

percent ... Yes, 28 ... We have to find something for that ... Important ... Then we have more problems ... That it is too small, of course ...

(time: 68 min.) This is also in my litter separation ... With the newspapers, etc. That includes the size ... Total size ... Then we have summarized in four points now ... The cleaners that would have to bend over so much ... Dark in the trains ... Too fast in flipping over ... That is the flipping over of the bins ... Sometimes ...

(time: 69 min.) The liquids in the bin splashes ... Turn over ... splashing of the liquids ... Yes, I'm putting it all together now ... Then you've got the newspapers ... OK ... I think that the separate collection of paper is all that's feasible ... Because other separations will be too complicated ... Do you know whether the railways are interested in the separation of litter in paper and other litter? ...

(time: 70 min.) That has not been discussed ... Yea ... But if I bring up the subject, can I then get an answer from the railways? ... In this way? ... EXPERIMENTER: You can raise the subject tomorrow ... Right ... And then we're presenting the concepts ... That means we'll have to work now ... I will look back to the current bin ... Because I want to see how far that sticks into the compartment ... The exact measures ...

(time: 71 min.) I don't think ... I'm making a drawing of the bin ... And I'm putting in the measures ... The total size of the product as it is ... Because I have some views here ... And I'm making a 3D sketch ... This is the height ... Section ...

And the lid ...

Interestingly, the separate bin is a solution that emerges as a possibly integrative frame idea from an intense analysis of the project brief and all the other information. These kinds of ideas have been called a “primary generator” in design, and they are to be taken as an initial frame that can lead to design ideas rather than as a core for a design concept. Taking this as a starting point, the designer retraces the value that can be achieved by this frame, and links it to the wishes of other stakeholders in the broader field—checking whether they would object, seeking to bolster the case for why this is a good solution direction, and seeking to enrich the frame with added value that might be achieved. This is an intense process of invention and reflection. The designer is carefully exploring an interpretation of the problem and a core solution idea together, in a close coevolution of the two. The paradox that gave rise to this quest was hidden in the brief:

*Because* the railway company wants to encourage use of the bins, the bins should be in easy reach for passenger comfort.

*Because* the railway company wants to encourage use of the bins, the bins should be quite big.

The paradox then becomes: