Trying to Evaluate Human Dignity in a Social Group

Antonio Caselles Spanish Society of General Systems

Abstract

This study attempts to make progress in the way an instrument can be created, by consensus, to monitor the development of human beings quality of life in all aspects. Based on various recent studies into human values, quality of life and subjective well-being, and on the Universal Declaration of Human Rights, this study takes *human dignity* as the supreme value, and *development, freedom* and *equality* (with *solidarity, justice* and *peace* as the subsidiary values) as the subsidiary values. All these values were disaggregated hierarchically by considering the literature on this matter to obtain measurable variables. They were converted into indices and geometric averages were used to aggregate the considered variables into each level. Obviously, this is an initial attempt, and the definitive instrument will need more in-depth studies and ampler consensuses.

Keywords Human values; Subjective well-being; Quality of life; Universal Declaration of Human Rights.

1 Introduction

From immemorial times, and without going into much detail, philosophers in particular, and human beings in general, have attempted to determine and explain what they need to survive and to obtain satisfactory conditions of life, both individually and also in their social group. In the present-day, and taking advantage of new technologies, we can aspire to find a procedure to give a numerical value to these conditions in a given social group. That is, to devise a system that evaluates human organizations, and not just individuals (or perhaps it does). To this end, it would be necessary to first determine the partial objectives to be reached by asking: what is well? do objectively right social conduct norms exist? If so, how can their degree of implantation and effectiveness be evaluated?

Evidently this it is the field of Ethics. The aim is to find what is good. Yet "good" seems a relative thing ("One man's meat is another man's poison", "It never rains to everyone's taste", are well-known sayings). For this reason, what the common good actually is must be determined by consensus, and must represent the common desires or preferences in a social group. The larger social group is humanity as a whole (at the moment), and we have the United Nations (UN), which issued the Universal Declaration of Human Rights (UDHR) in 1948. This is the first manifestation of the existence of a global consensus on "what is well" that we know. In the UDHR, "human dignity" is determined implicitly as the upper rank value, and its subordinated values are also determined [1]. Psychology studies the so-called "subjective well-being", which we could consider

the equivalent to happiness. Some authors, e.g., Khaneman and Krueger, have attempted to evaluate a group's happiness by averaging the happiness of their component individuals (determined through questionnaires)[2]. Other authors, e.g., Parra-Luna, have proposed their own scale of values and suggested a way to evaluate it[3]. Regarding the philosophical treatment of UDHR, the book of Moncho is most interesting[1].

From the abundant literature on the matter we have selected, more or less rightly, these two traditional approaches based on (a) human dignity, and (b) subjective happiness, since economic well-being is considered in the UDHR to be a subsidiary objective of human dignity. Therefore, first we set out to analyze the human dignity concept from the UDHR perspective by hierarchically disaggregating its components until we obtain the directly measurable components; second, we do this to suggest a way to evaluate all these lower level components; third, we do this to confer a value to the degree of respect to human dignity in a given social group (city, country, region, world, etc.) from these values by means of mathematical formulas and with a staggered aggregation process. Finally, we analyze the happiness or subjective well-being concept, and attempt to find aspects or factors not contemplated in the UDHR that can affect human dignity; e.g., environmental caring and sustainability. We attempt to integrate them into this hierarchy as a suggestion for future consensus.

2 Human Dignity

From the UDHR analysis and following Moncho [1], we deduce that human dignity is considered here to be the supreme value or the upper rank value, and development, freedom and equality to be immediate the subordinated values. Solidarity, justice and peace are subordinated to equality (which acts as justification for them). In order to establish common criteria, we attempt to summarize definitions for these seven basic concepts:

- **Dignity**: the equivalent to being a "person"; that is to say, subject of operations, and not a "thing"; that is to say, an object or usable instrument. This definition assumes that self-conscience and reason exist in a person.
- **Development**: survival and self-fulfillment options, which include: life/ health, social progress (education, culture, etc.) and standard of life (economic resources, comforts, etc.).
- **Freedom**: no restrictions to self-fulfillment would be the total freedom which, obviously in a group, must be limited by the dignity of the other group members.
- **Equality**: non discrimination to face opportunities and rights, and obviously with the limits determined by the social group's resources.

