#### **RESEARCH PAPER**



# A theory of old care: beyond state and market

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#### Abstract

In the backdrop of the rise of capitalism that led to a crisis in old care, this paper advances a theory of old care based on Amartya Sen's analytical frame of capability and freedom. It unpacks the dimensions of care and characterizes old care from these in terms of aging. The definition and dimensions of old care are produced in a scenario where the life span of the elderly is seen as fluid, complex and heterogeneous and their freedom to make choice over functionings deemed essential. In the process, the paper both highlights and overcomes some of the serious drawbacks of the extant approaches to old care including those following the Utilitarian approach that underpins the state- and market-based solutions.

**Keywords** Capability · Functioning · Well-being · Care · Elderly · Aging

### Introduction

One of the gravest socioeconomic crises facing humanity today is the state of the elderly. As a human being proceeds toward old age, need arises for a care which is not to be considered care in general but a distinct kind of care to account for a particular stage of life. At a preliminary level, the term 'old care' refers to serving those care needs arising due to aging in the everyday life of the persons without which well-being in old age will be seriously compromised. Our objective in this paper is to rethink and theorize old care in a way that will transcend market and state dictated understanding of old care in the age of capitalism, a system that is at the source of the problem itself. In doing so, we do a twofold task—first is to capture the broad dimensions of care in general and extrapolate these in the realm of old care, and the second is to separate out old care from other forms of care and that too in a manner so that it corresponds to the individual old and not the old as a group. To this end, we expand Amartya Sen's capability approach to show how and why it opens up new

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and superior avenues of locating and analyzing old care in comparison to the existing renditions of the same.

While the first objective requires recasting of Sen's model in understanding care as such the second objective lands us in a further puzzle—what is that attribute which might enable us to separate out and define 'old care' as distinct from care in general? A definition of something demands the isolation of a characteristic (Hospers 1997). It guarantees that a word becomes a definition, as distinct from others. In our framework, aging is the distinguishing attribute of old care. We seek a definition of old care by way of addressing the features of 'aging' in terms of care needs. Aging refers to a very specific existential state of being that is widely recognized and understood by the members of society. The features of aging are distinguished from features of other existential states of being such as disability, infancy, etc. Explicating a definition does not demand that we define other categories, but only what we are seeking out to isolate and specify: old care here. An aged person may be disabled or a person may even become early-aged due to some physical disability but that does not call for confusing between the two; disability and aging may share some common characteristics but they are conceptually different. This difference arises because the shared features of two states, say aging and disability, do not exhaust the entire set of features specific to what we are defining (say, old age) and these shared features in their interconnectivity with other features would not even mean the same thing (say, a non-elderly disabled person in wheelchair and an aged person in wheelchair will have different explanation for their respective restricted state of being and doing). Therefore, care with respect to 'aging' or what we call old care is different from other versions of care based on other distinguishable characteristics. Further, we would like to highlight that by old care we do not intend to pose some idea of care meant for a certain group of people—who are aged; on the contrary our concern is to show how the concept of old care is associated with an individual aged person. This is a crucial intervention of this paper in the domain of old care where aged people are not addressed as a homogeneous group with some universal features of aging.

Notwithstanding the different ways in which aging was historically seen and accounted, it may still be said that not much emphasis was given to old care as a distinguishable element in premodern societies even though old care was rarely, if at all, delivered as part of state duty or through the market system. This may have been because it was considered as part of cultural reproduction of society processed through various kinds of family-kinship-community networks, so deeply integrated in its functioning—forms of life—that no separate consideration was necessitated. The advent of capitalism with its utilitarian logic produced a disconnect of the forms of life from those normative demands that morally obligated younger cohorts to care for the aged as part of intergenerational reproduction of family and community life (Bilgrami 2014). The cutting of this umbilical cord was complemented by the process of the systemic evolution, changes and maturation of capitalism that has since promoted, and led to historically unprecedented levels of, movement/migration (voluntary and involuntary). The dual phenomenon complemented, reinforced and compensated one another to generate two lasting effects in turn: first, to paraphrase Max Weber, the 'disenchantment of old age/old care' and second the collapse of erstwhile family-kinship-community-based relationships and social networks that previously allowed for intergenerational reproduction of care for the elderly. The result was that aging appeared as a social problem and 'old care' emerged as a category indicative of social crisis. It is notable that this social crisis is derived from the historical appearance and demands of capitalism



underpinned by the new operative ontological imperative, an aspect we will probe further in the next section.

Because of the global reach of the problem, various national and international organizations like World Bank (1994), United Nations (1983, 2002, 2008, 2013), World Health Organization (1998, 2004, 2015), etc., have been forced to explicitly recognize and address the issue of old care in recent times. Their discussion seems to echo a shared viewpoint that as societies march toward the path of capitalist development, two contradictory effects emerge specifically with respect to the elderly. On the one hand, as the access to better healthcare and medical facilities improves, the life expectancy of individuals increases considerably thereby adding more numbers to the elderly population; on the other, following the combined effects of 'disenchantment of old care' and mobility, we witness a breakdown of the traditional form of families, kinship relations and communities which conventionally has been the primary source of providing required care to elderly persons. Unlike in many of the earlier systems where old care was seen as a moral duty of the adult, we find an acknowledgement here of a displacement of the problem of aging into an economic (cost) aspect such that old age is seen as a burden for the productive younger cohorts. That the World Bank makes a connection of 'aging' with 'crisis' is indicative of the significance of the issue:

The world is approaching an old age crisis. As life expectancies increase and birth rates decline, the proportion of the population that is old is expanding rapidly, swelling the potential economic burden on the young (World Bank in Sherlock 2002, p. 1164).

Rather than connecting the cause/source of the burden to capitalist system, the discourse of old care tends to leave the burden of solution to capitalism itself. Thus, the gradual disappearance of extant family-kinship-community-based arrangement of old care is associated with the simultaneous birth of new arrangements typified by the formal sources of state (say, pension) and market (say, old home), two institutions integral to and supportive of capitalism. The focus turns to delivering the most efficient and sustainable ways of providing care to the elderly through the formal sources of income/ commodity so that it covers the largest segment of the population at minimum cost. There is thus an attempt to govern the effects rather than the cause of this problem and that too through an economization of the problem of aged population. The 'disenchantment of the old age' turns old care into an object that can now be placed under the rational decision making process of cost-benefit calculation. This also points to the limitation of addressing the category of old care through mainstream economic thinking that tends to objectify old care and project it into an income/commodity space. It is a deficit that cannot be solved by adding and stirring non-commodity aspects to the mainly commodity based frame or by reducing the former to the latter (say, through imputed valuation). Rather, it requires building a distinct framework in which there is an interconnected continuum of commodity and non-commodity bundles.

