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# Understanding Max-Neef's model of human needs as a practical toolkit for supporting development work and societal transitions

Des Gasper – January 2023<sup>1</sup>

## Introduction

Manfred Max-Neef (1932-2019) is perhaps best known for his model of human needs, a system of linked categories that has served as a set of flexible and stimulating work-formats for many development analysts and practitioners around the world. The system was stated in the 1980s, relatively briefly, as a section of a 1986 manifesto in Spanish published as a special journal issue (Max-Neef et al. 1986), translated to English in 1989, and subsequently slightly elaborated in publications in English (e.g., Max-Neef 1991, 1992, Cruz et al. 2009) and Spanish.<sup>2</sup> It became and continues to be quite frequently used across a range of contexts, as we see later.

The model contains at least the following aspects: first, a matrix of fundamental needs and diverse satisfiers, based on a number of propositions; second, a theorization of satisfiers; third, a methodology for satisfier specification, for use in diagnosing current systems, sketching preferred alternative systems, and considering how to move from one towards the other. Boltvinik (2023) gives a detailed exposition and systematic assessment of issues under the first aspect and briefly refers to the second. He also interprets Max-Neef's work in relation to earlier and contemporary needs theories.<sup>3</sup> Different theorists have different purposes here, reflecting their different contexts, audiences and ambitions. This chapter aims to give a fuller understanding of Max-Neef's model's specific context, purposes, and significance. It complements Boltvinik's analysis through attention also to the second and third aspects just mentioned (the theorization of satisfiers and the system for satisfier specification, situation diagnosis and design of alternatives), to the purposes behind the enterprise, and to its diverse applications.

Part One of the chapter notes the context of emergence of Max-Neef's model. It arrived after his initial book on *Experiences in Barefoot Economics* (1982), as an instrument to pursue that book's agenda, and was presented as a section, co-written with Antonio Elizalde and Martin Hopenhayn, within a treatise on 'Human Scale Development' (1986, 1989, 1991).<sup>4</sup> It continues in use 35 years later, now in a variety of settings.

Part Two locates the model in terms of different modes in needs theory: descriptive, explanatory, evaluative, prescriptive, and in relation to the corresponding understandings of needs as lacks or as potentials or as requirements or as entitlements. It focuses on what is distinctive, and distinctively

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<sup>1</sup> I am grateful to participants in the Max-Neef book project of the Universidad Austral de Chile for stimulation and especially to Julio Boltvinik, Mònica Guillen-Royo, Maria del Valle Barrera, and Luis Valenzuela for detailed suggestions, and to Mirtha Muñiz Castillo for advice on translation from Spanish.

<sup>2</sup> This chapter focuses not on the original version (1986 journal special issue in Spanish), but on the later versions in English (1991 book, 1992 chapter, 2009 article), precisely because they are later and since Max-Neef can be considered bilingual between English and Spanish. He had intensively studied and worked in English, including at Berkeley and for various international organizations, universities and projects.

<sup>3</sup> Including Karl Marx, Bronislaw Malinowski, Abraham Maslow, Eric Fromm, Agnes Heller, Michael Maccoby, Len Doyal & Ian Gough, Martha Nussbaum, and Edward Deci & Richard Ryan.

<sup>4</sup> The 1986 and 1989 special issues listed Elizalde and Hopenhayn as second and third authors. For the expanded and amended 1991 book they have a 'with contributions by' status but are listed as full co-authors of the chapters on needs theory.

valuable, in the model and what is not distinctive. Max-Neef did not introduce the conception and specification of fundamental needs, nor the distinction between needs and satisfiers. He was especially influenced by work from the 1970s in Argentina and elsewhere, such as at the Barriloche Foundation by authors like Carlos Mallmann (1977a & b, 1980), as well as by others in the 1985-86 project that generated the 'Human Scale Development' book. That book's distinctive contribution was to enrich thinking about satisfiers by considering multiple existential modes and the impacts of satisfiers on multiple needs. As a practical man, Max-Neef looked not at concepts in isolation from life but instead at patterns of living, viewed as systems of needs, satisfiers and goods. The concepts were practical tools, none of them perfect, but serving to look at life-situations actively, holistically, and creatively. Similarly, while he did not consistently distinguish between needs as drives or as desiderata, he was aware of the distinction and looked at both, confident that human needs as desiderata for living well could often at least potentially correspond to certain drives, which he therefore sought to promote and channel. His concepts of pseudo-, inhibitor- and violator- satisfiers reflected an awareness however that drives can sometimes be misdirected or destructive.

Part Three of the chapter looks at intended and attainable functions of the various components of the model, conscious that it was intended for use in practical development work not in academic philosophy or psychology. It notes some of the range of applications, for diverse levels and topics; by Max-Neef himself and close collaborators, and by various recent authors not connected to Max-Neef or ecological economics.

Max-Neef was an activist not a pure theoretician. He inspired much work by others. In that spirit, this chapter does not restrict itself to line-by-line examination of his texts and comparison with other texts but looks also at work that he inspired and that uses and extends his proposed tools.

## **Part One: Emergence of a tool for promoting local sustainable development**

Max-Neef's Human Scale Development (HSD) approach, centred on understanding and promoting human needs fulfilment, was explicitly articulated in relation to dilemmas of development in Latin America and his advocacy of a self-reliant people-centred path rather than either state-led or market-led economic growth. It grew out of disillusioning years as an economist working for international organizations, as described in the 1982 book subtitled *Experiences in Barefoot Economics* (Max-Neef 1982: Preface). He looked for a human-centred reality-based approach, not the alienated and megalomaniac economics he had been trained in and had practiced. Having rejected also the notions that poor people are ignorant, don't know their own problems, and need to be conscientized before any action is worth attempting (1982: 30-31), he looked to horizontal communication between localities as a source of learning and critique, rather than to reliance on outsiders with often dangerously misconceived or unbalanced ideas. So he sought tools with which to encourage and support local analysis, communication, planning and action. The 1982 book contained as yet, however, little use of needs language, and no needs model.

We might say that Max-Neef had become a Schumacherian Green, an advocate of "integral ecological humanism" (1982: 54), affiliated neither to conventional economics nor to Marxist alternatives (1982: Theoretical Interludes I & II). He had concluded that sustainability and social justice concerns could not be added as marginal refinements in existing forms of social organization, for he saw those forms as being rooted in profoundly anthropocentric conceptions and in rule by dominant classes who are largely indifferent to the poor (1982: 45, 115ff.). The conceptions are flawed by blindnesses to the physical world, to waste production and entropy, and by resulting fantasies of endless economic growth. Required instead are fundamental alternatives, a "humanist ecoanarchism" (1982: 55). "Anarchist" here meant radically decentralized and community-centred

(1982: 56). His 1971-2 work in Ecuador had convinced him that this is possible – except perhaps politically; the Ecuadorian central authorities had intervened to stop the experiment because, in his view, of its success.

