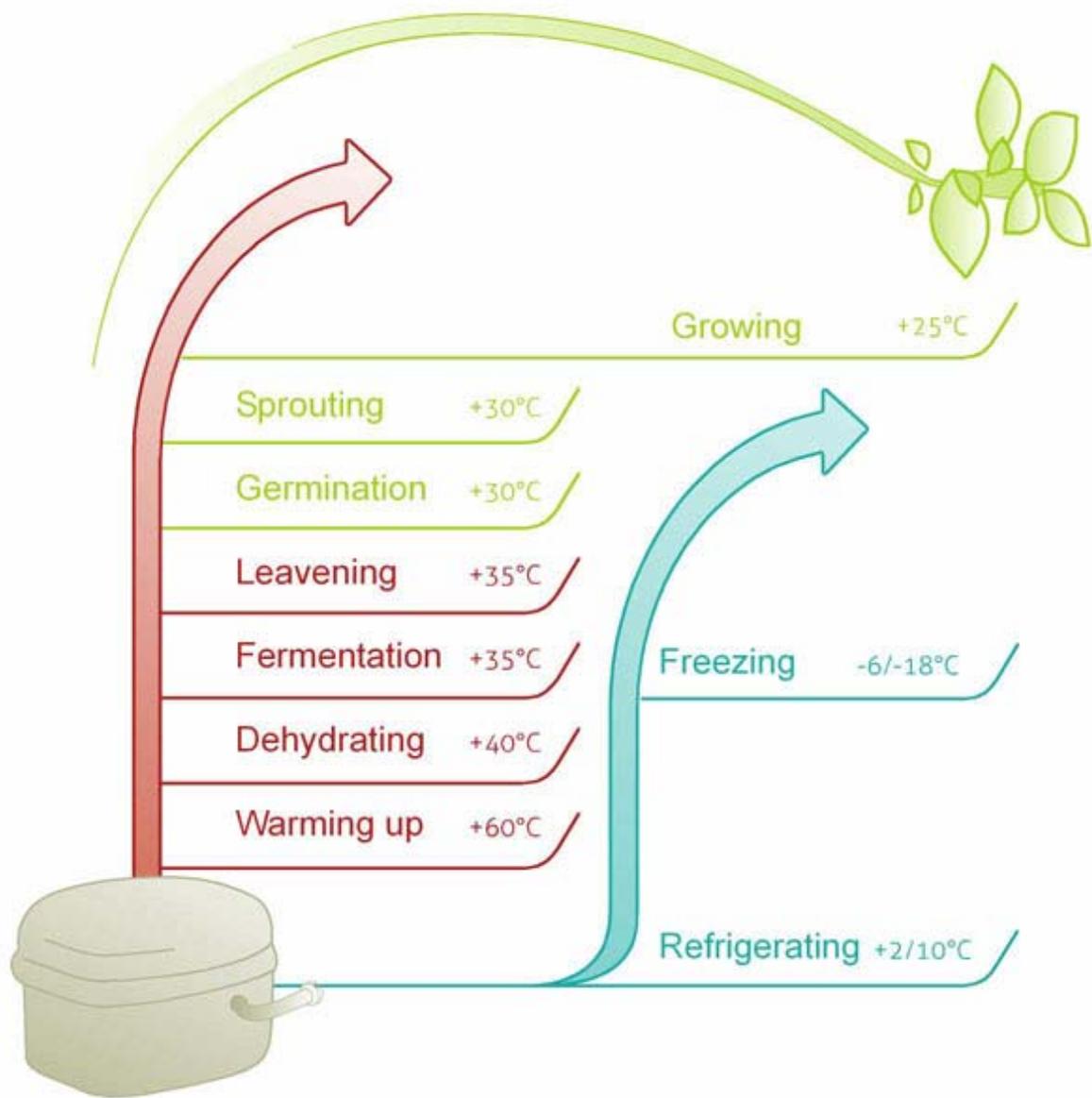
The basic idea is to move the compressor from its classical position in the back up to the height of the countertop. By doing this the heat is placed to allow that it can be reintroduced into other actions within household production and transformation processes.