There is another complementary way to interpret the manner in which the problem of old care has been dealt with, especially at the global institutional level. It pertains to the attempts to present solutions to crisis of old care through listing of care needs without adequate theorization of the category of old care. The problem with listing is that it tends to posit a somewhat myopic and static view of old care. Moreover, both these interpretations undermine the idea of freedom of the aged and the possibility of subjectivity. This twin deficit becomes particularly glaring when seen through the lens of Sen's capability framework, albeit reformulated to suit our problem.



While capabilities approach have seen formal treatment in many arenas [including poverty (Alkire 2002), gender (Nussbaum 2000) and disability (Mitra 2006)], the issue of elderly has remained somewhat forsaken which, as Sherlock (2002) notes, cannot be similarly treated as the others. While Sherlock appeals for an intervention through the work of Nussbaum we develop our approach by reformulating the formal structure of Sen (1987). This reformulation significantly departs from extant renditions of old care. The first departure draws attention to those versions that try to encapsulate the care requirement of old age in terms of some exhaustive listing. Our reformulated Sen's frame can be invoked to make an argument that listing of care requirement is no substitute for defining old care and is hence inadequate. Secondly, among the existing approaches, the Utilitarian criteria tend to dominate the discussion on old care, particularly when the solution is sought explicitly from within capitalism. If utilitarianism is about happiness and desire fulfillment, the device that permits individuals to get what they will be happy with or what they desire is income. It follows from our frame that the Utilitarian objective dissolves the diverse aspects of old age care into a specific condition—income and commodities—and through this reductionism it truncates the space/problem of old care that should encompass a continuum of commodity and non-commodity domain. Thirdly, defining and characterizing old care through our frame has the benefit of explicitly incorporating the key aspect of freedom of the old and their subjective element into the evaluative space which, as Sherlock (2002) notes, is missing or demoted in the other income or listing based approaches. The incorporation of *freedom* of the elderly in making their choice of living brings into contention the political dimension of 'caring with' which requires 'that caring needs and the ways in which they are met need to be consistent with democratic commitments to justice, equality, and freedom for all' (Tronto 2013, p. 23). Finally, our theorized evaluative space derived from the definition and dimensions of old care will help us to 'appreciate later life as a fluid, complex and heterogeneous phenomenon' (Sherlock 2002, p. 1165). Our rendition of old care would be malleable enough to accommodate not only the heterogeneity of care needs across old persons but also embody contingently changing possibility of the state of an aged person over the time. All these four deficiencies present in extant approaches on old care are better addressed in the reformulated Sen's frame. Our theory centralizes the importance of defining old care and unpacking its dimensions as distinct from, but not necessarily independent of, state and market.

The trajectory of this paper is the following. We begin by expanding further the connection of social crisis of old care with the historical appearance of capitalist system. Having posed the importance of old care as a social problem, we then explore the idea of old care as posited by the three major international organizations—the United Nations, the World Health Organization and the World Bank—which are in charge of directing the preparation of research agenda, policies and future plans and programs regarding the issues of aged population. After pointing to the deficiencies in them, we delve into our main task of theorizing old care within a fluid, complex and heterogeneous space spanning

<sup>&</sup>lt;sup>1</sup> The Feminist theorists have dealt with the issue of caring in considerable depth and complexities. Their discussions range from analysis of caring as performance of labor in various institutional set up, possibility of exploitation in care work, devaluing or undervaluing care work, to the role of care ethics in political theory and how it shapes our everyday life (Kittay 2011; Tronto 2013; Folbre 2014). While accepting the importance of these works much of which has deeply influenced our thought process, we would still say that our objective in this paper (old care) and the approach we take (formal presentation of capability approach) distinguishes our intervention from these renditions of care.



the interconnected continuum of commodity and non-commodity bundles from which the elderly can choose their desirable state of being and doing.

## Old care in the age of capitalism

Why do we contend that the emerging social crisis of old care is a direct result of the appearance and expansion of capitalist economy? Recall the argument that the evolution of capitalist system with its operative ontological paradigm severed the erstwhile relation between human and nature, between moral conduct and forms of life thereby setting off a process of reconstitution of the subject vis-à-vis the old. In fact, Agamben (2013) and Healy (2016) trace the seeds of a new operative ontological paradigm that would underpin the functioning of the emerging capitalist system to the earlier stage of antiquity. To be precise, this operating paradigm not only fundamentally displaced the extant moral compass and forms of life but in the process instituted and deepened a breakup of their symbiotic relation by way of shaping a new relation in which the two stood as disjoint; forms of life got principally guided by utilitarian objective rather than the moral demands from nature. This process found fertile ground and spread rapidly in the West in the post-enlightenment era of utilitarianism that gave shape to modernity and market system driven industrial capitalism, and entered into the rest of the world through the process of colonialism and imperialism (Bilgrami 2014).

The implication of this historically emerging operative ontological paradigm unfolding in relation to capitalism was that it helped produce a subject who sees himself in relation to the old in a manner that no longer views the aspect of moral duty derived from the erstwhile relation as useful or sustainable. Such a changed outlook for the old is true for the young and middle aged, and it could be true for the old themselves. The disenchantment of the world takes here the form of disenchantment of the aged entailing that the conduct of the subject need not necessarily be any longer bound to the normative demands imposed by the conditions of aged. That relation, if and when it exists, is incidental rather than necessary for societal reproduction.