This ECU-28 Project in remote and extremely poor areas of NW Ecuador – its full name was 'Planning of Zonal Programmes for the Modernization of Rural Life in the Andes' – planted seeds for his later model of needs. "Each community manifests a clear awareness of a number of problems affecting it, and its members express the felt need that the solution of these problems is often a matter of the greatest urgency" (1982: 64). But each locality thought only of its own situation, had no idea of shared problems and causes, and had no systems for cross-locality discussion. Max-Neef and his team proposed a bottom-up regional development planning process. Despite profound scepticism in advance from most officials and technicians, the 54 local situation reports prepared by local committees and checked by local consultations proved surprisingly rich and profound (1982: 70ff, "Wisdom unveiled"). Studying them was a humbling and transformative experience for the project staff, who prepared a book containing extracts and then a synthesis document: the Regional Felt Diagnosis. These were followed-up by extended consultations ('Encounters') in Quito in 1972, involving 300 peasant participants, that fostered a broader regional consciousness and a reasoned set of project proposals, not a pile of traditional village-specific petitions. Nineteen days of meetings led to six reports for each of three provinces, then a synthesizing meeting involving a representative from each of the 54 self-studied localities. This produced a proto regional plan and instituted a planning commission to proceed further. But next, counterforces within and via the new military regime blocked phase 2, arranged Max-Neef's expulsion from the country, confiscated all project documents, and demolished the institutions that the project had created.

The 1982 book describes also a second major generative project experience. In 1979-81 Max-Neef established and led a small team for revitalization of Tiradentes, a historic small town in SE Brazil. The Argentinians Carlos Mallmann (1928-2020) and Oscar Nudler (1934- ) were important advisers (1982: 125), and one can see needs theory themes emerging. "I should like to make the proposal, ... that there are at least four functions expected of a city: it should provide its members with sociability, well-being, security and culture. Such functions can only be fulfilled as long as human communication between citizens is satisfactory and genuine, and participation is complete, responsible and effective" (Max-Neef 1982: 134). Similarly, when reflecting on the relation between spaces and identity, Max-Neef prefigured his later adoption of identity as eighth axiological need.<sup>5</sup> He was greatly struck by the impact of a sub-project that mobilized households to contribute local photographs from between 1880 and 1980 and that then exhibited them widely. He proposed that felt identity of persons is better built or safeguarded in small towns or in cities that contain systems of small localities having their own identities.

The 1982 book was looking for tools to advance autonomous local action, approaches that can mobilize especially the poor and the young, their energies, knowledges and commitment.<sup>6</sup> It opposed elephantine standardized national or global programs (1982: 203-4); "if national systems have learned to circumvent the poor, it is the turn of the poor to learn how to circumvent the national systems" (1982: 117). In 1982 Max-Neef did not yet use needs language. But major work on

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<sup>5</sup> Max-Neef suggested "I am part (object/element) of a space that is my space, because as long as I contribute to its creation just by being present and make it definable through my presence, by being an element that, in it *is*, I attain and acquire identity" (1982: 140).

<sup>6</sup> He later added (1992: 198): "The creation of a political order which can represent the needs and interests of a heterogeneous people is a challenge to both the state and civil society. The most pressing question, not only for a democratic state but also for a society based on a democratic culture, is how to respect and encourage diversity rather than control it. In this regard, development must nurture local spaces, facilitate micro-organizations and support the multiplicity of cultural matrixes comprising civil society."

basic needs theory had been done in Argentina and elsewhere in the 1970s (see, e.g., Mallmann 1977a, 1977b, Lederer 1980), supported by for example the Bariloche Foundation, and Max-Neef encountered this (see, e.g., Guillén-Royo 2016: 48). He became close to the Foundation and to Argentinian researchers, notably Mallmann and Nudler, from the late 1970s. They and others influenced the 1985-86 project co-funded by the Dag Hammarskjöld Foundation that generated the 1986 *Human Scale Development* volume. Already by 1983 Max-Neef articulated his list of fundamental human needs.<sup>7</sup> It can be seen as a modification of Mallmann's lists (e.g., 1977a: 8, 24; 1977b: 256). By 1986 he had emphatically adopted a needs approach in which he added a different way of working creatively with such a list, by recognition of a plurality of existential modes. This step took Max-Neef beyond Mallmann's work.<sup>8</sup>

Not surprisingly, the character of his needs model flowed from his bigger project. He considered, for example, needs both as lacks and as potentials or drives, stressing the mobilization of "non-conventional resources" such as solidarity, commitment, knowledge and creativity, resources that are not depleted by use (1991: 78-81) and are essential elements in Human-Scale Development. Part Two will now elucidate distinctive features of the model and their roles in the overall project.

## Part Two: Characteristics of Max-Neef's needs model

### Elements of the model

I suggest seven main (sets of) elements or features of the model, in the list below. I add cross-references to Boltvinik's itemization of elements (Boltvinik 2023).

- A. Broad specification of needs: nine axiological categories (Boltvinik: #3, 5, 12)
- B. Needs as both lacks and potentials (Boltvinik: #6)
- C. A contrast between needs, satisfiers and goods (Boltvinik: #2, 7, 8, 10, 12-13)
- D. Plural existential modes, which together with elements A and C generate the famous matrix
- E. Theory of satisfier types and interactions
- F. A methodology for using elements A-E in situation analysis and planning
- G. Stress on needs ideas as tools for examining an integral life-reality; 'needs as a system' (Boltvinik: #3).

Some important elements are not itemized by Boltvinik, notably from areas D, E and especially F in my list, though he gives some attention later to area E, the theory of satisfier types. Within area F, the methodology for application, Max-Neef insisted that any needs model should be: 1. Understandable to the intended users, 2. Operational, 3. Critical (e.g., it helps to identify where candidate satisfiers don't work), 4. Propositional, and 5. Combine scope with specificity (1991: 29). He then proffered suggestions on how to fulfil these criteria.<sup>9</sup>

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<sup>7</sup> See his acceptance speech for the Right Livelihood Award, <https://rightlivelihood.org/speech/acceptance-speech-manfred-max-neef/>. In addition to subsistence, "protection, affection, understanding, participation, leisure, creation, identity and freedom are extremely fundamental human needs". I am grateful to Maria del Valle Barrera for this reference.

<sup>8</sup> Mallmann's 1977 papers contain matrices for types of need. The axiological categories are close to those in the model presented by Max Neef et al. in 1986 but the second dimension is "according to the means whereby they are principally satisfied" (1977b: 254), grouped under three headings: psycho-somatic, psycho-habitational, psycho-social. In Max-Neef's matrix the specification of means/satisfiers is instead more fruitfully generated by the combination of the axiological type and the type of existential mode.

<sup>9</sup> Boltvinik also specifies other, important but perhaps less central, elements. For example, his elements #14 and 15, that each inadequately satisfied fundamental human need represents a poverty and can generate pathologies; "poverties are not only poverties. Much more than that, each poverty generates pathologies" if it

Many authors reproduce the matrix with all the illustrative satisfiers suggested in the 1986, 1989, 1991 and 1992 expositions; as could Max-Neef himself (e.g., Smith & Max-Neef 2011: 143; see also Boltvinik 2023: Table 2). However, he warned that the satisfiers mentioned in those expositions are merely illustrative. Thus Guillén-Royo (2016, 2020) reproduces only the outline of the matrix, i.e. the titles row and titles column, since the matrix is intended for use as an exploratory tool for thinking and discussion, not for their inhibition. I do so too, slightly extended (Table 1).

Table 1: Matrix for discussion of fundamental human needs and possible satisfiers

		Existential categories			
		Being	Having	Doing	Interacting
Axiological categories	Subsistence				
	Protection				
	Affection				
	Understanding				
	Participation				
	Idleness/Recreation				
	Creation				
	Identity				
	Freedom (Transcendence)				

Transcendence is added here provisionally. Max-Neef noted it (e.g., 1992: 203) but considered it had not yet sufficiently emerged to be included in the matrix. However, one might disagree with that judgement; further, for his sustainability agenda, transcendence values could be essential (cf. Fuders' chapter in this volume).

### What is distinctive in Max-Neef's model and what is not

The degree of originality and sources of attraction of Max-Neef's needs model are perhaps often partly misunderstood. Still, for nearly all the issues that we will discuss, the model appears to incorporate major relevant insights, whether or not original, and to use them in complex ways, enriching much.