- **Solidarity**: considered synonymous of brotherhood; that is to say, mutual aid.
- **Justice**: mechanisms of prevention, protection and compensation for individuals or groups to face possible damage or benefits.
- **Peace**: absence of violence, coercion and fear.

Next we attempt to not only identify articles on the UDHR which explicitly mention the diverse components or ingredients of human dignity existing, but to also locate other possible components in the literature that are not explicitly mentioned in the present UDHR, but could perhaps be included in the future according to our criterion.

2.1 Development

For this aspect, the UDHR includes: health, education, sufficient rent and free time.

- Health: includes feeding, dress, house and health care (Article 25-1).
- **Education**: refers to knowledge and aptitudes, and emphasizes the following subsidiary values:
 - In the State (Article 26-1)
 - Free-of-charge and obligatory nature of elementary and fundamental education.
 - Generalization for technical and professional education.
 - Free access through merits to higher education.
 - Like objective (Article 26-2)
 - Respect human rights and fundamental liberties.
 - Understanding, tolerance and friendship.
 - Peace-keeping.
 - Values that do not explicitly appear in the *UDHR*, like education objectives (perhaps they are implicit in the three previous ones), but frequently appear in the literature, like desirable: courage, love, joy, calm, prudence, respect of opinions and other people's customs, communication and cooperation, self-control, self-knowledge, self-acceptance, self-esteem, flexibility, loyalty, integrity/honesty (word), self-discipline, honor the elderly and parents, empathy, generosity, efficiency (yield rate, rapidity, success, social recognition), exploration, reliability, environmental respect, pleasure, responsibility (in case of failure), and to have objectives that go beyond ones own person (see for instance: [4-11]).

- **Sufficient income**: enough to ensure health and family well-being (Article 25-1).
- Free time: includes rest, leisure and paid vacations (Article 24).

- Sustainability and environment care do not appear explicitly in the UDHR.

2.2 Freedom

It includes the following as subsidiary values:

- Opinion and publication by any means (Article 19).
- Choice of partner (in marriage) (Article 16).
- Pacific meeting (Article 20).
- Pacific association (Article 20).
- Choice of work (Article 23).
- Choice of asylum (not for common or anti-UN crimes) (Article 14).
- **Displacement** (in the territory of a State) (Article 13-1).
- To leave any country and to return to ones own country (Article 13-2).
- Trade unions (to endow and/or to affiliate) (Article 23-4).
- Choice of childrens type of education (Article 26-3).
- Thought, conscience and religion (aims and values) (Article 18).
 - $\circ\,$ To change ones own religion or beliefs.
 - To show ones own religion or beliefs (individual and collectively, publicly and privately, education, cult and observance).
- Access to public functions (Article 21).
- Legislation: indirectly by means of electing legislators and governors, or directly (Article 21-1).
- **Vote** (Article 21-3).

- The following do not appear explicitly: right to strike, freedom to hire (market), sexual freedom (with consent and fidelity).

2.3 Equality

The UDHR understands equality to be equality in rights and liberties (Article 2) and facing the law (Article 7). Subsidiary values of equality are solidarity, justice and peace because equality justifies solidarity as both justice and peace [1].

- Solidarity

- Non discrimination: by race, color, sex, language, opinion, national or social origin, economic position, birth, etc. (Article 2).
- Same rights: economic, social, cultural and social security (Article 22). It clarifies by stating that it refers to rights that are indispensable to people's dignity, them free developing their personality, and always limited by the resources of the State itself and International Cooperation.
 - Right to work: under equitable, satisfactory conditions (Article 23-1).
 - The same wage for the same work (Article 23-2).
 - Security and social welfare: insurances for disease, unemployment, widowhood, disability, old age and involuntary loss of means of subsistence (Articles 23-1, 25-1 and 26).
- $\circ~$ The solidarity mechanisms that are not explicit in the UDHR:
 - Urgent palliative for ensuring survival.
 - Reintegration mechanisms: for workers and delinquents.
 - Welfare aid for people with difficulties.

- Justice

- Protection by law (Article 7).
- Appeal to Courts (Article 8).
- Presumption of innocence and guarantees of defense (Article 11-1).
- Non retroactivity of laws (Article 11-2).
- Right of property (Article 17).
- Protection of author rights (Article 27-2).
- Protection of Human Rights (Article 28).
- Duties to the community (Article 29-1).
- Respect of others rights and liberties (Article 29-2).
- No opposition to the general UN principles (Article 29-3).
- No contradiction (Article 30).
- Effectiveness and efficiency of justice are not explicitly considered.
- Peace: no coercion, no violence, no fear, no misery.
 - Prohibition of slavery and servitude (Article 4).

- Prohibition of torture and cruel and/or degrading treatment (Article 5).
- Right to legal personality (Article 6).
- Prohibition of arbitrariness: in cases of detention, prison and exile (Article 9).
- Right to being heard publicly and with justice by an impartial court (Article 10).
- Right to having a nationality and being able to change it (Article 15).
- Right to participating in the scientific progress and in artistic and cultural activities (Article 27-1).

3 Subjective Well-being, Happiness or Satisfaction with One's own Life

For our purpose, these three concepts are considered synonymous. As our objective in this section is to find the factors that influence subjective well-being, and this objective agrees with that in the recent publication of Vijayamohanan and Asalatha[5], for details we recommend reading this publication. From the literature review that these authors did, we emphasize the following factors that determine human happiness:

- (a) Material conditions and consumption (income, unemployment, inequality, inflation, free time, etc.).
- (b) Satisfactory family life (partner, children, relatives, etc.).
- (c) Personal and family health.
- (d) Satisfaction in the workplace.
- (e) Ones own character or personality.
- (f) Environmental, socio-demographic or institutional factors (community life, friends, liberties, activities, social control, religion/values, etc.).

According to these authors, or those mentioned by them, the main factor that influences individual happiness is one's own character or personality (determined by genetic and environmental factors), followed by health. Money seems to have less influence than what people think, mainly from a minimum. Sex and age seem to have little influence and depend on certain aspects. Influence of marriage is different for men than it is for women.

The United Nations Development Program distinguishes between well-being and happiness. The well-being components are health, work and standard of life. The components of happiness are: life with a purpose, receiving respectful treatment and having a network of social support[12]. The evaluation of these components is made by means of interviews, which determine the percentage of people who state having these components.

In order to measure the degree of personal happiness Kahneman and Krueger propose a scale of adjectives (happy, enjoying, pleasant, depressed, angry and frustrated) and a questionnaire to determine the distribution of the time a person spends between pleasant and disagreeable situations[2]. It distinguishes 19 possible situations in daily life; e.g. intimate relationships, meeting people after work, eating supper, relaxing, eating, exercising, etc.. Later it proposes a formula to average the happiness of the individuals in a social group (sum of the degree-of-satisfaction and time-in-the-situation products of different individuals in various situations). As observed, this approach does not attempt to analyze the causes of happiness, but to evaluate happiness as the result. Perhaps it would be necessary to ask with questionnaires because of each answer, and to thus attempt to reach the corresponding cause.

The literature includes several questionnaires that have been devised to determine an individual's level of satisfaction with his/her life. A very popular one is the Oxford Questionnaire[9], although it has received severe critics[13].

To conclude our literature review of happiness causes, we state that we have not found anything new that is objectively measurable to be incorporated into calculations at the human dignity level. Therefore, if what is more influential seems to indicate respect to a person's happiness is his/her own character, and the other conditions have already been considered between the factors that most influence his/her human dignity, we agree with most of the opinions voiced in the literature that the best way to determine a person's degree of happiness is to directly ask him/her, and with more or less disaggregation according to the questionnaire used.

4 Other Scales to Measure the Value of a Society or Group of People

Among the more recent studies on this subject, we selected the following for them possibly leading, more or less quickly, to a numerical global evaluation of a society or a group of people which are, at the same time, a source of ideas or suggestions for our purpose.

An approach to the subject in more detail is found in the work of Parra-Luna[3]. This author distinguishes nine groups of values: Health, Wealth, Security, Knowledge, Freedom, Justice, Conservation of the Environment, Quality of Activities, Prestige. Each group is disaggregated into its respective components to obtain 84 measurable lower level ones. The proposed averaging formula is arithmetic. Thus, for example, the *Health* value is disaggregated as so: (a) Life expectancy, which includes that of 1-year-old children, mortality at the age of 1 year and

mortality at the age of 50; (b) Quality of life, which includes days not worked due to disease or an accident; (c) Sanitary means available, which includes the people for 10000 inhabitants and hospital beds for 10000 inhabitants. All the lowest level components are assumed to be measurable and registered in official statistics.

Dolan et al. propose a detailed hierarchy of the factors that influence subjective well-being or happiness based on the literature review they did[7]. They distinguish seven groups of factors: income, personal characteristics, socially developed characteristics, distribution of available time, attitudes to and beliefs in others, relations with others, and characteristics of an ample social environment. These factors are composed of sub factors; for example, in the factor distribution of available time, they distinguish: hours worked, hours spent traveling from home to work, taking care of others, voluntary community service, physical exercise and religious activities. All the sub factors are assumed to be measurable and are recorded in statistics or can be determined by surveys. They propose aggregation by means of a linear model with an uncertainty term $(y = a + b1 \cdot x1 + b2 \cdot x2 + ... + \varepsilon)$.

As mentioned earlier, Kahneman and Krueger propose a procedure to measure the happiness of a country based on individual surveys, distributed by what each individual does in his/her own time and how he/she feels like in all the considered situations[2].

Schwartz puts forward a hierarchy of basic values to motivate action and interrelations (some are hardly compatible) that are common to all cultures (justified), between which there would be differences only for priorities and each value's relative importance[6]. These values are aggregated into 10 higher ranking values: self-direction, stimulation, hedonism, success, power/prestige, security, conformity (with social norms), tradition (acceptance of one's own culture and customs), benevolence (group aid) and universalism (well-being for everyone and for nature). The proposed measurement method is based on surveys conducted by means of validated questionnaires. The priorities of the diverse values in each individual and each culture are calculated. The evaluation at the group level is assumed based on averages. No higher level value to group these 10 basic values is considered

Musek proposes a hierarchy that begins with two macro categories: Dionysian values and Apollonian values[10]. Dionysian values are classified into Hedonistic (sensual and heath related) and Values of Power (profit, success, etc.). Apollonian values are classified into Moral values (traditional, social, etc.) and Satisfaction values (cognitive, cultural, etc.). Singular values are fitted to this scheme. Nevertheless, the author observes that this hierarchy can change with country and with each individual's age and time.

Maslow proposes a hierarchy of values (motivating priorities), which is not altogether justified and receives considerable feedback[11]. For him, level 1 (physiological) is occupied by: breathing, food, water, sex, dreaming, homeostasis and excretion; level 2 (security) is occupied by: corporal security, and those of work, resources, morality, family, health and property; level 3 (love/belonging) by: friendship, family and sexual intimacy; level 4 (esteem) by: self-esteem, confidence, success, respect of others and to be respected by others; level 5 (self-fulfillment) by: morality, creativity, spontaneity, problem solving, lack of prejudices and acceptance of facts.

5 The Development Concept Considered by the UNDP

The development concept that the UN uses attempts to include all the aspects implied in: (a) a prolonged, healthy, creative life; (b) knowledge acquisition; (c) a decent standard of life: (d) political freedom: (e) human rights; (f) to interact freely with others [12]. In our opinion, its amplitude is total. However, a constructive process is followed there, which tends to produce an adequate index for measuring development. The UN began by defining the Human Development Index (the HDI, in 1990), whose calculation was specified in detail by Anand and Sen[14]. For this calculation, the following variables were used: Life expectancy at birth (years), Adult literacy rate (%), Combined gross enrolment ratio (%), and Gross Domestic Product (GDP) per capita (PPP US\$). The HDImeasures health by life expectancy when born, wealth by GDP and education by the percentage of people with a degree or registered in regulated studies. In order to certainly complete the HDI, other indices were created, among them the HPI2, which is a poverty index applied to developed countries. This index is based on four variables: probability of not surviving to the age of 60; the long-term unemployment rate; the proportion of adults who lack functional aptitudes; the proportion of the population that lives below the poverty threshold. Later, HDI - D (that corrects the HDI by considering inequality)[12], hybrid HDI (that uses a geometric average instead of an arithmetic one in order to be more sensitive to minor differences in lower valued factors), the Multidimensional Poverty Index (MPI) (that analyzes deprivations in HDI components), and the Gender Inequality Index (GII) appeared. In the UNDP, today the idea seems to develop and perfect these indices in order to obtain a suitable, efficient specification and measurement to monitor human development in diverse countries.

