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METHODOLOGICAL COMBINATION IN A PARTICIPATIVE APPROACH TO CO-DESIGN A SOCIAL ROBOT IN AN AUTONOMOUS DAY CARE CENTER

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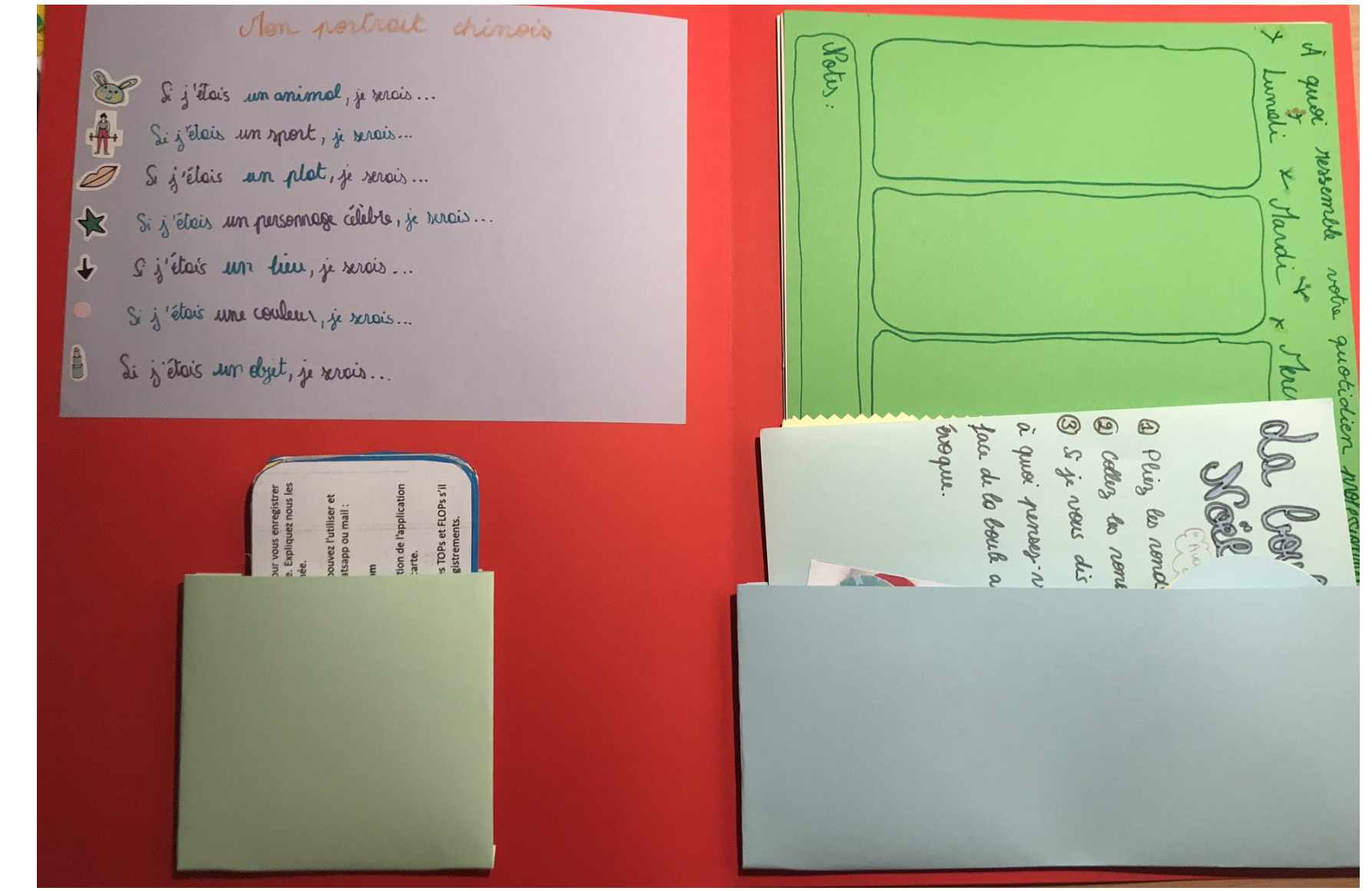
WHAT? 10 fun & quick activities for 4 professionals: a psychologist, two caregivers and a nurse [Gaver & al., 1999].

WHY? To question the daily work and the a priori vision of a social robot.

PROS & CONS Playful method that requires investment but allows regular contact and good discussion support.



CULTURAL PROBES



SEMI-STRUCTURED INTERVIEWS



WHAT? Interviews scheduled during participant observations or during a dedicated time with 8 interviewees [Britten,1995].

WHY? To better understand their daily professional activity, the difficulties faced, the solutions adopted. To investigate their ideas for the use of a social robot and their ethical concerns.

PROS & CONS Focus on participants' point of view and foster the emergence of ideas for using the social robot.

WHAT? The researcher immersed as a participant observer, at least 1 day /month for 7 months [Randall & al., 2007].

WHY? To gather real data and an interpretation closer to reality to co-design 8 use cases.

PROS & CONS Time and energy consuming, but direct contact with ecological environment allows a closer interpretation and a better description of situations.



ETHNOGRAPHIC IMMERSION

WHAT? 2 group interviews with elderly and caregivers: one to prioritize use cases, and the second to develop the graphical interface of the tablet.

WHY? To capitalize on interaction between participants as qualitative data [Kitzinger, 1995].

PROS & CONS Requires adaptation in terms of time and explanation with regard to the audience.



FOCUS GROUPS



WHAT? Iterative usability tests in a realistic environment with 12 participants: 8 teenagers (14-15 years) and 4 elderly (75-90 years) [Lan Hing Ting & al., 2018].

WHY? Identify technical problems and improve the prototype.

PROS & CONS More controlled than ecological environment, the next step in real situation will reveal probably different behaviours.



LIVING LAB TESTS



INTRODUCTION IN REAL ENVIRONMENT

