

Ethical Framework for Elderly Care-Robots

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ACCOMPANY- Acceptable robotiC COMPanions for AgeiNg Years

ACCOMPANY Website <http://accompanyproject.eu/>

Context

- Quickly growing and longer surviving elderly population in Europe and globally
- Heavily burdened informal carers (at least in UK)
- Elderly “bed-blocking” (at least in UK)
- “Care in the community” –coalescence of money-saving agenda with psychiatric libertarianism
- New “care in the community”: prolonged independent living with assistive technology

Non-robotic assistive technology

- Alarms
- Helplines
- Sensors for falls, bed occupancy
- Medication monitoring
- <http://www.facilities.ac.uk/j/images/stories/main/telecare.jpg>
- “Virtual visiting”

Questions

- Do robots add much to non-robotic assistive technology?
 - They add “presence” and (possibly) care
- Robots can be present, but as carers?
 - Some machines can be present, but not as carers
 - Television, telephone as a conduit for presence

Answers

- Do robots add much to non-robotic assistive technology? **They can, but what they add may not be what elderly most want. In care homes: kindness; elsewhere facilitation of mundane tasks that are difficult to perform in old age.**
- Kindness, accessibility, presence and care
- **Demand of kindness very exacting**
- Robots can be present, but as carers?
 - Washing machines are present, but not as carers
 - Television, telephone as a conduit for presence
- Carers vs enablers?

Presence

- A chair can be co-located with someone
- Co-location not presence (because someone can feel alone when co-located)
- Presence is presence *to* a subject
- Presence is typically presence of a *person* or something analogous to a person
- Presence can be virtual. A character in a television programme or a book can be present to a subject
- So can a (long) dead person in a photograph
- The television or the photograph can be a medium for presence of a person, without being present themselves
- Skype can be medium for presence in real time

Presence-to

- Requires a contribution from the subject:
 - Imagination [or]
 - Acceptance [or]
 - Willingness to adapt to behaviour of the thing that is present
- (These conditions can be satisfied by a subject with respect to a car, or domestic appliance that is used for a long time, as well as animals.)

Presence-to

- Robots but not telecare equipment can be present-to a subject

Presence-to and simple robots



Presence-to and simple robots 2



Presence plus

- Patients in care-homes wanted to be “treated with kindness”
 - <http://www.dailymail.co.uk/health/article-2072818/One-NHS-hospitals-care-homes-breaking-law-dignity-respect.html>
- Kindness is way above the threshold for presence
 - Presence plus benign and friendly anticipation of and response to wishes; empathy

Presence-plus Independent residents

- Need kindness
- Need some self-reliance and capacity
- Kindness might be less important than enablement
- Enablement plus companionship
- Enablement plus companionship plus monitoring
- Enablement plus companionship plus monitoring plus reporting, alarm raising