We suggest restricting the development concept to the components that are deduced from the UDHR, that is, health, education, sufficient rent and free time, to which we would add what concerns sustainability and the environment. Thus *development*, along with *freedom* and *equality* (which includes *solidarity*, *justice* and *peace*), as described by the UDHR, would be the components of the supreme

value: human dignity.

6 Attempting to Suggest a Proposal for Future Consensus

Let us now consider the scale that the UDHR implicitly developed and which we have attempted to make explicit based on the philosophical approach of Moncho [1] (see Heading 2.). It is now necessary to associate all the values specified in UDHR articles with a measurable variable that is registered, or can be registered, in the official statistics of a given country or region. This scale also needs the incorporation of new values which, in 1948, the date when the UDHR came into being, were not as important as they are now. Attempting to find the best way to measure the concepts specified in the various UDHR articles and incorporating new values into it can imply remarkable work, which also requires a consensus. However we dare, as an attempt, to suggest a preliminary proposal which, if it contains something interesting, will have to be improved in subsequent approaches.

Following the implicit scheme in the UDHR, considering the statistics that the UNDP uses and stressing that our suggestion is merely a preliminary attempt[12], we propose the following procedure to evaluate the degree of human dignity in a social group (world, country, region, municipality, company, etc.).

- 1. Specify the implicit hierarchy of values in the UDHR and complement it by considering the statistics and procedures that the UNDP habitually uses.
- 2. Evaluate all the first-level variables (input or basic) as they appear in the statistics or by means of scores provided by experts.
- 3. Transform all these values into indices with the formula habitually used in the UNDP; that is: (present value minimum value)/(maximum value minimum value).
- 4. Calculate the indices of the second-level variables (those that depend solely on first-level variables) by using the geometric average (as the *UNDP* suggests). Indices with a negative sense will be entered as (1-index) in the corresponding formula.
- 5. Calculate the indices of the third-level variables (those depending on the second- or first- level variables) by also using the geometric average.
- 6. Continue in this way until the human dignity index is calculated. This procedure is simple and quite feasible in a computer. In order to complicate it, a weight or importance measure may be assigned to each index. For geometric averages, each weight will appear as an exponent of its corresponding index. For instance,

 $I_{dignity} = (I_{development})^a \cdot (I_{freedom})^b \cdot (I_{equality})^c$

where a, b, c are higher than zero, and a + b + c = 1. This calculation can be facilitated using logarithms.

As a first approach, the list of variables (turned into indices) can be the following: they are numbered between 0 and 142 (both inclusive). When their codified name begins with a Y, it is understood that they have a negative sense and that their respective aggregation formula will consider $(1 - Y \cdot \cdot \cdot)$.