Let us look in turn at the elements or areas, A through G.

A - A broad specification of axiological needs (i.e., types of fundamental value)<sup>10</sup> is not original and Max-Neef's is similar to Maslow's which included seven sets of needs.<sup>11</sup> Like Maslow, Max-Neef was careful to make his list of intermediate length: not crudely brief, but not so long as to be hard to remember and too unwieldy to function as a flexible and stimulating tool for thinking.<sup>12</sup>

A broad specification of needs helps us "escape the 'tyranny' of economic needs as the main measure of well-being" and the corresponding tyranny of economic growth criteria (Cardoso et al.

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corresponds to a fundamental need (Max-Neef 1991: 18-19). Such pathologies can include "collective pathologies of fear" (p.21).

<sup>10</sup> Boltvinik, note 10: "By calling them axiological, the authors express their intention to emphasize the values or aims that one pursues in satisfying needs, rather than on the impulses behind them."

<sup>11</sup> Julio Boltvinik (personal communication) notes that Maslow specified five sets of needs within his prepotency hierarchy and two sets of needs outside it: cognitive needs and aesthetic needs.

<sup>12</sup> For comparisons with other needs theories see, besides Boltvinik's intensive analysis, Guillen-Royo (2016) which connects to the work of Amartya Sen and Martha Nussbaum. Sen's influential writings lack though an adequate treatment of needs theory (Gasper 2020, section 5).

2021: 9; emphasis added). Stressing plurality and diversity of needs brings openness to basic realities of human existence; in contrast, for example, to the ridiculously impoverished treatment of work in conventional economic theory. “Work constitutes much more than a factor of production: it fosters creativity, mobilizes social energy, preserves communal identity, deploys solidarity and utilizes organizational experience and popular knowledge for the satisfaction of individual and collective needs” (Max-Neef 1991: 77, cf. Gasper 2009a).

The explicit broad specification of needs means that Max-Neef is more effective than, for example, Amartya Sen in describing and responding to “lack in the midst of [modern] abundance” (Regan 2021: 274). Like nearly all writers on development ethics he considered those people who are excluded or marginalized from the fruits of modernity, but also, like only some writers, the people who are not fully satisfied by that material abundance.

Many authors praise Max-Neef for departing from the model of prepotency associated with Maslow (e.g., Cardoso et al. 2021). However, Maslow himself always allowed for some co-occurrence of needs, prepotency is true to some extent, and Max-Neef too provided room for it. While psychological research has found much co-occurrence of felt needs, and little support for presence of five or more different stages or levels, it may suggest not just one level but two or three that contain different relative emphases (e.g., first on physiological and safety needs, later on affective needs, and then on other needs; Lea et al. 1987). Max-Neef acknowledged the priority of subsistence but noted that in fact for all needs there may be a threshold level below which there is intense preoccupation with the deficiency (1992: 211-212). Consequently, one must not assume poor people are focused only on material subsistence; searches for meaning are important at all material levels of living, and arguably they are sometimes even more intense amongst the poor.

*B - Needs as both lacks and potentials.* In formal analysis of needs language, we must distinguish at least three modes: 1. Descriptive/explanatory usages – ‘Needs’ as various sorts of positive entity, e.g., strongly felt wants or prepotent wants or the general drives that underlie wants and/or behaviour; 2. Instrumental usages – ‘Needs’ as requisites for attaining an objective; and (as a subset of #2) 3. Evaluative/ prescriptive usages - Needs as ethically approved requisites for attaining ethical priority objectives (Taylor 1959; Braybrooke 1987; Doyal & Gough 1991; Gasper 1996, 2004, 2005, 2007, 2009b). It is not clear whether Max-Neef used these distinctions consciously. Cardoso et al. (2021: 5) claim that: “In [Max-Neef’s] framework, all interpretations coexist but some need our attention more than others at different times and places.”

Max-Neef and his colleagues moved across this territory by talking of needs both as lacks and potentials.<sup>13</sup> On the latter: “to the degree that needs engage, motivate and mobilize people, they are a potential and eventually may become a resource” (Max-Neef 1992: 201). Guillén-Royo argues that Max-Neef’s model brings together both concerns: “Until the nineteen eighties human needs in international development had mainly been addressed either as motivations for action or as deprivations (Gasper 1996; Jackson et al. 2004) [Modes 1 and 2/3 respectively]. Approaching human needs both as deprivation and potential, aligns with the democratic and empowering vocation of the HSD ... [It brought a belief that needs could] stimulate creative strategies in the pursuit of their satisfaction both at the personal and group levels.” (Guillén-Royo 2016: 44). Such analyses were present already in 1970s ‘Basic Human Needs’ discourse (e.g., Green 1978; Lederer 1980; Galtung 1980), but we will see how HSD provided a format for seeking to activate them.

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<sup>13</sup> A lack is assessed by (a) a description of a situation, (b) a theory that states that this situation will lead to an outcome, which (c) is normatively judged as unacceptable, with reference to particular value(s) and a threshold. The threshold may be converted into (d) a prescription for public provision/guarantee. A potential, concerning a desirable outcome which can or will result from removal of a lack, is diagnosed in terms of an explanatory theory such as in (b). A potential might be understood instead as a (latent) drive, a motivating force that conduces to generate attempted action; often this action will correspond to a lack that the action attempts to lessen.

*C - The needs-satisfiers distinction* is not original to Max-Neef. It was emphatically stated by, for example, Galtung (1980) and Mallmann (1980), and was implicit in the work of Taylor (1959), Doyal & Gough (1984), Sen and others.<sup>14</sup> How Max-Neef discussed satisfiers is more distinctive though: as the ways that needs are expressed in a particular society, and as forms of activity to (seek to) express/actualize/fulfil needs. Economic goods are commodities that may be used in those forms of activity. He emphasized the trio needs-satisfiers-goods, not only the duo needs-satisfiers (e.g., 1992: 201-2), partly in order to show goods as only one type of satisfier, in contrast to in economic theory, and as in fact often pseudo-satisfiers.<sup>15</sup> Boltvinik (2021: 12) adds that a Satisfiers-Goods distinction works only sometimes. Indeed, all these distinctions are not universally applicable perfect blueprints but are instead imperfect tools to be applied situationally; and sometimes they must be multiply, recursively, used. When we try to order and understand complex life-situations then a single contrast (need versus satisfier) or even two (need versus satisfier versus good) will often not suffice.

Max-Neef's theory is perhaps more original and value-adding in regard to the following aspects.

*D – Plural existential modes, resulting in a matrix.*

In the words of Cardoso et al. (2021: 9) the nine axiological needs each “manifest themselves differently according to four ‘existential’ categories: they may entail being in a certain state, having a certain asset, doing a certain action or interacting with a certain setting. These categories cover the spectrum of need satisfiers as emerging, respectively, from individual attributes, available economic goods, personal or collective agency and societal interaction, which come together and interact, ...”. In Max-Neef's own words “satisfiers are forms of Being, Having, Doing and Interacting, related to structures ...” (1992: 204).<sup>16</sup> For readers who find this partly unclear or questionable, I suggest that the four existential categories can also be seen as suggestive prompts rather than as exact ontological building-blocks. The addition of the existential categories serves to bring us to a matrix not a list, allowing the treatment of satisfiers to become suitably rich. The use of a matrix makes people think and be more active in discussion.

An existential contrast between Being and Having brings to mind the thinking of Eric Fromm, amongst others. Balyejusa (2017a: 8) compares Max-Neef's (1991) existential categories and Allardt's (1976) earlier basic needs classification (having, loving and being).<sup>17</sup> But in fact Allardt's list refers to types of axiological category, and Max-Neef's set of existential categories thus included instead Doing and Interacting. There has been discussion over the adequacy of the label

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<sup>14</sup> Mallmann (1980: 37-38): “Satisfier: an element whose use or consumption human beings require in order not to become ill”, i.e., in order to fulfil a need; “Need: generic requirement that all human beings have in order not to be ill”. Paul Taylor (1923-2015), later a famous environmental ethicist, wrote a seminal 1959 paper on needs language that was clear on the distinction between two roles: (a) something-that-is-needed as a necessary means to the attainment of (b) a goal of a person who is said to have a need (1959: 107), although he did not use the term ‘satisfier’ for (a). Braybrooke (1987 and earlier) likewise distinguished four levels: 1. Universal requirements, 2. Matters of universal need, 3. Derived needs (i.e., implications of 1 & 2 in specific contexts), 4. Specific forms of provision. See also, e.g., Wiggins 1987, Doyal & Gough 1991, Gasper 1996.

<sup>15</sup> E.g.: “The speed of production and the diversification of objects have become ends in themselves and as such are no longer able to satisfy any need whatsoever. People have grown more dependent on this system of production but, at the same time, more alienated from it.” (Max-Neef 1992: 204).

<sup>16</sup> Max-Neef (1992: 207 fn.): “The column of BEING registers attributes, personal or collective, that are expressed as nouns. The column of HAVING registers institutions, norms, mechanisms, tools (not in a material sense), laws, etc. that can be expressed in one or more words. The column of DOING registers actions, personal or collective, that can be expressed as verbs. The column of INTERACTING registers locations and milieus (as times and spaces). It stands for the Spanish ESTAR or the German BEFINDEN, in the sense of time and space. Since there is no corresponding word in English, INTERACTING was chosen *à faut de mieux*.”

<sup>17</sup> For Allardt (1993: 91) ‘loving’ referred to “the need to relate to other people and to form social identities”.



'Interacting'.<sup>18</sup> I would suggest though that the English word can open productive territory. One might perhaps also use 'occurring' or 'being situated', but the labels may not matter too much if the role is to serve as a discussion prompt.<sup>19</sup> Labels, and language in general, cannot be perfect; they serve to construct relevant contrasts through which we seek to somewhat better order complexity.

Element E, the *exploration of multiple types of satisfier*, is very fertile and could well be original. It appeared a generation before the discovery of similar ideas by the political philosophers Jonathan Wolff and Avner de-Shalit (2007), which were then circulated by Martha Nussbaum (2011). We discuss it in the next section.

Element F concerns *use of the needs model as a tool in group investigation* not as a revered academic construct. Max-Neef insisted on using tools accessible to ordinary people, regardless of any philosophical imperfections. In his Tiradentes project, for example: "A central preoccupation... was to find a way to secure the participation of children in the revitalization process. It seemed to me that if children could be made to reveal freely their visions of society, of school, of authority, of work and of the worst, best and most likely futures, then the most fundamental and pressing problems of their society could be exposed in the purest possible way." (1982: 171). He hired an assistant to interview 107 children of ages from 7 to 12, and reported that the results were very illuminating. Cardoso et al. contrast theories for use by external observers and those for use by situation participants. Their own adaptation of Max-Neef for urbanism is "devised as a flexible roadmap able to be locally adapted by participatory communities and policymakers rather than a general model to apply analytically" (2021: 6).

Element G, *needs seen as a system*, is not original but is fundamental. Boltvinik (2021: 5) notes that we find both in Max-Neef and "Maslow the vision of the set of needs as a system (postulate 3). This is a positive trait and one which is present in very few authors." Perhaps another way of saying this is that the Max-Neef model treats needs-ideas as a set of complementary tools for looking at complex life realities, not as Platonic concepts. (He was an exponent and theorist of transdisciplinarity (2005) and his needs theory reflected that and tried to contribute to it.) As a result, when Cardoso et al. (2021: 6-8) compare various approaches in terms of a set of desiderata for a needs theory, they suggest that the Max-Neef approach satisfies all the desiderata; for example, sensitivity to both objective and subjective conceptions of need.

### Theorizing satisfiers

Max-Neef presented five categories of satisfier: singular, synergic, inhibiting, pseudo, and violator. He provided many examples for each type (e.g., 1992: Tables 7.2 to 7.6), with indication too of the needs that were being promoted, inhibited, violated, or only apparently promoted.

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<sup>18</sup> Boltvinik too considers the term 'interacting' only an inferior equivalent for 'estar' or 'befinden'. However, 'interacting' alludes to the idea that every entity exists in a system of relations to other entities, existing-in-situ; and further, tools can evolve beyond the original intentions of their creators.

<sup>19</sup> Cardoso et al. (2021: 18) call for work to explore how "the being-having-doing-interacting axis of our matrix closely relates to the distinction between the four qualities of life defined by [the prominent well-being researcher] Veenhoven (2000): 1. The attributes entailed in Being play a similar role in the set to that of the Satisfaction/Perception quadrant in the four qualities model. 2. The economic goods categorized in Having are related to the elements of the Liveability/Environment dimension. 3. The individual and collective actions of Doing have their parallel in the carriers of the Capability/Ability quadrant. 4. The societal relations and progress relevant for Interacting are implied in the Utility/Externality dimension of Veenhoven's matrix." Exploration and testing of these proposed equivalences might help deepen the HSD framework.

The last three categories can be discussed as a set of “negative satisfiers[,] that over-satisfy certain needs (*inhibiting*), [or] generate a false sense of satisfaction (*pseudo-satisfiers*), or eliminate the possibility of satisfying the need in question while reducing the possibility of meeting other needs (*violators*)” (Guillén-Royo 2020: 116; italics added). Presumably ‘false’ here means fleeting and/or unsustainable, or later regretted. More fully: “the satisfiers that are often in place in societies that prioritise material production, such as competition, materialist values, consumerism and acquisition, are often considered by people participating in HSD workshops as pseudo or inhibiting satisfiers without synergic or needs fulfilling characteristics” (Guillén-Royo 2016: 167). Max-Neef himself remarked that: “*Inhibiting* satisfiers are those which by the way in which they satisfy (generally over-satisfy) a given need seriously impair the possibility of satisfying other needs” (1992: 209); and that *violators* appear often to be misguided responses to needs for protection, that in fact undermine both protection and other values (1992: 208).<sup>20</sup>

These categories add to the toolbox of socio-economics and ecological economics. Beyond ideas about the ‘externalities’ impacts of one’s consumption on other people, they help us to consider the impacts on ourselves and to understand the distinction between economic goods and genuine satisfiers. Economic goods are not automatically genuine satisfiers.<sup>21</sup> For example, “Contrary to common understandings of mobile phones, televisions, tablets, laptops, broadband, or Internet as ‘necessities’ or needs (Røpke 2003), ICT-related products are considered here as economic goods that [can] support [or inhibit or even violate] the role of satisfiers” (Guillén-Royo 2020: 122). They can support fulfilment of important fundamental needs but they can also support withdrawal from other people and foster persecution fantasies and hate speech, etc.

*Singular* satisfiers serve a single need, whereas *synergic* (or synergistic) satisfiers satisfy more than one need, without harming other needs (Guillén-Royo 2020). Elsewhere Guillén-Royo adds that “synergic satisfiers [are] those that contribute positively to more than one human need *now and in the future*” (2016: 66; italics added), and offers as an example “extensive cycle lanes in urban areas”. Max-Neef saw identification of synergic satisfiers as key for human-scale development: “fundamental human needs can and must be realized from the outset and throughout the entire process of development. In this manner, the realization of needs becomes, instead of a goal, the motor of development itself. This is possible only if the development strategy proves to be capable of stimulating the permanent generation of synergic satisfiers.” (Max-Neef 1991: 53). Use of the needs model is itself considered to be a synergic satisfier (1992: 201).

Gradually he came to see synergic satisfiers as central too for sustainability, human-scale development that respected following generations. In Guillén-Royo’s words: “harmful satisfiers like consumerism have negative consequences both for people and the environment ... [whereas, in contrast,] synergic satisfier[s]...are by definition sustainable; as they cannot satisfy more than one need if they destroy or harm the natural environment. ... [So] by targeting human needs fulfilment and not economic growth, societies can actually progress towards [sustainability]. Societies need to provide the population with the means to identify synergic satisfiers and support their production and consumption...” (Guillén-Royo 2016: 27).

Guillén-Royo adds a term (2016: 59): “*synergic bridging satisfiers* (those that would enable a society or community to transition from a situation dominated by harmful satisfiers to another

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<sup>20</sup> For example, in a series of workshops involving students, researchers and other staff at the University of Oslo, in their matrix diagnosis of current situations “Participants discussed the use of ICTs... in connection with various negative satisfiers particularly detrimental to the needs for protection, affection, understanding, and freedom”; whereas “in the context of the utopian matrix [showing a desired future], ICT use emerged as [potentially] enabling singular and synergic satisfiers” (Guillén-Royo 2020: 121).

<sup>21</sup> ‘Economic goods’ refers here to commodities that may be physical goods or services or a combination.

characterised by synergic ones)". Workshop participants should be asked to seek these and to note those that must come from outside a particular community and those that can be mobilised from inside it. In her case studies, "Cooperating, sharing, exchanging, accepting, appreciating, integrating, restructuring, finding personal spaces and connecting with nature were ways of Doing describing the processes behind most synergic bridging satisfiers" (2016: 177).

### **Part Three: Using Max-Neef's Needs Model as an Exploratory Toolkit**

I will note three types of use seen in recent literature. First, simple uses that employ the list of nine fundamental axiological needs to give more adequate pictures of the life-situations of the poor and marginalized. Second, use of all aspects of the model in the ways envisaged by Max-Neef to investigate and promote local development, preferably local sustainable development. Third, uses in new areas of policy evaluation and design.

#### **Situation assessment/diagnosis of lives of the poor and marginalized**

The format of the matrix of needs and satisfiers offers a manageable and vivid way of addressing complexity and interconnections in the lives of any group and in the systems encasing them. One sees it employed by various analysts to try to deal with this complexity, especially for groups who are particularly marginal and vulnerable. For example, Balyejjusa (2017b) analyses the felt wellbeing of Somali refugees in Kampala by reference to their perceptions of the fulfilment of their needs viewed in terms of Max-Neef's axiological categories.<sup>22</sup> Boshuijzen-van Burken et al (2021) similarly consider the treatment of refugees in the Netherlands. Schenk et al. (2020) use the framework to look at the structural vulnerability of day labourers in South Africa.<sup>23</sup>

In all the cases mentioned, the role of ideas from Max-Neef appears to be to promote attention to multiple dimensions of life. Other frameworks could do this too, but Max-Neef's has an extra richness through its second dimension, the set of existential categories. Yet the studies mentioned above focus on the list of nine fundamental needs (the axiological categories) rather than the existential categories. For example, for Schenk et al. "*Max-Neef's matrix consisting of the finite nine Fundamental Human Needs (FHN)* was used to be able to conduct a multidimensional analysis and to order and describe the data" (2020: 144; italics added). In contrast, Max-Neef's own usage was more dynamic and change-oriented. As Boshuijzen-van Burken et al. themselves note, for example, in "order to emphasize that the poor are not mere passive receivers of development or charity, Max-Neef uses the term actualize instead of satisfy: you actualize your need for understanding when you take steps to find out what is going on" (2020: 171).

#### **Local sustainable development -- using the model in participatory workshops**

The 1989 English version of the HSD book contained a new section on using the model in participatory workshops (1989: 40-43), which was then considerably enlarged in the 1991 book (pp. 39-49). This extended treatment used examples from Colombia (indicating a society dominated by

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<sup>22</sup> In contrast, Glasman's 2020 book on humanitarianism and needs ignores Max-Neef and seems focused only on deficiency needs in regard to subsistence.

<sup>23</sup> Schenk et al. link Max-Neef's concepts to the notion of structural vulnerability as articulated by Du Toit (2005), seen as "embedded in the social, political and economic organisation of a society, with the result that it will be extremely difficult for the person to escape poverty. The person will be unemployed, without any income, without any assets and thus very little social capital. The structurally vulnerable will also be exposed to unequal power relationships, social injustices, marginalisation and restrictive policy frameworks." (Schenk et al. 2020: 144).

fear), Britain (showing a plurality of poverties and unhappiness amidst overall material wealth), Sweden (a society of many lonely people), Bolivia and Argentina. The model was seen to be operationalizable and able to generate unexpected insights.

As shown by those examples, Max-Neef advocated use of his needs model not only in localities but for analyses at regional and national levels too (1992: 211; Jolibert et al. 2014 is another example), and indeed even at global level. No doubt attempted uses at such levels produce new challenges. His 1991 book highlighted the ideas of Argentinian ecologist Gilberto Gallopin (1939-) which largely anticipated the core concepts and title of The Great Transition Initiative (GTI; Raskin et al. 2002) regarding possibilities for a global sustainability transition. Max-Neef insisted though that regional and higher-level work must “recognize the primacy of local wishes and realities and [seek] to find ways of helping them to be realized” (1991: 214). He appeared closer to what the GTI calls an eco-communalist path rather than to its own eclectic proposed transition path.

Mònica Guillén-Royo’s 2016 book surveys needs-centred HSD work from the following 25 years, covering desk uses as well as workshops. The “HSD approach to human needs has been drawn on by the transition town movement in Europe; it has inspired the ecovillage movement in Sweden and peasant associations in Latin America (Smith and Max-Neef 2011)” (Guillén-Royo 2016: 58).<sup>24</sup> She proposes (p.59) that, used as a workshop methodology, the model has “emerged as a flexible tool that could be used to reach many interlinked goals such as achieving a deeper understanding of specific development challenges; a greater engagement of people in social transformation processes; or an increased awareness of what was important in community development.” Underpinning this greater engagement, such workshops are found to work against downwardly adapted preferences of resignation to poverty, injustice and unsustainability, and to contribute to various forms of felt empowerment (pp. 49, 76). She confirms that the workshops can function as synergic satisfiers (Ch. 8). Reflecting on satisfiers, life-elements, and their relation to fundamental needs leads to more insight, including on the ‘wellbeing dividend’ (how less GDP growth can bring both higher wellbeing and less environmental damage), more creativity, and more resolve.

The workshop methodology outlined by Max-Neef called for inputs from very many people. Guillén-Royo therefore developed a modified, simplified, more widely feasible version. A core idea is to focus on identifying “a set of satisfiers with synergic characteristics that can bridge [between] the negative and the utopian scenarios” that are produced in a workshop (2016: 65-6), in other words to show how to move from a diagnosed actual negative trajectory to a preferred path. Figure 1 makes clear the three-stage procedure (Guillén-Royo 2020: 122).

Guillén-Royo follows up Max-Neef’s idea that “the system of synergic satisfiers emerging from needs-based workshops unveils a supportive structure on which to base sustainable development policies” (2016: 6), and reviews experiences with preparing and using such analyses. To give an example, her 2010 workshops in Lleida (Catalonia) identified as one synergic bridging satisfier the rationalization of daily schedules and timetables and the flexibilization of work times (2016: 84, 99). She concludes that “Through discussions on satisfiers, people deepen their exploration into the structures that define the functioning of their society and they come up with personal, collective and higher level changes that have to be in place for the system to become better suited to satisfy needs” (2016: 75).<sup>25</sup>

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<sup>24</sup> See also Spiering and del Valle Barrera (2020, 2021) for two other wide-ranging discussions of using and extending the HSD methodology.

<sup>25</sup> Later she proposes “the concept of ‘necessary’ synergic satisfiers, those that seem to be present in societies or communities where needs are optimally actualised and the negative environmental impacts of human activity minimised” (p.126). E.g., under ‘Being’: inner strength and authenticity (p.142); and “participatory

Her book offers a synthesizing case study from her work on relations between consumption and wellbeing in Lima, Peru. The HSD toolkit proved very useful, for four reasons which she suggests are widely applicable (pp. 175-6). First, people understood the language of needs, for it connects to everyday life. Second, Max-Neef's classification of satisfiers served well in helping people to explore their own lives and to consider how to improve them by searching for synergic satisfiers that serve more than one need. In particular, third, the search for violator, inhibitor and synergic satisfiers gives people tools to think about interconnections and the socio-ecological systems in which they live. Fourth, not least, the notion of synergic satisfiers leads people into active concern for sustainability, to not damage their environment and hence their own need-fulfilment and that of others now and in the future. Overall, the HSD needs model helped for considering the plurality of needs, the variety of satisfiers, and the systems of interconnection that structure life-patterns.

Guillén-Royo's chapter 6 discusses in detail workshop formats that combine HSD ideas with insights from sustainability-promotion approaches (e.g., The Natural Step framework and Theory U),<sup>26</sup> and studies that have used or adapted HSD methodology in order to address sustainability (e.g., Jolibert et al. 2014; Cuthill 2003; Guillén-Royo 2010). Her chapter 7 summarizes how HSD ideas are used by various sustainable communities; and notably "how different community initiatives such as eco-municipalities, ecovillages and the transition movement have linked to the fundamental needs approach of the HSD proposal" (2016: 126). She highlights the work of Inez Aponte with the Transition movement in the UK (<https://transitionnetwork.org/>) for sustained use of HSD ideas plus a major addition: "To the standard HSD approach, I added a fundamental condition for needs satisfaction: a Living Earth" (Aponte 2016: 137).

Aponte (2016: 138) notes that "Transition projects often intuitively meet many of the nine fundamental human needs in a synergic way", but that awareness of the HSD model can substantially improve this. "A Transition approach that worked consciously with the nine fundamental needs would quickly make it clear that action must take place on [all three of] the personal, community and global/state levels" (2016: 140). She has used this approach with many hundreds of participants and found it fruitful. Many sustainability activists experience economics language as off-putting; whereas the language of human needs and satisfiers allows them to discuss the economy not in alienated monetized terms but more concretely.

Guillén-Royo (2020: 123 ff.) discusses also important limits of the HSD workshop format for sustainability analysis; for example, when combining groups with very different views, not only environmental activists. She suggests possible responses too. "One way of adapting the HSD methodology to reach [people's] 'inner dimension' when [participants] do not [already] have similar values or goals is to give them the opportunity to reflect on needs and satisfiers on a personal level before engaging in a collective discussion. This was the strategy followed by Jolibert and colleagues" (Guillén-Royo 2016: 159).

## Policy design

One finds a wide diversity of applications of the HSD needs model, even if most of Max-Neef's own work might be described as Small-is-Beautiful radical populism. His *Barefoot Economics* book declared that its "two basic leitmotifs are smallness and self-reliance" (1982: 19). The interest of the FHNs model appears not dependent though on adopting Max-Neef's philosophy. Salado and Nilchiani (2014), for example, adopt his needs concepts for design engineering. They consider that

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conflict resolution schemes, volunteering, cooperating and direct experience of nature are put forward as [other] examples of interdependent necessary synergic satisfiers" (p.146).

<sup>26</sup> See: <https://thenaturalstep.org/approach/> and Scharmer (2016).

his list of fundamental needs can help engineers to generate more adequate specifications of requirements, to guide systems design, rather than only looking at assumed desirable design attributes or at the specifications in contracts.

Let us consider more fully two recent applications: one for urban design, and one for development policy design more broadly.

#### *Designing and managing cities*

Max-Neef largely focused on rural areas and towns. A generation or two later, in a now predominantly urbanized world, Cardoso et al. (2021) use his ideas for situation diagnosis and design-engineering in regard to the challenges of city planning and management. The overwhelming predominance of economic measures of performance has brought a bias in urban studies and urban policy towards very large cities, and too little systematic attention to aspects of life other than the market economy. Max-Neef's model provides a usable framework to remedy this.

“...we argue that, among several approaches to human needs, a suitable model which responds to the theoretical challenges of the [urbanism] discipline and can tackle the problem in cities already exists, namely the Human Scale Development theory of Max-Neef (1992). We highlight the nexus between the properties of this framework and the processes of human needs satisfaction in cities.” (Cardoso et al. 2021: 4)<sup>27</sup>

Cardoso et al. admire the framework's effort to be comprehensive and systematic and yet at the same time manageable. Their paper outlines how to adapt and operationalise the framework “to assess and envision how cities may satisfy [or frustrate] human needs” (Cardoso et al. 2021: 4). They “‘urbanise’ the list of human needs” (p. 17), by identifying distinctively urban satisfiers and dissatisfiers, and then propose corresponding indicators.

Cardoso et al. are aware of other approaches to need-satisfaction in cities but after comparison suggest that Max-Neef's is superior.<sup>28</sup> They rely on his 1992 chapter in the remarkable edited collection *Real-Life Economics* that Paul Ekins and he produced, and appear unaware of his 1982 book that reflected on urban social systems. Although that book considered small towns not big cities, and did not yet articulate a needs language, its discussion of towns as living (and sometimes dying) social systems could enrich their work.

#### *Designing Development Policies; Counteracting ‘Perspectivity’*

Mahlert (2020) addresses metropolitan power-centres' overgeneralizations about and for other actors. She treats this danger by using Max-Neef's needs model and vocabulary, together with insights from functionalist theory in sociology and the theme of perspectivity: “the quality or condition of being limited by or confined to a particular mental perspective or point of view” (<https://en.oxforddictionaries.com › definition › perspectivity>).<sup>29</sup> She looks especially at overgeneralizations about democracy and civil society, and gives attention also to the complex influence of needs for identity and recognition.

“... this paper draws three features of satisfiers that can help dealing with three potential fallacies arising from perspectivity [i.e., framing], including (a) unduly narrowing down the range of

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<sup>27</sup> Their complex and highly synthetic Table 1 summarises this proposed ‘nexus’ (Cardoso et al. 2021: 10).

<sup>28</sup> Cardoso et al. (2021: 8) propose: “Moving beyond the limitations of the still-popular ‘pyramid’ approach and its offspring, as well as from some existing approaches discussed earlier which we see as too specific and normative, we argue that a good candidate is the human needs framework by the Chilean economist Manfred Max-Neef”.

<sup>29</sup> We can perhaps equally speak of ‘framing’. For Mahlert herself defines “Perspectivity... as the phenomenon of perceiving the empirical world through pre-established interpretative frameworks that are shaped by the social contexts in which they are employed and/or have been created and modified.” (2020: 4).

conceivable means for achieving a goal; (b) depicting something as beneficial in itself by ignoring the potential variability of its context specific effects; (c) evaluating in dichotomic ways, i.e., seeing something in a rosy light only while regarding something else as exclusively deficient.” (2020: 3).

The three features that she draws from Max-Neef’s model to counteract these potential fallacies are his principles that, in Mahler’s words:

- “1 - Satisfiers for the Same Needs Vary across Groups and over Time
- 2 - A Candidate Satisfier Can Enable or Hamper the Fulfillment of a Need, Depending on Which Other Potential Satisfiers It Connects with
- 3 - A Satisfier Can Simultaneously Fulfill Some Needs and Fail to Fulfill Other Needs, and This Holds Both for the Needs of One Person and of Different Groups”. (Mahler 2020: 6).

For example, regarding the second feature: “If a satisfier is ‘transplanted’ from one context into another it might interlink with different ‘local’ satisfiers and might hamper instead of fulfilling needs as a result. Therefore, this second feature of satisfiers can be a tool for discerning whether a policy framework reifies strategies as inherently beneficial, thereby drawing attention to its potential negative effects.” (2020: 7).

Mahler applies these insights in critiques of three international development reports: a regional Human Development Report (HDR) for Africa, *‘Towards a food secure future’* (UNDP 2012); a global-level HDR on democracy, *‘Deepening democracy in a fragmented world’* (UNDP 2002); and the final report to the UN Secretary-General by the Commission on Human Security (CHS 2003), *‘Human Security Now’*. The third fallacy -- evaluating dichotomously: treating A as ideal in all ways and B as flawed in all ways -- is seen in a recurrent idealization of democracy and participation and often in an underestimation of ‘traditional’ arrangements. “In the reports, this fallacy becomes manifest through [their] highlighting the merits of the proposed institutions (e.g., equal citizenship rights, ‘accountable authorities’), while pointing [only] to weaknesses of ‘traditional’ institutions” (2020: 13) in overly simplistic fashion.<sup>30</sup>

Max-Neef himself thought hard about overgeneralized social science and policy discourses. In his remarks on “Fads and Biases in Development Discourse” he regretted “the feverish and obsessive doings of the technocrats who design solutions before having identified where the real problems lie... [and who] seek the justification of the models in the models themselves...” (1991: 12). Mahler’s article shows use of needs-satisfiers theory to investigate this concern and facilitate an alternative approach.

## Conclusion

Max-Neef theorized with a pragmatic orientation and an insistence on the limits of theory. He did not become bewitched by words or imagine that there is one correct specification of needs. The *Human Scale Development* book bemoaned “the utilization of simplistic theories for the interpretation of social complexity, ...the impoverishment of our language” (1991: 94), and our enslavement by the language of mainstream economics. In reaction, he enriched needs theory as a counter-language, providing some tools to explore the complexity of life and to respond to it. As explained in Part Two of the chapter, the resultant needs model should not be treated as a reified doctrine. Instead, if used with emphases on Doing and Interacting, the examples noted in Part Three have suggested that it can serve us as itself a synergic satisfier.

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<sup>30</sup> For a similar earlier discussion, see Gasper (1996b).

## References

- Allardt, Eric. 1976. 'Dimensions of welfare in a comparative Scandinavian study'. *Acta Sociologica*, vol. 17, pp. 227-239.
- . 1993. 'Having, Loving, Being: An alternative to the Swedish model of welfare research'. In M. Nussbaum and A. Sen (eds.), *The Quality of Life*, Oxford: Clarendon, 88-94.
- Aponte, Inez. 2016. Fundamental human needs and the transition movement. In Guillén-Royo 2016: 137-141.
- Balyejjusa, Moses Senkosi. 2017a. Human Needs and Human Wellbeing: some evidence from Somali refugees, Kampala. Working Paper, Uganda Christian University. DOI: 10.13140/RG.2.2.31721.49766
- . 2017b. The Wellbeing of Somali Refugees in Kampala: Perceived Satisfaction of their Human Needs. *Journal of Science & Sustainable Development*, 6(1): 94-111. www.ajol.info/index.php/jssd. DOI: <http://dx.doi.org/10.4314/jssd.v6i1.6> 94.
- Boltvinik, Julio. 2023. 'On the contributions of Max Neef *et al.* to the theory of human needs.' Chapter in this volume.
- Boshuijzen-van Burken, Christine; Roelien Goede; Attie van Niekerk. 2020. Reflections on the Humanitarian Logistics for Refugees in the Netherlands from Three Perspectives -- Maslow, Max-Neef, and Dooyeweerd. *Philosophia Reformata* 85 (2020) 157-180.
- Braybrooke, David. 1987. *Meeting Needs*. Princeton University Press.
- Cardoso, Rodrigo; Ali Sobhani; Evert Meijers. 2021. 'The cities we need: Towards an urbanism guided by human needs satisfaction', *Urban Studies*, October 2021, DOI: 10.1177/00420980211045571.
- Cruz, I., Stahel, A., & Max-Neef, M. 2009. "Towards a systemic development approach: Building on the Human-Scale Development paradigm". *Ecological Economics*, 68, 7, 2021-2030.
- Cuthill, M. 2003. From here to utopia: Running a Human-scale Development workshop on the Gold Coast, Australia. *Local Environment*, 8(4): 471-85.
- Doyal, Len; Ian Gough. 1984. A theory of human needs. *Critical Social Policy*, 4(1), 6-38. <https://doi-org.eur.idm.oclc.org/10.1177/026101838400401002>
- . 1991. *A Theory of Human Need*. Basingstoke: Macmillan.
- Du Toit, A. 2005. Chronic and structural poverty in South Africa: Challenges for action and research. University of the Western Cape (UWC), Programme for Land and Agrarian Studies (PLAAS) Working Paper 6.
- Fuders, Felix. 2023. The Human Scale Development approach: should spirituality be added to the matrix of fundamental human needs? Chapter in this volume.
- Galtung, Johan. 1980. The Basic Needs Approach. In Lederer ed., 55-125.
- Gaspar, D. 1996a: Needs and Basic Needs - a clarification of foundational concepts for development ethics and policy. Pp. 71-101 in *Questioning Development*, ed. G. Köhler, C. Gore et al., Marburg: Metropolis. Also: Working Paper 210, Institute of Social Studies, The Hague, <http://repub.eur.nl/res/pub/18952/>.
- . 1996b. Essentialism in and about Development Discourse. *European Journal of Development Research*, 11(2), 149-176.
- . 2004. *The Ethics of Development – From Economism to Human Development*. Edinburgh: Edinburgh University Press.
- . 2005: 'Needs and Human Rights', pp. 269-272 in *The Essentials of Human Rights*, eds. R. Smith & C. van den Anker. London: Hodder & Stoughton.
- . 2007: Conceptualising Human Needs and Wellbeing. In *Wellbeing in Developing Countries: New Approaches and Research Strategies*, eds. I. Gough and J.A. MacGregor, Cambridge University Press, pp. 47-70.
- . 2009a: 'Capitalism and Human Flourishing? – the strange story of the bias to activity and the downgrading



- of work'. Pp. 13-41 in *Global Social Economy – Development, Work and Policy*, ed. John B. Davis, London: Routledge. Also: Working Paper 469, Institute of Social Studies, The Hague, <http://repub.eur.nl/res/pub/18724>. Based on keynote address, 12<sup>th</sup> World Congress for Social Economics, University of Amsterdam, June 2007.
- 2009b: 'Human Needs and Well-Being'. Chapter 46, pp. 348-357 in *Handbook of Economics and Ethics*, eds. J. Peil & I. van Staveren (Cheltenham: Edward Elgar). <http://repub.eur.nl/res/pub/17959/>
- 2020. Human Development Thinking About Climate Change Requires A Human Rights Agenda and An Ontology of Shared Human Security. In A. Crabtree (ed.), *Sustainability, Capabilities and Human Security*. Palgrave Macmillan, pp. 135-168. <https://link.springer.com/book/10.1007/978-3-030-38905-5>
- Glasman, Joël. 2020. *Humanitarianism and the Quantification of Human Needs*. Abingdon: Routledge.
- Green, R.H., 1978. Basic Human Needs: Concept or Slogan, Synthesis or Smokescreen? *IDS Bulletin* 9 (4), 7-11.
- Guillén-Royo, M. 2010. "Realising the 'Wellbeing Dividend': An Exploratory Study Using the Human Scale Development Approach." *Ecological Economics* 70 (2): 384–393. doi:10.1016/j.ecolecon.2010.09.010.
- 2016. *Sustainability and Wellbeing: Human Scale Development in Practice*. London: Routledge.
- 2020. Applying the fundamental human needs approach to sustainable consumption corridors: participatory workshops involving information and communication technologies. *Sustainability: Science, Practice and Policy*, 16:1, 114-127, DOI: 10.1080/15487733.2020.1787311
- Jackson, T., Wander, J. and Stagl, S. 2004. Beyond insatiability: Needs theory, consumption and sustainability. Working Paper Series, 2004/2, Centre for Environmental Strategy, University of Surrey.
- Jolibert, C., Max-Neef, M., Rauschmayer, F. and Paavola, J. 2011. Should we care about the needs of non-humans? Needs Assessment. *Environmental Policy and Governance*. 21: 259-269.
- Jolibert, C., Paavola, J. and Rauschmayer, F. 2014. Addressing needs in the search for sustainable development: A proposal for needs-based scenario building. *Environmental Values*, 23: 29–50.
- Lea, Stephen et al. 1987. *The Individual in the Economy: a survey of economic psychology*, Cambridge: Cambridge Univ. Press.
- Lederer, Katrin, ed. 1980. ('In cooperation with Johan Galtung and David Antal'.) *Human Needs: A Contribution to the Current Debate*. Cambridge MA: Oelgeschlager, Gunn & Hain.
- Mahlert, Bettina 2020. Needs and Satisfiers: A Tool for Dealing with Perspectivity in Policy Analysis. *European Journal of Development Research*. <https://doi.org/10.1057/s41287-020-00294-9>, online October 2020.
- Mallmann, Carlos, 1977. Holistic Knowledge and Research Priorities. Paper for UNESCO programme on 'Investigacion y necesidades humanas'. <http://accmallmann.org/pdfs/documentos-cm-y-sus-colaboradores/1977-Mallmann-Research-priorities-and-holistic-knowledge-SPA.pdf>
- 1977b. Moving toward Synergy. *Impact of Science on Society*, 27(3), 253-258. UNESCO: Paris. <https://unesdoc.unesco.org/ark:/48223/pf0000023052.nameddest=23052>
- 1980. Society, Needs and Rights: A Systemic Approach. In Lederer (ed.), 37-54.
- Max-Neef, M. 1982. *From the Outside Looking In: Experiences in Barefoot Economics*. Dag Hammarskjöld Foundation, Uppsala, Sweden. The edition cited here was published by Zed Books, London, 1992. [http://www.daghammarskjold.se/wp-content/uploads/2014/08/From\\_the\\_outside\\_looking\\_in.pdf](http://www.daghammarskjold.se/wp-content/uploads/2014/08/From_the_outside_looking_in.pdf)
- 1991. *Human Scale Development: conception, application and further reflections*. New York: Apex Press. 'With contributions from A. Elizalde, M. Hopenhayn.'
- 1992. Development and human needs. In P. Ekins & M. Max-Neef, eds., *Real-Life Economics*. Routledge, 197-214.
- 2005. Foundations of Transdisciplinarity. *Ecological Economics* 53 (2005) 5– 16.
- Max-Neef, M., A. Elizalde, M. Hopenhayn. 1986. Desarrollo a escala humana. Una opción para el futuro. *Development Dialogue*, Special issue, 1986.

---- 1989. Human scale development: An option for the future. Special section of *Development Dialogue*, 1989:1, 5-81.

Nussbaum, Martha. 2011. *Creating Capabilities*. Cambridge, MA: Harvard University Press.

Raskin, P., Banuri, T., Gallopín, G., Gutman, P., Hammond, A., Kates, R., Swart, R. 2002. *Great Transition: The promise and the lure of the times ahead*. Boston, MA: Stockholm Environment Institute and Tellus Institute.

Regan, Matthew R.G. 2021. Treading between joy and grief: *Gaudium et Spes*, Louis-Joseph Lebret, and the challenge of modernity. *Journal of Global Ethics*, 17:2, 243-259, DOI: 10.1080/17449626.2021.1958903

Salado, Alejandro, and Roshanak Nilchiani. 2014. A Categorization Model of Requirements Based on Max-Neef's Model of Human Needs. *Systems Engineering*, 17(2): 348-360. <https://onlinelibrary-wiley-com.eur.idm.oclc.org/doi/epdf/10.1002/sys.21274>

Scharmer, C. Otto, 2016. *Theory U: Leading from the future as it emerges*. 2<sup>nd</sup> edn. Cambridge, MA: Society for Organizational Learning.

Schenk, Rinie; Derick Blaauw; Marianne Mathee. 2020. Max-Neef en die strukturele kwesbaarheid van dagloners in Mbombela en Emalahleni, Suid-Afrika (Max-Neef and the structural vulnerability of day labourers in Mbombela and Emalahleni, South Africa). *Tydskrif vir Geesteswetenskappe*, 60(1), 142-163. doi.10.17159/2224-7912/2020/v60n1a11

Smith, P.B. and M. Max-Neef. 2011. *Economics Unmasked*. Cambridge, UK: Green Books.

Spiering, Salina, and María del Valle Barrera. 2020. How to?! Practical knowledge for transformative science - facilitation guidelines for two applications of the Human Scale Development Approach. [https://www.ufz.de/export/data/global/240323\\_DP\\_3\\_2020\\_SpieringBarrera.pdf](https://www.ufz.de/export/data/global/240323_DP_3_2020_SpieringBarrera.pdf)

Spiering, S., & M. D. V. Barrera. 2021. Testing the quality of transformative science methods: the example of the Human Scale Development approach. *Sustainability Science*, 16: 439-457. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8136104/pdf/11625\\_2021\\_Article\\_966.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8136104/pdf/11625_2021_Article_966.pdf)

Taylor, Paul W. 1959. "Need" Statements. *Analysis*, 19(5): 106-111. <http://links.jstor.org/sici?sici=0003-2638%28195904%2919%3A5%3C106%3A%22S%3E2.O.CO%3B2-Y>

Veenhoven, Ruut. 2000. The four qualities of life. *Journal of Happiness Studies* 1(1): 1-39.

Wiggins, David. 1987. *Needs, Values and Truth*. Oxford: Oxford University Press.

Wolff, Jonathan, and Avner de-Shalit. 2007. *Disadvantage*. Oxford: Oxford University Press.

Figure 1: An FHN [Fundamental Human Needs] perspective on sustainable consumption and ICTs

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