Faced with the social crisis of old care, capitalist system has responded by attempting to reorient the meaning of aging. Subjective aging—how old people see themselves and how the society will see them (Bengtson and Setterstein 2016)—gets transformed under the capitalist system such that the responsibility of identifying and dealing with aging falls fundamentally on the aged rather than on the system itself. The objective is to ensure that individuals instilled with competitive spirit shaped through various social institutions and apparatuses try to remain income-wise active in their aged life as long as possible. They are thus useful to capitalism as far as possible and do not impose a burden on the productive young cohorts who are essential for the growth of capitalism. References to 'active aging' (WHO 2002b; Walker 2002; Stenner et al. 2011; Boudiny 2012; Lassen and Moreira 2014), 'productive aging' (Morrow-Howell et al. 2001), 'successful aging' (Havighurst 1961; Rozanova 2010), 'healthy aging' (Cardona 2008), etc., point to an incitement to a discourse of aging (Lamb 2014). In this context, Buch's (2015) identification of the segregation of 'oldest old' from the category of the old in general is also integral to capitalism's subjectivity production which Lamb (2014) has called the biopolitical project. The attempt to sort out the population this way is to ensure that only the oldest old who are beyond the purview of active aging or productive aging are accepted as eligible claimants of care and governed through distinct technologies of power.



The other impact of a functioning capitalist economy is structural. Capitalism produces and demands mobility in a spatial sense. Mobility may be due to growing distress from ongoing breakdown of agrarian society (as presently in many developing countries) that is demanded by the capitalist induced process of industrialization and urbanization or due to growing aspirations of subjects for a better standard of living. Whatever may be its source, mobility remains one of the more important elements of the spatial disarticulation of society that continually situates a portable army of subjects under the disposal of a mutating capitalist economy. It impacts not only the constitution of erstwhile family structure, but also the community as a whole. Both of which resultantly become untenable, undesirable and even disposable. If the erstwhile care regime requires time and localized space to form, solidify and function, the facet of mobility hardly helps in sustaining it. In fact, it subverts and then destroys the idea of congealed, stable space.

The above situation is further aggravated by an increase in life expectancy that was fueled by capitalist induced medical advancements and the phenomena of 'medicalization of the body,' both of which are directly related to the biopolitical project (Rabinow and Rose 2006). The combined effects of all these aspects, subjective and structural, meant that the erstwhile care regime starts coming apart and old care emerge as a social problem that requires some sort of institutionalized response on behalf of society. Rather than valorizing old care, we see it as a historically contingent category appearing as direct fallout of a crisis resulting from capitalism.

While the social crisis of old care can be traced to capitalism, there have been attempts to handle this crisis from within capitalism through the concomitant process of biopolitical medicalization of the body and old care delivery mechanism by way of more formal avenues such as social security by the state (through, say, pension or health care benefits using funds generated by tax on the capitalist enterprises) or through market by predominantly capitalist enterprises. While social security by the state is more rigid in terms of its criteria of old age, the market mechanism does not overtly impose strict criteria that characterizes old age. However, old care to have a market contract requires some fixed and finite commodity needs that can be quantified and assessed. This produces in turn segregation by way of basic needs, amenities, recreation, entertainment, medical needs, psychiatry, and so on, which an aged person can potentially demand from the market. The care service providers deliver the commodity care based on this perceived finite set of care needs which, with growing competition among providers, tend to become more standardized. Whatever it is, the connection of these formal solutions to some variant of utilitarian approach is palpable. While we don't discuss the capitalist induced ideas and programs in this paper, their underlying Utilitarian basis is certainly interrogated.

# The institutional responses to old care

#### The United Nations' idea of old care

The first ever organized initiative that addressed the problem of elderly persons as an important world problem and attempted to promote an appropriate international response to the issues of aging was taken up by the United Nations (UN) when it convened 'a World Assembly on Aging' in 1982 in Vienna. In the Vienna International Plan of Action on Aging (United Nations 1983), the UN expressed the view that care of elderly persons should be concerned with not only disease curing but also the total well-being of elderly



persons. The total well-being of elderly persons includes multiple aspects of aging life—physical, mental, social, spiritual and environmental factors—which are interdependent on one another. Care, which is supposed to maintain the total well-being of elderly persons, therefore, should simultaneously focus on these different interdependent factors. Concentrating on only one factor would compromise the totality of wellness in old age living.

This same viewpoint had been reiterated by the UN in the Report of the Second World Assembly on Aging held in 2002 in Madrid where it maintained that 'Effective care for older persons needs to integrate physical, mental, social, spiritual, and environmental factors' (United Nations 2002, p. 25). The UN thus views old care as a support system which takes into account various factors of human life in old age. Put in a different way, the UN's proposition understands old care as a comprehensive assistance mechanism which addresses the intertwined relations of the above mentioned factors of life in old age so that the well-being in old age, which depends on all these factors, is maintained. While the UN indicates that the broad factors or areas of life are not disjoint, its approach creates some fuzziness in conceptualizing on the one hand how the different factors of life can be integrated in the realm of old care; and on the other hand how the interrelation among these factors and their integration with old care simultaneously can be correlated with the well-being of the elderly persons.

## The World Health Organization's idea of old care

World Health Organization (WHO) understands well-being as 'a general term encompassing the total universe of human life domains, including physical, mental and social aspects, that make up what can be called a "good life" (WHO 2001, p. 211). Nevertheless, being an organization that primarily deals with the issue of health, it sees care in terms of health where 'health domains are a subset of domains that make up the total universe of human life' (WHO 2001, p. 211). WHO relates the idea of care need to 'some state of deficiency decreasing quality of life and affecting a demand for certain goods and services. For the older population, lowered functional and mental abilities are decisive factors that lead to the need for external help' (WHO 2004, p. 11). The state of deficiency in old age is due to lower functional and mental ability which in other words is called disability. For WHO disability is neither merely a medical aspect nor merely a social aspect; rather WHO propagates a biopsychosocial model of disability which is a synthesis of both medical and social model. Based on this model of disability, WHO gives us a new genre of classification of functionings which is known as International Classification of Functioning, Disability and Health. It provides 'a coherent view of different perspective of health: biological, individual and social.' (WHO 2002a, p. 9). Such a perspective of WHO (2001) involves various aspects of life which are broadly classified into four components such as body functions and body structure, activities and participation, environmental factors and personal factors. Under each heading there are various subheadings, every subheading contains an array of specific fields, each of which is again defined over some particular attributes of life. In this process WHO tries to give an exhaustive list of disability situations. Each of these situations is tagged with a specific alphanumeric code. These codes are meaningfully used only after a qualifier is attached to the code. The qualifiers are numbers (0, 1, 2, 3... etc.) which are added after the alphanumeric code that is separated by a point and are measurement or ranking of various degrees of disabilities. The codes along with the qualifiers objectively define different states of life and indicate toward different kinds of care needs. From broad aspects of old care, we thereby end up arriving at care which is related to definite disability



conditions, where types of disability is listed in a more detailed and specific way. By focusing attention on health and primarily disability aspect, WHO sidesteps the issue of a comprehensive examination of old care.

#### The World Bank's idea of old care

The World Bank's (WB) perspective on old care compared to the UN and the WHO is even narrower and unidirectional. The WB released its first policy research report in 1994 and highlighted the problems that the aged population began to experience because their old age support system as a whole started being seriously challenged. In that report titled 'Averting the Old Age Crisis,' the crisis of old age is located in the breakdown of the informal care system for elderly persons from family and community ties. According to that report 'changes in the economic, political, social, legal and demographic environments—having already broken down the family systems of old age support in industrial countries—are now weakening those systems in developing countries.' (WB 1994, p. 60) In the wake of failing informal care system the WB has tried to propose some alternative mechanisms to provide safety net to that vulnerable population group. In that context, the WB assumes old care as somewhat synonymous to financial support of old age. That is to say, it sees old care in terms of income care. The crisis for old age is reduced to a financial crisis, to mitigate which it proposes a multi-pillar financial support system through market and state apparatuses.

These approaches do point to important aspects in the process of aging that needs to be accounted for. However, they have some problems, a few commonly shared and others present more in one approach than the other.

The commonly shared disposition is a silence on capitalism and its connection to the crisis. This silence turns into complicity, more so in case of some than others, when the solution to the crisis becomes part of a governance issue that is to be resolved by instruments of capitalism.

The next problem, as an extension of top-down governance, refers to a tendency to 'list' the needs of old care leading to possibilities of selective inclusion—exclusion of requirements. Listing at the cost of theorizing old care may lead to arbitrariness in the choice of what we list and would have the danger of freezing the needs of the elderly across time and space. This is also one reason why we have taken the route of Sen (who does not consider listing as fundamental) rather than Nussbaum (who is heavily in favor of listing). There are indeed multiple factors of old age life (physical, mental, social, spiritual, environmental and also financial) and various states of disabilities as well in relation to old care. But can this list be exhaustive or uniform for all individuals in all societies? If we put such an a priori fixed listing of states or conditions of life to be associated with old care we immediately detach ourselves from the concrete reality that governs individual's needs in different societies and different individuals in a society. Thirdly, in some of the literature, especially in the World Bank's approach, we observe a tendency to fall back on the Utilitarian doctrine. This is evident when old care takes the path of financial care.

The fourth lacuna pertains to the absence of an analytical space that can characterize care needs in a fluid, complex and heterogeneous domain. For this, we need a definition of old care that can be mapped into the well-being of the elderly in that complexly situated environment.



<sup>&</sup>lt;sup>2</sup> See Sen (2004) and Nussbaum (2006) on their respective positions.

Finally, what is lacking in all of the described approaches is the absence of the category of freedom in a functional sense of the old having the option of choosing their actual living from available alternatives. These are all top-down understandings that hardly refer to the question of rights of the old in participating in decisions regarding their own life. Recognition of subjectivity and participatory rights of the old must be integral to how we define and characterize old care, and our analysis must be able to account for it in the evaluation of performance of care regimes put in place or being conceived.

Overall, what seems to afflict the discourse of old care is the absence of a rigorous definition of old care that is capable of considering and internalizing the above mentioned deficiencies. Addressing this is important because our derived conception of old care would influence our attitude and handling of care toward the aged.

## Rethinking care of elderly

The concepts of functioning, capability and freedom as propounded by Sen (1987, 1988, 1993, 2000, 2005) become important with respect to old care. For that we have to change the perspective of looking at the phenomenon of aging. Given real choices over functionings (states of beings and doings), which an old person values, our concern is which valuable functioning he or she can achieve ultimately. Not only that, but also whether or not he or she can exercise his or her free will, to the extent possible, over the set of valuable functionings when choosing one. Higher the capabilities higher would be that person's freedom, i.e., options of choosing from the set of valuable alternatives; freedom thus has value in both intrinsic and instrumental sense. Moreover, how valuable an achieved functioning is, differs both spatially and temporally across old individuals and over time. For example, an old person having sufficient financial security today might consider taking the expenditure decision by self to be a more valued state; but tomorrow with age betraying him his mental robustness might be challenged and he might want somebody (say a close relative) to take the financial decisions on his behalf. Our emphasis is not only on 'choosing to do x and doing it' but also on 'choosing to do x and doing it in present and in future.' Aging of a person influences the valuation order of different achievable functioning vectors in a capabilities set. Hence, achieved functioning vector of an individual old is dependent on freedom at each point of time. Let us now recast Sen's frame to develop a generalized theory of care.

One pivotal element in Sen's discussion is that commodity possession and functioning are two distinct aspects of human life which establishes the fact that commodity possession per se does not *determine* the well-being of individuals. Functioning, i.e., what an individual manages to do or to be, is conditioned by entitlement to commodities. But this is not the only condition of the vector of functioning of a person since the person's ability to use the characteristics of those commodities can be influenced by other conditions than mere possession. Moreover, there are also other non-commodity aspects of life.<sup>3</sup> Just like entitlement to commodities and ability to make effective use of more of their characteristics

<sup>&</sup>lt;sup>3</sup> Let us take Sen's example where nutritional achievements of a person depends not only on commodity conditions such as access to food but also various other factors such as "(1) metabolic rates, (2) body size, (3) age, (4) sex (and, if a woman whether pregnant or lactating), (5) activity levels, (6) medical conditions (including the presence and absence of parasites), (7) access to medical services and the ability to use them, (8) nutritional knowledge and education, and (9) climatic conditions." (Sen 1987, p. 17) Some of these other factors pertain to non-commodity conditions and some of these non-commodity conditions are changeable through human activities. In our rendition, commodities are those which are produced to be exchanged in the market.



determines the functionings and capabilities set of an individual, entitlement or access to various non-commodity factors and the ability to deploy their characteristics modify the functioning vector and the capabilities set of an individual.

### Different dimensions of care

The process of care may take the form of getting necessary commodities, ensuring entitlement to non-commodity conditions, to enable any individual to make use of the characteristics of commodities under possession and to utilize effectively the characteristics of the various non-commodity conditions of life. Explanation of how each dimension of care makes valuable functionings feasible to a person is backed up by examples with reference to the elderly persons so as to keep facilitating the process of arriving at a theory of old care (to be addressed in the next section). With this clarification, let us explain, with specific example of the elderly.

1. Care in the form of giving access to more commodities:

Individuals reaching old age require various commodities to maintain their lives. These commodities might be the general requirement (say food) or special requirement (say a wheelchair). An elderly person might not have entitlement to those commodities the need for which arises with aging (either because of insufficient income or even if she has income she might be unable to purchase it from market herself or due to non-availability in the market). In that case somebody else has to make the commodities available to her. The access to commodities, say wheelchair, will expand the feasible commodities vector and hence the capabilities set.

Care in the form of helping the persons to make use of the characteristics of the commodities under possession:

We have mentioned that mere possession of the commodities does not ensure that a person would be able to use the characteristics of those commodities. For example an old person might have access to food, but to realize the characteristics of food (say maintaining nutrition level, satiating hunger, etc.) she has to cook the food which she is unable to do. In that case if somebody cooks the food for her then only those characteristics of food are realized in her functioning vector. Cooking food for that old person is a kind of care enabling usage of characteristics of commodities which helps her to expand her feasible set of valuable functionings.

3. Care in the form of granting access to non-commodities:

Elderly persons' state of living, as reflected by functioning vectors, does not depend only on functionings defined with respect to commodities, but also the functionings with respect to other non-commodity aspects of life. For example an old person needs companionship of other persons who would listen to him, with whom he can share his experiences or pain; he needs peaceful and secured living environment, and so on. Access to the vector comprising of such non-commodity aspects would enable him to achieve a valuable state of being and doing. Accompaniment, for example, which helps in overcoming loneliness, can help the person to live with contentment in the society.



Similarly, secured and peaceful living environment confers to him scope of confident living.

Now suppose that some of the non-commodity aspects needed in old age are not available to an old person. Care might be the process of giving old persons entitlement to those non-commodity aspects thereby enabling them to achieve more valued functionings.

4. Care in the form of helping the persons to use effectively the characteristics of various non-commodity conditions:

The access to non-commodity conditions itself might not guarantee that the various characteristics of non-commodities will be effectively used in old age. For example, a person has some memories, that he tries to recollect, but fails do so on his own. Some-body has to help him in using the characteristics of memory such as remembering past events and incidents, recognizing a familiar person, etc. Similarly a person might have access to accompaniment of his family members but still that accompaniment cannot help him to overcome loneliness, get emotional support because old age might have caused a mental seclusion of him from others, or he might think himself as irrelevant for other members in the family. So the characteristics of accompaniment as helping to overcome the loneliness, and developing emotional bonding can only be put to utilization if somebody intervenes and put efforts to get him out of loneliness, give him emotional support, etc. It is not enough for others to be 'there' but to put an effort, care, to activate the 'thereness.' Care which helps the elderly to utilize the characteristics of non-commodity elements of life expands the set of valuable functionings.

The four dimensions of care mutually interact and influence one another in realizing the achievement of a specific functioning vector. Consider, for example, the nutritional achievements of a person which requires access to food. However, mere access to food might not be a sufficient condition as the person might not be capable of cooking the food himself; somebody has to cook it for him. Again, only consumption of food of normal quantity or quality might not serve an elderly person's nutritional requirements. He might need to follow a specific balanced diet formula and medicinal supplementary, a non-commodity factor of life. But given the physical and mental states in old age, whether an old person is maintaining that specific balanced diet and medicinal supplementary formula depends on whether somebody else is taking the responsibility in helping him to maintain that on his behalf; somebody has to help him to minutely follow that diet routine and medicinal chart which is most suitably formulated to fulfill that old person's nutritional requirement.

# Defining and distinguishing old care

In our frame, old care involves activities and efforts of persons directed specifically toward an elderly person, which expands the feasible set of valuable functionings and enables the elderly persons to achieve more valued functionings thereby increasing well-being. Given the four dimensions through which old care can help the elderly persons to achieve more valuable functionings, we now concentrate on the concept of old care in totality. Given our analysis, we modify the specifications developed by Sen (1987) as

 $x_i$  = the vector of commodities possessed by person i



c(.) = the function converting a commodity vector into a vector of characteristics of those commodities.

 $y_i$  = vector of non-commodities possessed by person i.

n(.) = the function that converts a vector of non-commodity aspects into a vector of characteristics of those non-commodities.

 $k_i(.)$  = a personal 'utilization function' of i reflecting one pattern of use of both commodities and non-commodities that i can actually make (in generating a functioning vector out of a characteristic vector of both commodities and non-commodities possessed).

 $K_i$  = the set of 'utilization functions'  $k_i$ , any one of which person i can in fact choose.

If the person i, given his possession over commodities and non-commodities, chooses the utilization function  $k_i(.)$  then his achieved functioning vector is

$$r_i = k_i(n(y_i), c(x_i)) \tag{1}$$

The feasible functioning vector would be given by

$$P_i(y_i, x_i) = [r_i | r_i = k_i(n(y_i), c(x_i)), \text{ for some } k_i(\cdot) \in K_i]$$
(2)

And the capabilities set given that  $x_i$  is restricted to commodities  $X_i$  and  $y_i$  is restricted to non-commodities  $Y_i$  would be

$$Q_i(Y_i, X_i) = [r_i | r_i = k_i(n(y_i), c(x_i)), \text{ for some } k_i(\cdot) \in K_i, \text{ for some } y_i \in Y_i, \text{ and for some } x_i \in X_i]$$
(3)

We have explained that there are several channels through which a person's care can be accounted for. Aggregation of cares, coming through all these channels that increase the freedom of any person in achieving valuable functionings to the fullest extent possible, together, in their conjunction, make up care in totality.

Old care in its totality indicates to that care which fulfills all the care needs arising with aging in terms of all the four dimensions we have mentioned. Let the commodities to which the elderly person needs entitlement be  $X_i^{\text{OC}}$  and that of non-commodity elements be  $Y_i^{\text{OC}}$ . The set of utilization function from which the person can choose a certain utilization function  $(k_i^1)$  (when the necessary commodities, non-commodities and utilization of their characteristics are acquired by that old person) is  $K_i^{\text{OC}}$ . The vector of achieved functioning upon choosing a certain utilization function  $(k_i^1)$  is  $r_i^1$ . Seen this way, old care, encapsulating all its dimensions, entails a feasible functioning set:

$$P_i^{\text{OC}}(y_i, x_i) = [r_i^1 | r_i^1 = k_i^1(n(y_i), c(x_i)), \text{ for some } k_i^1(\cdot) \in K_i^{\text{OC}}]$$

$$\tag{4}$$

The capabilities set as:

$$Q_{i}^{\text{OC}}\left(Y_{i}^{\text{OC}}, X_{i}^{\text{OC}}\right) = \left[r_{i}^{1} \mid r_{i}^{1} = k_{i}^{1}\left(n\left(y_{i}\right), c\left(x_{i}\right)\right), \text{ for some } k_{i}^{1}(\cdot) \in K_{i}^{\text{OC}}, \text{ for some } y_{i} \in Y_{i}^{\text{OC}}, \text{ and for some } x_{i} \in X_{i}^{\text{OC}}\right]$$

$$\tag{5}$$

And, the set of possible values of well-being that he can achieve as:

$$V_i^{\text{OC}} = \left[ v_i | v_i = v_i \left( r_i^1 \right), \text{ for some } r_i^1 \text{ in } Q_i^{\text{OC}} \right]$$
 (6)

The set of feasible functionings (4) and capabilities set (5) comprises what should constitute old care in its totality, and the set of valuation of capabilities set (6) reflects



the valuation of all possible states of beings and doings in the capabilities set that a person is free to choose from.

While Eqs. (4), (5) and (6) capture the dimensions of old care in its totality, a question may still be asked regarding those components the consideration of which will transform the general vectors  $X_i$ ,  $Y_i$  and  $K_i$  to  $X_i^{OC}$ ,  $Y_i^{OC}$  and  $K_i^{OC}$  respectively. In other words, what ensures that (4), (5) and (6) refers to old care, as distinct from other forms of care, such as infant care, disable care, etc.?

We have already stated that the concept of 'old care' is associated with aging although aging is simultaneously determined by other individual and social factors. As an individual grows old, new set of care needs<sup>4</sup> arises whose appearance is attributable to aging of that person.<sup>5</sup> These care needs are what we call 'care needs due to aging' and they determine the composition of sets  $X_i^{OC}$ ,  $Y_i^{OC}$  and  $K_i^{OC}$ . Thus, the characteristics of aging pertaining to its care needs become the defining feature of old care.

Our analysis highlights two further aspects. First, while aging becomes the decisive criterion of old care, there cannot be any universal convention which will fix the experience of aging and thereby the space of care needs arising out of aging. This takes us to the issue of the pre-fixed universality of listing across all the elderly population which we have already criticized. Secondly, even when the relation between aging and old age care needs are individual specific, it is not possible to anticipate an all-encompassing listing of care needs that aging will generate for a person over the time. Since aging is fluid and heterogeneous it will give birth to care needs which are also heterogeneous across elderly population and that too changing over time. Specifically, the entitlement sets to commodities and non-commodities,  $X_i^{\text{OC}}$  and  $Y_i^{\text{OC}}$ , and the related functioning vector  $K_i^{\text{OC}}$  are decided at each point of time with respect to the relevant set of care needs arising for a person (denoted by the subscript i) at that particular time point and therefore are flexible and changing across time points. The capabilities set  $Q_i^{OC}$ , capturing the fullest extent of freedom of achievement of various states of beings and doings in old age warranted by totality of old care, is therefore formulated with reference to  $X_i^{OC}$ ,  $Y_i^{OC}$  and  $K_i^{OC}$ . At a certain point in time with the aid of list of care needs due to aging for a specific individual old it is possible to arrive at the relevant  $X_i^{OC}$ ,  $Y_i^{OC}$  and  $K_i^{OC}$  sets and therefore construct the capabilities set  $Q_i^{OC}(Y_i^{OC})$  $X_i^{OC}$ ). In the next period, following the changing attributes of aging, the 'care needs due to aging' undergoes alteration. Therefore, the relevant  $X_i^{OC}$ ,  $Y_i^{OC}$  and  $K_i^{OC}$  sets change for that same person and the resultant  $Q_i^{OC}(Y_i^{OC}, X_i^{OC})$  will also be a different set containing different combinations of achievable states of beings and doings. Our approach makes us to think of old care as a continuum of processes which guarantee freedom not in a static but dynamic plane.

Apparently some components of old care for any person might be similar with components of other forms of care (say care for disable, sick or children) but that should not be a cause of confusion. The aged person might become too feeble to continue walking and hence need wheel chair support, which even a physically disabled person might require. The person loses her memory because aging has curbed her proper brain functioning,

<sup>&</sup>lt;sup>5</sup> Here need is individualistic which comprises of both subjective and objective needs arising due to old age.



<sup>&</sup>lt;sup>4</sup> Here we consider needs not in the sense of basic needs (which was criticized for its problems of commodity bias and tendency for predetermined listing) but as the entire array of contingently arising needs (commodities and non-commodities) that are associated with the functionings of an old person. Need is thus rendered consistent with Sen's evaluative space of functioning, capability and well-being (Sen 1988).

which can happen to an Alzheimer patient as well. The person might need assistance in feeding, clothing, bathing, etc., just like she needed in her childhood. But what is distinct in this case is that here the defining factors of these care need is aging of that person and not disability, childhood, sickness or any other thing. To be more specific the relevant entitlement sets of commodities  $(X_i)$ , non-commodities  $(Y_i)$  and set of feasible functionings  $(P_i)$  would be different for different types of care (because  $K_i$  would change). Disability care needs, for example, require access to some commodities set, say  $X_i^D$ , and non-commodities set, say  $Y_i^D$ , and the set of utilization of their characteristics, say  $K_i^D$ . Emergence of these care needs is not in any manner related to the phenomenon of aging of that person:  $X_i^D$ ,  $Y_i^D$  and  $K_i^D$  are different from  $X_i^{OC}$ ,  $Y_i^{OC}$  and  $K_i^{OC}$ . Hence, the capabilities set  $Q_i^D(Y_i^D, X_i^D)$  that disability care (in its totality) generates would be different from that in old care in spite of all the overlapping commodities and non-commodities care needs arising for an old and a disabled person. Similar argument can be used to isolate old care from care for sick, children and so on.

## The relevance of old care theory as a device of democratic engagement

Every theorization is an abstraction from the concrete social condition and every concrete practice is situated on a theoretical understanding of the concrete social reality. Our proposed theory of old care attempts to open up a new perspective of praxis related to elderly care in the context of decay of erstwhile family–kinship–community-based elderly care regime. Amidst faltering attempts to resolve this social crisis through solutions from within capitalism, we try to rethink and rebuild the idea of elderly care that will enable us to orient our practices in a manner that addresses many of the deficiencies of the conventional routes. By endogenizing the aspect of freedom of the elderly in the concept of old care, our theoretical intervention makes it imperative to complement externally induced intervention with bottom-up subjective intervention, individual and social, in the formulation of old care and its associated practices in a complex, dynamic space. In this context, we might invoke Sen's argument against listing to highlight the relation between the theoretical and concrete.

What I am against is the fixing of a cemented list of capabilities, which is absolutely complete (nothing could be added to it) and totally fixed (it could not respond to public reasoning and to the formation of social values). I am a great believer in theory.

<sup>&</sup>lt;sup>6</sup> Is pension funds really a substitute for old care regime? Existence of pension funds and its reform (say, state to market oriented) seek a financial solution for the future that is to be made today while care regime is about addressing the well-being of individual when (s)he is old (which we have shown is not reducible to economic processes let alone income/commodity). The difference between pension as means of achieving well-being and well-being as capabilities should be palpable by now. Moreover, amidst a record-low birthrate and increasing ratio of old age population to working age population in large parts of the world, many countries are facing financial crisis in maintaining their existing level of old age coverage. The latter can be linked to the prolonged crisis of capitalism involving stagnation/decline in real wages and welfare benefits for the working population and a demographic shift towards fast-greying nations within North-East Asia, South-East Asia, Europe and North America. Given the historical tendency of changing income and wealth distribution in favor of top 10% of the population under worldwide capitalist system (Alvaredo et al. 2017), this scenario of declining and precariat working population makes it challenging to even maintain the requisite amount of funds for the relatively growing percentage of elderly population, rendering the financial viability/stability of pension funds whether run by state or through market, vulnerable.



The theory of evaluation and assessment does, I believe, have the exacting task of pointing to the relevance of what we are free to do and free to be (the capabilities in general), as opposed to the material goods we have and the commodities we can command. But pure theory cannot "freeze" a list of capabilities for all societies for all time to come, irrespective of what the citizens come to understand and value. That would be not only a denial of the reach of democracy, but also a misunderstanding of what pure theory can do, completely divorced from the particular social reality that any particular society faces. (Sen 2004, p. 78).

In our rendition, the dimensions of old care do not fix the concrete form of requirements arising contingently in diverse circumstances for different aged individuals. Given the changing requirements (unpredictable and person oriented), fixed listing would be a wrong way to look at the issue of old care and ends up delivering a distorted expression of the needs of the elderly. Even if we agree for the sake of argument that, at a specific timespace, a policy driven listing is unavoidable we also must acknowledge in the same breadth its inability to capture the dimensions of old care revealing in the process the 'relevance of what we are free to do and free to be.' Any listing of determinants should be posterior to the definition of old care and not prior to that. The components under various dimensions of old care in turn would be modified due to contradictory effects from concretely situated old care practices; both theory and concrete constitute one another. Without this caveat, a listing specified in state policy or market contract which tend to be top-down and/or standardized will undermine the aspect of freedom and subjectively induced demand. This raises the necessity for a theory of old care which can have enough malleability in identifying, evaluating and assessing the fluid and complex requirements for old care for a heterogeneous and ever changing cohort of aged population in a democratic environment where it is possible to enhance the 'hearing that people get in expressing and supporting their claims to political attention' (Sen 1999, p. 10) and which offers the space for constructive engagement to clearly mark out the deficits in delivered old care, whether in informal or more formal arrangements. Our theory of old care has the merit of meeting these features to a considerable extent.

The definition and dimensions of old care are abstractions (theoretically derived) which are realized concretely through the old care deliveries/schemes that get manifested, whether in traditional household structure or more formal systems derived from state or market. That would, as Sen seeks, not only allow the theory of old care to remain connected to the social reality but also leave the scope for raising the issue of critiquing and challenging existing forms of old care as also of haggling and negotiation (including by the old persons themselves) for specific types of old care to be realized, a possibility that is indicative of constructive democratic engagement.

## Conclusion

Capitalism has given birth to the discourse of old care as a fallout of the crisis it has created for the aging population. Intervening in this discourse by using the capability approach, we have questioned the remedies and solutions offered in conventional approaches that have used a complex array of policies and programs of various government, non-government and transnational developmental organizations. However important



and laudable these approaches and interventions may be, what we sought to highlight here is the need to shift the *terms* of discussing old age beyond that circumscribed by market/commodity and state space. Resultantly, the perspective of viewing and addressing old age would undergo a radical displacement. To facilitate that shift is the underlying motif of the paper.

Expanding on Sen's framework, we have delivered a theory of old care which is based on rethinking old care in a fluid, complex and heterogeneous space alive to political contestation. We have unpacked the dimensions of old care that comprises not only access to commodity and non-commodity requirements pertaining to care needs arising due to aging but also highlighted the importance of successful utilization of their valuable characteristics. Endogenizing aspects of non-commodity space and freedom in the process of conceptualizing old care also holds the promise of further extension of this frame explicitly into the domains of psychological well-being, loneliness, etc., of the elderly. The elderly person's care that we have advanced is no longer subjugated to predefined set of care services or the capitalist system's somewhat truncated recognition of the same proposed through state and market, and that too with a strong utilitarian bias. <sup>7</sup> In the process, our framework changes the location of viewing old age, from victimhood and/or passive state to that of an alternative evaluative space for analyzing old care which not only raises challenging issues about existing models of solutions but is also instructive in rethinking the possibility of institutional interventions that allows for freedom. This no doubt demands a perspectival shift in the terrain of discussing policy and would require a radical redirection of institutional interventions. Such intervention may involve state and market along with other aspects, but only as instrumental means rather than an end in itself that reduces old care to utilitarian logic. However, with capitalism as the dominant economic system of society, how far the conceptual recasting of old care is possible under the present order of things is the moot question. Or perhaps, our insight could be construed as suggesting that a movement to a fundamentally new ontological paradigm and an associated post-capitalist setting is a better wager for dealing with a social crisis of the magnitude represented by old care.

<sup>&</sup>lt;sup>7</sup> Our reformulation of old care enables the evaluation of the effectiveness of old care that are produced through market-based institutionalized care to elderly. 'Old homes' are common wherein care is provided in a centralized form to a group of elderly and so are 'service centers' that deliver care service at the client's home by sending service workers (individual or as groups); one can contemplate other forms as well such as individually delivered care to the elderly at home by a professional caregiver. To what extent a particular institutional form comes to address each and every dimension of old care, each and every concrete requirement of every single old individuals, to what extent elderly individuals are democratically engaged in communicating and fulfilling their care needs, can be judged by this evaluative space.  $Q_i^{\rm OC}(Y_i^{\rm OC}, X_i^{\rm OC})$  contains all the possible vectors containing all the commodities, non-commodities care needs and associated valuable functionings that an individual person requires for being old. Now if any of these vectors are omitted from this  $Q_i^{\rm OC}(Y_i^{\rm OC}, X_i^{\rm OC})$  capabilities set, which is very likely to happen in the modern care institutions operating with utilitarian objective, this would mean a lower well-being for the individual old person in terms our definition. Conceptually,  $Q_i^{\rm OC}(Y_i^{\rm OC}, X_i^{\rm OC})$  has vector dominance over any other capabilities set of old care. In any modern day setup of care practices, the existing capabilities set can be compared to this yardstick  $Q_i^{\rm OC}(Y_i^{\rm OC}, X_i^{\rm OC})$  capabilities set in order to assess the deficiencies in different care delivery practices



### References

Agamben G (2013) The highest poverty: monastic rules and form-of-life, Trans. A. Kotsko, Stanford University Press, Stanford

Alkire S (2002) Valuing freedom: Sen's capability approach and poverty reduction. Oxford University Press, Oxford

Alvaredo F, Chancel L, Piketty T, Saez E, Zucman G (eds) (2017) World inequality report. Paris: World Inequality Lab. https://wir2018.wid.world/files/download. Retrieved 14 Dec 2019

Bengtson VL, Setterstein RA (eds) (2016) Handbook of theories of aging. Springer Publishing Company, New York

Bilgrami A (2014) Secularism, identity and enchantment. Harvard University Press, Cambridge

Boudiny K (2012) Active aging': from empty rhetoric to effective policy tool. Aging Soc 33(6):1077-1098

Buch ED (2015) Anthropology of aging and care. Annu Rev Anthropol 44:277–293

Cardona B (2008) 'Healthy aging' policies and anti-aging ideologies and practices: on the exercise of responsibility. Med Health Care Philos 11(4):475–483

Folbre N (2014) Who cares? a feminist critique of the care economy. Rosa Luxemberg Stiftung, New York

Havighurst RJ (1961) Successful aging. Gerontol 1(1):8–13

Healy S (2016) Saint Francis in climate-changing times: form of life, the highest poverty, and postcapitalist politics. Rethink Marx 28(3-4):367-384

Hospers J (1997) An introduction to philosophical analysis. Routledge, London and New York

Kittay EF (2011) The ethics of care, dependence, and disability. Ratio Juris 24(1):49-58

Lamb S (2014) Permanent personhood or meaningful decline? Toward a critical anthropology of successful aging. J Aging Stud 29(2014):41–52

Lassen AJ, Moreira T (2014) Unmaking old age: political and cognitive formats of active aging. J Aging Stud 30(2014):33–46

Mitra S (2006) The capability approach and disability. J Disabil Policy Stud 16(4):236-247

Morrow-Howell N, Hinterlong J, Sherraden M (eds) (2001) Productive aging: concepts and challenges. The Johns Hopkins University Press, Baltimore and London

Nussbaum M (2000) Women and human development: the capabilities approach. Cambridge University Press, New York

Nussbaum M (2006) Poverty and human functioning: capabilities as fundamental entitlements. In: Grusky DB, Kanbur R (eds) Poverty and inequality. Stanford University Press, Stanford, pp 47–75

Rabinow P, Rose N (2006) Biopower today. BioSocieties 1:195-217

Rozanova J (2010) Discourse of successful aging in The Globe & Mail: Insights from critical gerontology. J Aging Stud 24(4):213–222

Sen A (1987) Commodities and capabilities. Oxford University Press, New Delhi

Sen A (1988) The standard of living. In: Hawthorn G (ed) The standard of living. Cambridge University Press, Cambridge, pp 1–38

Sen A (1993) Capability and well-being. In: Nussbaum M, Sen A (eds) The quality of life. Oxford University Press, New Delhi, pp 30–53

Sen A (1999) Democracy as a universal value. J Democr 10(3):3–17

Sen A (2000) Development as freedom. Knopf, New York

Sen A (2004) Capabilities, lists, and public reason: continuing the conversation. Fem Econ 10(3):77-80

Sen A (2005) Human rights and capabilities. J Hum Dev 6(2):151–166

Sherlock PL (2002) Nussbaum, capabilities and older people. J Int Dev 14:1163–1173

Stenner P, McFarquhar T, Bowling A (2011) Older people and 'active ageing': subjective aspects of ageing actively. J Health Psychol 16(3):467–477

Tronto JC (2013) Caring democracy: markets, equality, and justice. NYU Press, New York

United Nations (1983) Vienna international plan of action on aging, New York, United Nations

United Nations (2002) Report of the second world assembly on ageing, New York, United Nations

United Nations (2008) Regional dimensions of the aging situations. Department of Economic and Social affairs, United Nations, New York

United Nations (2013) World population ageing 2013. Department of Economic and Social Affairs, Population Division. United Nations. New York

Walker A (2002) A strategy for active aging. Int Soc Secur Rev 55(1):121-139

World Bank (1994) Averting the old age crisis: policies to protect the old and promote growth. Oxford University Press, New York



- World Health Organisation (1998) The World Health Report—life in the 21st century: a vision for all. World Health Organisation, Geneva
- World Health Organisation (2002a) Towards a common language for functioning, disability and health: ICF, the international classification of functioning, disability and health. World Health Organisation, Geneva
- World Health Organization (2001) International classification of functioning, disability and health. World Health Organization, Geneva
- World Health Organisation (2002b) Active aging: a policy framework. World Health Organization, Geneva
- World Health Organisation (2004) Ageing and health technical report volume 5: a glossary of terms for community health care and services for older persons. World Health Organisation, Geneva
- World Health Organisation (2015) World report on aging and health. World Health Organisation, Geneva

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