Compressor positioning

The heat that is emitted by the compressor rises, as it is natural for a warm air flow, and passes through four compartments degrading from 60° to 25°C, determining four different microclimates. These microclimates represent the possibility to carry out actions in order to implement the functionality of the fridge on the one hand and to preserve the value of food by being an interactive platform to the consumer on the other.

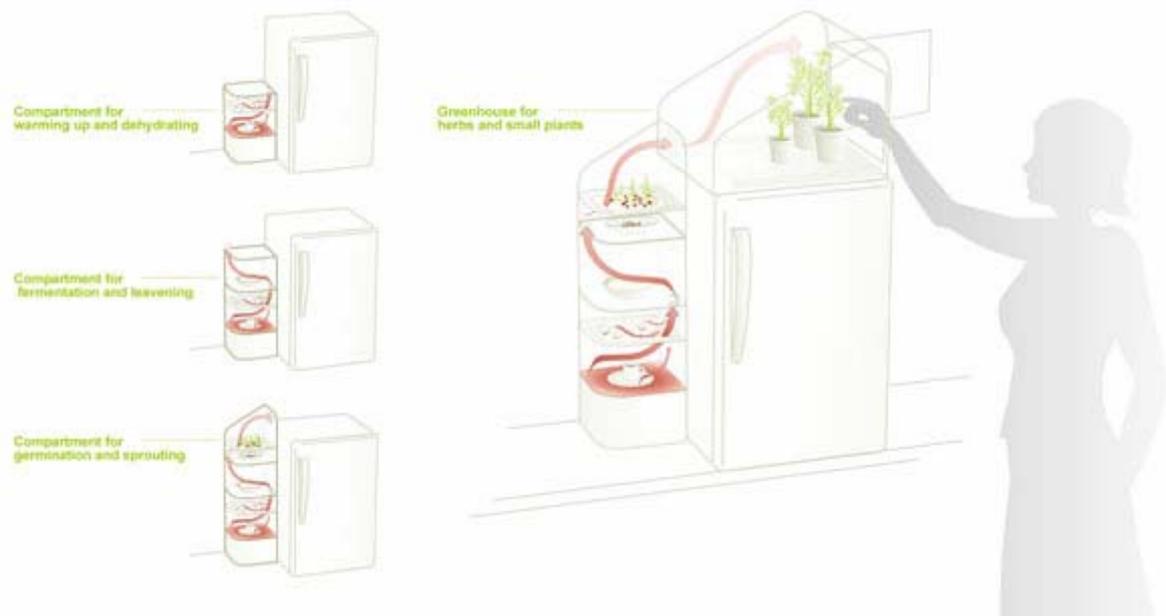
The refrigerator no longer is a passive conserving machine, but it becomes a tool that is capable of generating and producing.



Functioning layout

The first compartment that is run through by convection heat is used for a chafing dish in the bottom and trays for dehydration of food on the top. The output warm air of this compartment gets channelled to the next level where temperature and conditions are favorable for fermentation and leavening.

The upcoming compartment once again gets warm air from below and provides a third microclimate that has appropriate characteristics for processes such as germination and sprouting. From the seed to the sprout, and from the sprout to a plant. Indeed, the last compartment right above the fridge accommodates a small greenhouse for herbs or other small plants.



Compartments and use

All these processes around food processing create **A++green**, a fridge that not only deals with current tendencies like energy-saving concepts but that maximizes the use of energy in such a way that it returns to the consumer what is really essential in the relationship between men and food: Enrich our food through actions with a high symbolic value that convert the fridge from static object into a living system.

For further information, e-mail:

Karin Ransberger: karineria@yahoo.de

Antonio Sorbo: sorbo.a@gmail.com