



### External Capabilities<sup>1</sup>

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The capability approach of Amartya Sen evaluates well-being in terms of an individual's achievements and abilities to function. The traditional view of capabilities is that they are discernable as part of an individual's own set of characteristics, or as part of a package of socially provided services. We argue that individuals also have access to a broad array of capabilities through their family, friends and other persons with whom they have relationships. We introduce the concept of "external capabilities", which are defined as those abilities to function that are conferred by direct connection or relationship with another person. Several examples are provided, and we distinguish between our new concept and other existing notions of capabilities originating in groups. The perspective of external capabilities can be especially valuable in formulating development policies or understanding how existing policies work. As an illustration of this, we show how information and communications technologies (ICT) can enhance development by augmenting external capabilities.

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## 0 Introduction

The capability approach evaluates well-being in terms of a person's ability to achieve certain outcomes, doings, and beings, which are collectively called functionings. It measures human development by freedom, which is "the 'capabilities' of people to lead the kind of lives they value" (Sen, 1999, p. 18). The development process is seen as one of expanding capabilities, or giving individuals the freedom to realize more and better functionings.

Although the capability approach is a general framework for evaluating well-being, it has found the most traction in the literature on human and economic development. This is due in part to its multidimensional focus, which easily accommodates the synergies inherent in development processes. For example, two capabilities commonly identified within the approach are the abilities to achieve health and be well educated. Levy (1991) and others have described in detail the synergistic relationship between nutrition, health, and education – namely, undernourished children have trouble learning, and the less educated find good health difficult to attain – and this conforms well to the capability framework.<sup>4</sup> As another example, consider Anand and Ravallion (1993), who show that poverty alleviation and public spending on health care explain the entire effect of economic growth on raising life expectancy in poor countries. Whereas a traditional economic approach would tend to focus on income growth, studies informed by the capability approach will also investigate the pathway from growth to individual well-being.

Sen's goal in formulating the capability approach was a more realistic understanding of the determinants of a person's well-being. The individual is the basic unit of analysis in the capability approach and, indeed, many of the capabilities described in the literature, such as the ability to read, can be viewed as somehow belonging to the individual.<sup>5</sup> Social influences also

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<sup>4</sup> The Government of Mexico created the successful Progresa/Oportunidades program, a contingent cash transfer program for poor families, to capture these synergies and break the cycle of poverty. See Levy (2006).

<sup>5</sup> Sen adopts what Robeyns (2008) calls "ethical individualism", which "postulates that individuals, and only individuals, are the *ultimate* units of moral concern" while acknowledging the vital role of social structures in creating capabilities. See section 3 below.

play a role in the construction of certain capabilities and can have detrimental or positive effects on individual well-being. For example, Sen has often quoted Adam Smith's realization that while having a linen shirt was not physically essential for doing day labor in eighteenth-century Britain, not having such a shirt would mark the laborer as being somehow different from or below his peers.<sup>6</sup> The linen shirt plays a key role in signaling this socially determined capability (or deprivation): society sets a norm and the person has the capability exactly when he is able to meet this standard. Considerable attention has likewise been devoted to publicly provided capabilities intended to benefit the members of society. Examples include the provision of health care, schooling, and public transit by the government or other institutions.

Both of these traditional forms of capabilities – which might be called individual capabilities and socially created capabilities – are centrally important for understanding well-being and development. However, we argue that they do not nearly cover the wide scope of capabilities that are instrumental for development. Consider a farmer who has an internet connection that allows him to keep track of crop prices at nearby markets, so that he can gain a better price from middlemen or bypass these agents altogether. He regularly shares this information with a second farmer, who lives next door and is his good friend. Clearly, the capabilities of both farmers are enhanced by acquiring access to the crop prices and other information. But while the capability gained by the first farmer is individual (or perhaps socially created), this is not the case for the second farmer. His expansion depends crucially and contingently on his friendship with the first farmer, so the new capability is hardly an individual capability. It is also not a purely a socially created capability, since its provision to the second farmer hinges so importantly on his friend.

Another instructive example is provided by children's health. A young child has almost no individual capability to achieve good health, and so must rely on the care of a parent or other persons. A mother might instruct her child in basic hygiene, keep track of the services offered

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<sup>6</sup> See, for example, Sen (1983).

by a local health center, or undertake a wide range of activities in order to keep the child healthy. But the resulting ability to achieve good health is certainly not an individual capability of the child. The mother's own capability to achieve health may be individual or socially determined—by government provision, perhaps—but the child's is most directly determined by its relationship with the mother.

This paper introduces the notion of “external capabilities” to describe cases in which a person is able to achieve additional functionings through a direct connection with another person. The standard conception of capabilities already allows an individual's social environment to impact his or her capabilities, and acknowledges the role of institutions and policies in the creation of capabilities. But it makes little use of the fact that the individual's relationships can also matter greatly in this regard. So when the capability approach is used as a tool for analyzing policy, it is likely to catch, for example, a person's expansion in capabilities from becoming literate, but likely to miss the next step, wherein the person's literacy can enhance the capabilities of family and friends. Our goal is to recognize this important class of capabilities.

The paper proceeds as follows. The first section provides an overview of the capability approach. The second introduces the notion of external capabilities and explains its role within the capability approach. The third section contrasts external capabilities with existing forms of group capabilities and shows that the two concepts are very different. A final section summarizes and presents some suggestions for future research.

## **1 The capability approach**

The capability approach is fundamentally a framework for conceptualizing and evaluating well-being. In this capacity it is seeing a wide range of applications, from formulating and analyzing policies to serving as a component in philosophical theories of justice. The approach

was introduced and first developed by Amartya Sen (1980, 1984, 1985a, 1985b, 1987) and continues to mature in the work of Sen and other scholars.<sup>7</sup>

The capability approach aims to give a truer picture of human well-being. It finds fault with the use of utility or primary goods as indicators of well-being, and it critiques economists for switching between the two in their theoretical and empirical work, respectively. The approach admits multiple dimensions of human well-being, including market-based capabilities, such as having enough income to purchase food and avoid malnutrition, and non-market capabilities, such as the freedom to participate in the political process.

The capability approach specifies a fairly detailed chain of well-being, summarized by Robeyns (2005) in an excellent survey article. Production activities combine with income to form an individual's means to achieve. These means determine certain goods and services available to the individual, who uses the characteristics of those goods and services to form capabilities. This conversion process is specific to the individual and is influenced by other people, social norms, and various social and environmental factors. For example, a given level of income may translate into the capability of being nourished for one person, but may not allow a pregnant woman to purchase enough food. And for both these individuals, whether that level of income buys enough food may be influenced by weather, geography, government policy, and trade policy in foreign countries. To some degree, the social and environmental context in which the individual chooses and acts can be thought of as having characteristics that produce capabilities, similar to the characteristics of goods and services. These social and environmental influences may also contribute directly to an individual's capabilities, as described in the introduction.

In Sen's (1985a) formulation, each capability represents the ability to achieve a certain doing or being, called a functioning. All of an individual's capabilities together form his or her

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<sup>7</sup> See Sen (1990, 1992, 1993, 1999), Foster and Sen (1997), Alkire (2002, 2006), Basu and Lopez-Calva (2008), Deneulin and Stewart (2002), Evans (2002), Herrero (1996), Ibrahim (2006), Nussbaum (1988, 1992, 1998, 2000, 2003), Robeyns (2000, 2005, 2008), and Stewart (2005).

capability set. The capability set can be thought of as a collection of vectors of functionings from which the individual may choose one achieved vector. This choice is influenced by individual and social factors, similar to how such factors affect the formation of an individual's capabilities. Finally, from the achieved functionings an individual may derive some amount of utility. However, according to Sen (1999, p. 74) the appropriate space for evaluating well-being is not utility, but "...that of substantive freedoms—the capabilities—to choose a life one has reason to value."

The capability approach has been used to motivate improved aggregate measures of well-being and poverty. Probably the best-known example is the Human Development Index (HDI), produced by the United Nations Development Programme (UNDP). This indicator combines data on a country's income, life expectancy, literacy and school enrollment rates to obtain an overall measure by which countries are ranked in the annual Human Development Report. The Human Poverty Index (HPI), also provided by the UNDP, focuses on deprivations in income, education, and health. Both indices go beyond the traditional income basis for evaluation.<sup>8</sup>

The capability approach has motivated a number of empirical studies as well.<sup>9</sup> Sen (1985a), using 1980-1982 data, investigated GNP, life expectancy, and infant mortality in several countries, including Mexico, Brazil, and Sri Lanka. He found that while Brazil and Mexico had much higher GNP per capita, Sri Lanka performed the best in life expectancy and infant mortality. This is evidence that income does not always reflect development, and also that growth in income does not always translate into better living standards, a point Sen has made repeatedly (1999). Ruggeri Laderchi (1997), using 1992 data from Chile, found that income is a poor indicator of deprivations in education, health, and child nutrition, and hence that poverty may be quite sensitive to the choice of indicators. Ellman (1994) provided evidence of rapidly

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<sup>8</sup> See Alkire and Foster (2007) for multidimensional poverty measures motivated, in part, by the capability approach.

<sup>9</sup> It is also being formalized to provide a sounder basis for theoretical and empirical work. See Sen (1985a), Basu and López-Calva (2008), and Herrero (1996), for example.

increasing mortality rates in the former Soviet countries following the fall of the USSR and showed that this cannot be explained by prices, incomes, and consumption.

While the capability approach offers a clearer picture of well-being, it is not a full-fledged theory of justice (Sen, 1995, 2004a), in part because it includes no explicit method by which the importance of one capability can be measured against another. Nussbaum (1988, 1992, 1998, 2000, 2003) has attempted to move closer to such a theory by identifying a list of "central human capabilities" that she argues should be guaranteed to all people. A recent list contains more than thirty individual capabilities grouped into the following categories: life; bodily health; bodily integrity; senses, imagination, and thought; emotions; practical reason; affiliation; other species; play; and control over one's environment. Whether a universal list should exist is a matter of some debate; Nussbaum (2003) argues that the capability approach is powerless without it, while Sen (2004b) has noted the difficulties in and consequences of endorsing such a list.

Two further themes of the capability approach merit special mention. The first is the need to distinguish between the means and the ends of development. The means are production, income, and social and environmental factors that determine or form the inputs for capabilities. The ends are capabilities and achieved functionings. Of course, some ends are also instrumentally important to development—that is, they double as means. Participation in the political process is both a matter of freedom (an end) and a way to influence policy (a means). A friendship may be both intrinsically valuable and a vehicle for further capabilities. And many capabilities feed back into higher income, which is then an input for more capabilities. The second theme is the role of choice in the capability approach. Choice over functionings is viewed as being intrinsically valuable, and Sen recognizes the value of both well-being achievement, which is best represented by functionings, and well-being freedom, which is best represented by the scope and quality of achievable functionings in the capability set.<sup>10</sup>

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<sup>10</sup> The intrinsic value of choice is not unlike Weisbrod's (1964) "option value". For a technical survey on the measurement of freedom, see Foster (2008).

## 2 External capabilities

External capabilities are abilities to function that depend on direct human relationships.<sup>11</sup> Specifically, they depend on an individual's access to the capabilities of another person. They frequently require some coordinated action within personal relationships: again, it is more than a single person going to the market to buy food, and more than simply accepting government provision. But the relationships on which they depend are also very often informal: they happen outside group and organizational structures, and in fact often work best when fewer people are involved. Within this framework, the farmer whose friend has an internet connection has the external capability of access to crop prices through this friendship—specifically, through a direct relationship with someone who has the capability of access to this information. And the child has the external capability of better health through the capabilities of its mother.

Another example of an external capability can be found in the notion of “proximate literacy” developed by Basu and Foster (1998). The idea is that there is a “positive intrahousehold externality” to illiterate family members when at least one member can read and write; and while the authors do not explicitly mention the capability approach in their discussion, their concept fits the idea of external capabilities effortlessly. A person who cannot read may nevertheless have proximate literacy—an external capability—through one or more relationships. Basu and Foster offer a pair of examples where proximate literacy may be beneficial: (1) agricultural extension workers distribute brochures about planting, growing, and harvesting high-yield crop varieties, and (2) a new medical center is established nearby, and pamphlets are provided that describe the services offered by the center and offer preventative tips. Whether a

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<sup>11</sup> The term “external capabilities” has previously been used by Nussbaum (1998) in a very different sense: to recognize the fact that individuals are sometimes prevented by others from using their capabilities. Nussbaum's two examples are suppression of criticism in “repressive nondemocratic regimes” and repression of women. This idea, then, has much in common with the “social conversion factors” discussed by Robeyns (2005). Nussbaum recognized this and discarded the term.



person reads the information, or has it read to them, the achieved functioning is similar: obtaining information or communicating through reading and writing.<sup>12</sup>

The idea of external capabilities extends naturally to other skills. Consider numeracy: if an individual has some skill but is prevented from entrepreneurship by a lack of proficiency with numbers, a relationship with a numerate person could offer that individual a chance to start a small business. Proficiency in a foreign language is another example. A family may have access to a local internet kiosk, but much of the information available online may be in English. So having a family member who reads English can make this information accessible to the entire family. And for immigrants, having a child who learns the local tongue in school may ease the transition into a new and unfamiliar country. Finally, the skill of technological proficiency can often generate external capabilities. Family and friends of someone who knows computers may be better able to use their own computers because they have direct access to tips and troubleshooting. Sometimes these various skills converge: an individual might use his or her literacy and technological savvy to help others send, receive, and read emails or text messages.

The range of external capabilities can be dramatically amplified by information and communications technology (ICT). One way ICT does this is by enhancing connections between people. For example, *The Economist* recently reported that fishermen in India are using mobile phones to guide their friends to areas where the fishing is best, and to the landing spots where markets prices are currently most favorable. At the same time, ICT can augment a person's individual capabilities by providing access to information, and this can expand the external capabilities of that person's friends and family. A second report noted that fishermen are now using the internet to retrieve weather forecasts and satellite images of fish shoals; it is likely that this information is being shared across existing social networks. ICT advances individual capabilities and makes them easier to share as external capabilities.

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<sup>12</sup> Whether external capabilities are good substitutes for individual capabilities, or are distinct in important ways, is an interesting question. See the related discussion below. Note that Basu and Foster used the term "proximate illiteracy" rather than "proximate literacy"; the latter term seems more apt in the present context.

Another fascinating example of external capabilities and ICT is Kiva, a nonprofit that allows a person in an industrialized country to extend credit to an entrepreneur in the developing world through the internet, using a credit card, PayPal, or a checking account. Funds are sent to local microcredit partners and then disbursed to qualified borrowers, and the lender gets updates on the status of the small business using the money. The initial effect for an entrepreneur in the developing world is access to credit through a relationship with another individual—an external capability. If well used, the loan will grow the business and the entrepreneur may have easier access to traditional sources of credit, which is a more individual capability. The loan will also enable her to gain business experience and increase earnings potential—a synergistic expansion of other individual capabilities.

Each of our examples of external capabilities involves sharing – from a person who has a capability to another who does not – and it is the willingness to share that creates the external capability where none existed before. But the process by which external capabilities are produced also imposes certain restrictions on them. For example, external capabilities can be inferior to their individual analogs, as suggested by Basu and Foster (1998) in the context of literacy. They also noted that the quality of external capabilities may vary depending on the characteristics of the person providing them, drawing on evidence that females are more effective than males in generating literacy externalities in families.<sup>13</sup>

A person who has individual capabilities rather than external capabilities need not face the contingencies or inherent quality variations associated with external capabilities. But moving to individual capabilities may require a significant investment, such as the long-term commitment of time and effort needed to complete an adult literacy program. In other cases, the repeated sharing that leads to external capabilities may also create individual capabilities over time. A mother who teaches her children good health practices keeps them healthy now while also

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<sup>13</sup> See, for example, Murthi, Guio, and Dreze (1995), Nag (1983), or Caldwell (1979). It is not difficult to imagine differences across ages, environments, and societies as well.

enabling them to maintain their own health in the future. And as noted above, a rural entrepreneur who successfully borrows through Kiva may eventually advance her enterprise to the point that it can secure reliable funding through traditional credit markets.

As we go from general definition to specific example, it is not always easy to identify the capability being accessed. For instance, take the example of the two farmers and the internet-connected computer, and suppose that the two have always raised different crops. The first farmer makes use of the internet-connected computer in deciding where to sell his crops. Is the relevant capability access to the internet, or is it access to the prices of that farmer's specific crops in nearby markets? In the first view, the farmer converts the capability of internet access into the achieved functioning of knowing crop prices; in the second, the capability and the functioning are identical. Both views are valid descriptions of the farmer's capabilities. But when the external capabilities of the second farmer are considered, the broadly defined capability is the relevant one. His external capability is formed by the first farmer's access to information on the internet, including the prices of the crops he raises (which have value to the second farmer) and the prices of the crops raised by the first farmer (which have no such value to the second farmer). External capabilities, then, are freedoms to achieve functionings that a person values by accessing the capabilities of other people through relationships.

The idea of external capabilities fits well into the capability approach and preserves the importance that the capability approach places on the freedom to choose. External capabilities, like other capabilities, ultimately reside in an individual's capability set and may be converted, or not, into functionings at the discretion of the individuals involved. Moreover, an individual has the freedom to choose his or her relationships, and each set of relationships potentially makes available a different set of external capabilities. Of course, as we have noted above, this freedom is tempered by the possibility that the other person may choose not to share or may refuse the relationship altogether.

### 3 External capabilities and group capabilities

Several scholars have developed concepts of *group* capabilities, which typically refer to abilities to function that are created through organizations, such as political parties, credit and savings groups, and producer associations. Group capabilities have similarities to our concept of external capabilities. We now present a brief review of the literature on group capabilities in order to compare the two concepts.

Stewart (2005) defines group capabilities as “capabilities that belong to groups even though the groups are made up of individuals and the behavior of the group affects individuals.” These include “the resource access (political and economic) of the group” and “the way the group operates and the resulting impact on members of the group and on others.” Stewart reasons that membership in a group affects people’s well-being in three major ways. First, there is a direct impact, both through feelings of inclusion and self-respect and through tying one’s own well-being to how well the group is doing (of course, this incurs the risk that the group fares poorly). Second, groups are important to well-being instrumentally: through collective action, they confer capabilities that the individual would not have in the absence of membership in the group. As Stewart puts it, “the group capabilities of collective entities are not simply the sum of the individual capabilities of members of the group.” Third, groups influence an individual’s preference formation and behavior. Stewart writes that a group can be good or bad according to whether it tends to promote desirable or undesirable capabilities. A bad group might create identities that foster violent political conflict, while a good group might organize collective action among the poor.

Evans (2002) has discussed a similar idea through “collective capabilities.” He notes that “for the less privileged attaining development as freedom requires collective action. Organized collectivities—unions, political parties, village councils, women’s groups, etc.—are fundamental to ‘people’s capabilities to choose the lives they have reason to value.’” Evans, like Stewart, also recognizes the impact of groups on the formation of an individual’s preferences.

Deneulin and Stewart (2002) argue for the importance of “structures of living together” in the formation of capabilities. These structures represent the organization and properties of society, including “social norms, cultural practices, [and] trust.” This notion, then, is a very broad one, going beyond formal groups to the realm of social capital. Deneulin and Stewart assert that these structures are important intrinsically, not merely as they promote individual capabilities. Ibrahim (2006), using Evans’ language of collective capabilities, says much the same thing, noting the “intrinsic and instrumental value of social structures.” She goes further than Deneulin and Stewart by calling for “shifting the focus of the analysis from the individual to the collectivity.”

Some of these concepts were originally presented as challenges to the capability approach’s focus on the individual. But, as we noted above, the capability approach does recognize social influences. Robeyns (2005) makes sense of this debate by distinguishing among three different types of individualism. First, ethical individualism is the common denominator of liberal philosophy: individuals are ultimately what matter morally. Robeyns notes that within ethical individualism, it is still possible to recognize the importance of social structures and societal properties, but only insofar as they contribute to the well-being of the individual. Second, methodological individualism is, in part, the view that everything can be explained by reference to individuals and their properties. Finally, ontological individualism holds that society is merely the sum of individuals and their properties. Robeyns argues that by recognizing social influences both in the formation of capabilities and in the choice of functionings, the capability approach embraces ethical individualism, but not—and rightly so—methodological or ontological individualism. Robeyns concludes that groups and social structures can fit in the capability approach, but that the literature on these phenomena may indeed be lacking.

Alkire (2008), using Robeyns’s distinction among different types of individualism, argues that Deneulin’s and Stewart’s objections do not challenge ethical individualism. She notes that the capability approach can be used in both evaluative and prospective roles. For example, it can

be used both to evaluate outcomes or policy options and to shape proposals of policy or social change. Deneulin and Stewart's argument, then, is that because the capability approach uses only an individual's capability in evaluation, social influences may well be missed when the capability approach is used in its prospective role.

A common denominator of the various notions of group capabilities mentioned above is that they arise when people organize to create capabilities that none of them would have otherwise. This provides one key distinction between group capabilities and external capabilities. Consider again the example of the two farmers. The second farmer, who learns of crop prices from his internet-connected friend, does not gain this capability through a well-defined group that was formed for the purpose of generating it. Instead, he receives it from a friend who has access and is willing to share. Moreover, the first farmer will have the capability of accessing the internet and knowing crop prices regardless of whether he shares the resulting information with his friend. This contrasts with the other central characteristic of group capabilities—they exist or perish with the group. The notion of external capabilities is fundamentally different from previously defined concepts of group capabilities.

#### **4 Conclusion**

This paper has introduced the notion of external capabilities and discussed some issues arising from the concept; many others remain to be explored. One potentially important task is to identify likely dimensions for external capabilities. Which types of capabilities are especially well-suited to be shared along social networks in this way, and which forms are not? It may be that skills (such as literacy) are readily shared, while higher order capabilities (such as reasoning) are not; or more nuanced understandings may be needed to answer this question. A second issue concerns the persons and relationships associated with external capabilities. Are certain types of people better providers of external capabilities? If so, then for which types of capabilities? Answers to these questions may help in the design of development policies.

A third area for investigation concerns the dynamic implications of external capabilities. External capabilities may be viewed as imperfect substitutes for their more reliable and permanent counterparts, and this can influence investment in future capabilities. On one hand, the presence of an external capability can be a helpful coping mechanism that eases the pressure of a capability deprivation, providing an interim solution while a person builds individual capabilities. On the other hand, this coping mechanism may discourage the very investments that would reverse the capability deprivation that the external capability addressed. Determining which effect would hold in a given situation could be very useful in policymaking. In particular, it would be interesting to explore whether external capabilities might be an important part of a prospective plan for enhancing capabilities, such as through the use of ICT.

The capability approach has proven valuable in conceptualizing and evaluating well-being, and creating policies that promote development. It recognizes that human well-being is multidimensional and that progress in development involves synergies across those varied dimensions. But as currently presented the capability approach often misses the impact an individual's relationships have on his or her capabilities. In other words, while it succeeds in capturing synergies across *dimensions*, it fails to recognize important synergies across *people*. Our concept of external capabilities remedies this by specifically focusing on the capabilities enjoyed through social networks. It augments the considerable power of the capability approach to provide insight about well-being and craft policies that make use of that insight.

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