the previous year)		
I030	Quality of primary education	
I031	Student-teacher ratio (number of students per teacher)	
I032	Teachers trained in primary education $(\%)$	
I033	Income/work/standard of living (disaggregated according to literature[4])	
I034	Jobs-population ratio (% of the population aged 15-64 years)	
I035	Formal jobs	
I036	(% of all jobs)	
I037	Womens rate/mens rate ratio	
Y038	Vulnerable jobs	
I039	(% of all jobs)	
I040	Womens rate/mens rate ratio	
Y041	People who work and live with less than US\$ 1.25 per day (% of all jobs)	
Y042	Unemployment rate per levels of education (% of the labor force with the indi-	
cated level	of education)	
I043	Primary education or less	
I044	Secondary education or better	
Y045	Infantile work (% of children aged 5-14 years)	
I046	Obligatory and paid maternity (in days)	
I047	Free time	
Y048	Working hours per year (average per worker)	
I049	Days of paid vacations per year (average per worker)	
I050	Stainability and non vulnerability (disaggregated according to [4])	
I051	Fitted net saving (% of gross net income)	
Y052	Ecological footprint of consumption (hectares per capita)	
I053	Proportion of the total provision of primary energy	
Y054	Fossil fuels (%)	
I055	Renewable sources (%)	
Y056	Emissions of carbon dioxide per capita (tons)	
1057	Protected area ($\%$ of the terrestrial area)	
Y058	Population that lives on degraded terrain $(\%)$	
Y059	Population with no access to improved services	
I060	Water $(\%)$	
I061	Sewerage (%)	
Y062	Deaths caused by intra-domiciliary, atmospheric and water contamination (per	
1 million p	people)	
Y063	Population affected by natural disasters (annual average, per 1 million people)	
I064	Freedom	
I065	Of choice	
I066	Of partner (score)	

I067	Of work (score)	
I068	Of asylum (score)	
I069	Of displacement in a country (score)	
I070	To leave and return to a country (score)	
I071	Of childrens type of education (score)	
I072	Of religion or beliefs (score)	
I073	Of access to public functions (score)	
I074	Of opinion and publication	
I075	Freedom of press index	
Y076	Number of jailed journalists	
I077	Of pacific meetings (score)	
I078	Of pacific associations (to create and to become a member, including trade u-	
nions) (score)		
I079	Of pacific manifestations (including religion or beliefs) (score)	
I080	Of legislation (directly or by choosing legislators)	
I081	To vote (score)	
Y082	% corruption/bribe victims	
I083	Degree of democratic decentralization (score)	
I084	% of political participation	
I085	Equality	
I086	Solidarity	
1087	Non discrimination (race, color, sex, language, opinion, national or social origin,	
economic position, birth, etc.)		
I088	Seats in parliament (score)	
I089	Population who have at least completed secondary education (score)	
I090	Rate of participation in the labor force (score)	
I091	Same rights (economic, social, cultural, equal wage for the same work, fair	
wage)(everything limited by the resources of the State and international cooperation) (score)		
I092	Social security	
I093	Disease (score)	
I094	Unemployment (score)	
1095	Widowhood (score)	
I096	Disability (score)	
1097	Old age (score)	
1098	Non voluntary loss of means of subsistence (score)	
I099	Attending to people who have difficulties surviving (not in UDHR) (score)	
I100	Justice	
I101	Protection by law	
I102	Physical (score)	
I103	Of property (score)	

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I104	Of author rights (score)
I105	Of human rights (score)
I106	Obligations to others and the community (score)
I107	Resources to courts (score)
I108	Presumption of innocence (score)
I109	Guarantees of defense (score)
I110	Non retroactive laws (score)
I111	Non contradictory laws (score)
I112	Effectiveness and efficiency in application of laws
I113	Hearing (score)
I114	Publicity (score)
I115	Impartiality (score)
I116	Non abuse (score)
I117	No errors (score)
I118	Celerity (score)
I119	Peace
I120	No coercion
I121	No slavery (score)
I122	No servitude (score)
I123	Right to legal personality (score)
I124	Right to nationality and its change (score)
I125	Right to participate in scientific progress (score)
I126	Right to participate in artistic and/or cultural activities (score)
I127	Non violence
I128	No torture (score)
I129	No cruel and/or degrading treatment (score)
Y130	Rate of homicides
Y131	Rate of robberies
Y132	Rate of assaults
I133	No fear (disaggregated according to [4])
Y134	Selling/purchasing arms
Y135	Refugees
Y136	Displaced internally
Y137	Civil war
I138	Victims
I139	Intensity
I140	No misery
Y141	% undernourished
Y142	Insufficiency average

7 Conclusions and Discussion

Different approaches have been observed in the literature as to not only the identity of the superior values in a human group, but also its hierarchy and composition. The values detected there have been checked against the subjective well-being components and the result is that well-being depends mostly on genetic factors and personality, while the other factors are assumed in other previously considered values. It is observed that values and their priorities can change according to country and time. Accordingly, if the intention is to design a scale of values that is useful for any human group, it is necessary to reach a global consensus and to update it whenever necessary.

The UNDP is immersed in constructing an index that measures the general value of both a human group and partial indices that measure different aspects of this value. This process comes across several difficulties, such as those that derive from the nonexistence or inaccuracy of necessary data and the nonexistence of a consensus about the definition and structure of diverse partial values. In order to advance in determining a definition and a structure between the partial values and the total value of a human group, we based our work on the UDHR (a first universal consensus) and on the philosophical studies, which are also based on the UDHR. With this information and the suggestions that we found in the UNDP reports and in studies by different authors, we drew a list of indices, structured by levels, and a general formula to aggregate lower level indices into higher level ones.

In this way, the upper rank/higher level index would be the Human Dignity Index (IDIG) (level 6). Like the indices of level 5 (with whose aggregation the IDIG would be calculated), we would obtain the Human Development Index (IDEV), the Human Freedom Index (IFRE) and the Human Equality Index (IEQU). From this stage onward, we would suppress the adjective "human" for being redundant and obvious. Level 4 indices, subsidiaries of the IDEV, would include the Index of Health (IHEA), the Index of Education (IEDU), the Index of Income (IINC), the Index of Free Time (IFRT) and the Index of Sustainability (ISUS). We would continue in the same way until we reach the indices of level 1, which would be calculated from the statistical data or from the scores provided by experts. As formulas to calculate the indices of level 1 and to aggregate indices, we agree with the habitual ones employed in the UNDP reports (present-minimum)/(maximum-minimum) and the geometric average (perhaps weighed), respectively. All the indices must be aggregated in a positive sense. The indices in a negative sense (in the list in Heading 6, those that begin with a Y) would enter the respective aggregation formulas as the 1-index.

Despite being obvious, we insist that this proposal (based on the consulted literature) has to be considered a germ or an attempt, must be the object of a more detailed or refined study, and has to be submitted to consensus; for instance, the definition of each index, deduced from its assigned components, ingredients or dimensions, and also the weight assigned to each component when averaging.

Another question to consider in future studies is that which refers to crosssectional indices. We assumed that each component, ingredient or dimension appears once in the structure; that is to say, the considered structure is hierarchical or tree-shaped. However, it is possible that a given component can be considered as a starting point to pertain to more than one branch. In this case, we chose the branch that was more concordant with the concept being dealt with; for example, free medical aid could be considered within the *health* concept and also on the *development* branch. However, we considered that it was more likely a solidarity subject than (although also) a health subject.

There are also some concepts, such as poverty or gender inequality, that do not appear in the list of Heading 6, but include components that either appear on several branches of the tree or do not appear on any. Thus in the Multidimensional Poverty Index (MPI) [12], 10 components enter: 2 in *health* (nutrition and infantile mortality), 2 in *education* (school enrollment and training years) and 6 in standard of life (goods, floor, electricity, water, sewerage and fuel to cook). Both the health ones are on different branches (Y141 and I015, respectively). In education, training years do not appear on the list and school enrollment is disaggregated into three levels (I024, I025, and I026). We see that the six standard of life ones do not appear on the list. Since many of the items on the list were obtained from tables in the UNDP report [12] and were assumed to be a first approach, we observed that perhaps it would be advisable to better select the components of the list so that the cross-sectional indices, such as the MPI, are based solely on the components on the list. A similar situation occurs with the Gender Inequality Index (GII); the ideal situation would be that all the components of the cross-sectional indices are included on the list, but this ideal situation is perhaps not attainable if simplicity is preferred. In this last case, the cross-sectional indices would be independent indices of the Human Dignity Index, which we are attempting to design herein.

We sincerely hope that somebody finds new ideas in this paper which contribute to or are useful for better monitoring the progress of Humanity on our planet, and we encourage anyone who feels motivated by this matter to continue with this type of work.

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Corresponding author

Antonio Caselles can be contacted at: antonio.caselles@uv.es