Care-o-bot 3

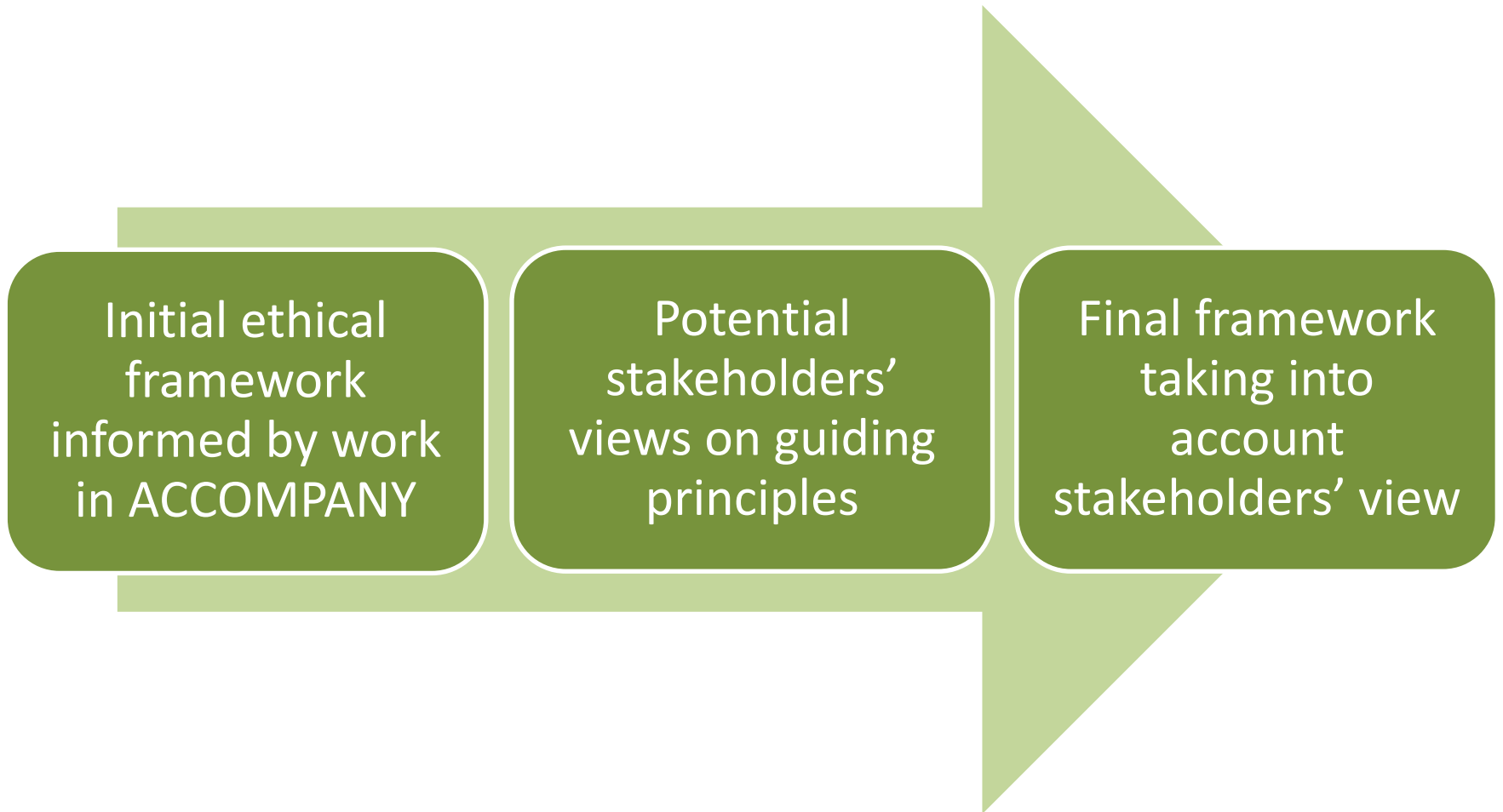




Squeeze Me



Three phase ethical evaluation



Initial Ethical Framework (background)

1

- The requirements of ACCOMPANY robotics scenarios
 - Robot as personalized care companion
 - Empathic
 - Robot as co-learner
 - Robot as fetcher and carrier
 - Robot as co-mover and co-present (proxemics)
 - User-controlled

Initial ethical framework (Background)

2

- Philosophical literature criticizing robot use, design as
 - Deceptive
 - Infantilizing
 - Intrusive
 - Isolating
 - Treating the elderly as a problem

Initial Ethical Framework (Background)

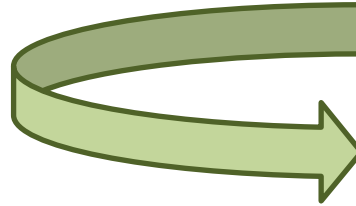
3

- Liberal Democracy
 - Freedom within limits of no harm to others
 - Harm-to-self permitted
 - Equality of the cognitively competent
 - Anti-discriminatory
 - Right of those affected by a policy to be consulted about it

Potential values to be applied

- **Autonomy** – being able to set goals in life and choose means;
- **Independence** – being able to implement one's goals without the permission, assistance or material resources of others;
- **Enablement** – acquiring the means of realizing goals and choices independently;
- **Safety** – being able readily to avoid pain or harm;
- **Privacy** – being able to pursue and realize one's goals and implement one's choices unobserved;
- **Social connectedness** – having (consensual) regular contact with friends and loved ones and safe access to strangers one can choose to meet.

AUTONOMY



**INDEPENDENCE,
ENABLEMENT**

SAFETY

PRIVACY

**SOCIAL-
CONNECTEDNESS**

Relative weights of values

- Where values conflict with autonomy, autonomy prevails
- Autonomy prevails even over safety
- Basis of this: liberal equality

Autonomy vs safety

- Depends on degree of dependence
- The more exercise of autonomy foreseeable and avoidably burdens others e.g. by reducing *their* autonomy, the less autonomy outweighs safety
 - Burdening formal vs informal carers

Autonomy and enablement

- The more an agent works at enabling themselves and so at not burdening others, the more that self-enabled agent's autonomy outweighs safety
- If there are limits of self-enablement in old age, autonomy can only outweigh safety within limits

Autonomy and social connectedness

- People can autonomously choose relative isolation
- People can also “choose” relative isolation because of technophobia
- Kinds of friendship can be generationally specific
- If there is genuine online friendship, the kinds of friendship recognized by the elderly may increase as more people at home with the internet get older

Does Carebot try to do too much?

- Enablement might be non-robotically but technically achieved
- Social connectedness might be achieved by computer rather than robot
- Companionship might be achieved by a simpler and cheaper robot than Carebot
- The presence-component could be achieved by Paro

Does Carebot try to do too much ?

- Empathy