

AUSTRALIAN LONERGAN WORKSHOP 2021

**An Integral Scale of Values
as a Heuristic for Understanding and Transforming Cultures**

presented by

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A Working Paper (revised and updated after the Workshop)

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ABSTRACT

The vast diversity in human cultures presents issues for those seeking to develop a better world. We can no longer presume that one culture is better than another. Each has had to confront different challenges/problems and has found different solutions to the problem of living. This process of challenge and response has resulted in a diversity of cultures where particular solutions become embedded in the taken-for-granted ways of doing things and priority is given to some values over others.

In the context of a discussion on feelings in Chapter 2 of Method in Theology, Lonergan discusses how feelings respond to values in accord with some scale of preference and distinguishes vital, social, cultural, personal and religious values in an ascending order. Much of the discussion around the scale of values has been in terms of a personal scale of preference.

However, in Chapter 2, Lonergan then goes on to discuss the notion of value, judgements of value, beliefs, the structure of the human good and, progress and decline. At the beginning of his discussion of progress and decline, he notes "Our account of the structure of human good is compatible with any stage of technological, economic, political, cultural, religious development" (p.52), indicating the possibility of understanding societies in terms of an integral scale of values.

What is value? What is a technological value, an economic value, a political value, a cultural value and a religious value?

This paper explores how these different dimensions of development can be used to understand any society in any place and any time.

Authentic subjectivity is achieved by meeting the demands of an integral scale of values.

Introduction

Lonergan's integral scale of values is a heuristic for understanding and transforming cultures. It is a heuristic that can be located within Functional Collaboration and within the structure of the human good. The achievement of an integral scale of values makes demands on us both personally and socially.

At the outset, it should be noted that I come at the issue of the integral scale of values as a researcher seeking to understand societies and the issues they face and, seeking to propose changes in a society. This perspective throws up issues about the integral scale of values that, in my view, are not sufficiently addressed in more philosophic and theological approaches.

In keeping with the theme of this Workshop, in this presentation I will first talk about Charles Massy and his heuristic of agriculture. Second, I will parallel that discussion with a heuristic of society – my main goal here is to put the integral scale of values in a context and throw up some issues with how it is currently understood among Lonergan scholars.

This is a slow work in progress – an attempt to think through Lonergan's writings on the integral scale of values and whether and how it is relevant to my work as a social researcher.

Charles Massy & the heuristic of agriculture

Charles Massy is wonderful storyteller. He is inspirational, urging us to change our agricultural practices through the example of farmers from around the world.

One of the questions that I have learnt to ask as I immersed myself in the writings of Lonergan is: what is this person doing? So, I will begin with the question: what is Charles Massy doing in his book *Call of the Reed Warbler: A New Agriculture and a New Earth* (2017)

However we think about this question, what is he doing, and interrogate his book seeking an answer, we have some implicit or explicit heuristic – a guide for this doing, an anticipation of the structure of an answer.

I have come to the view that the best research heuristic is “functional collaboration” which, in any area of human endeavour, is the way in which we make progress by asking and answering eight different types of questions in the process of going from where we are now to implementing something new.¹ Though I should add that Charles Massy would not understand nor articulate what he is doing in this way.

Figure 1: Functional Collaboration: distinguishing questions, methods and answers



Source: Society for the Globalization of Effective Methods of Evolving (SGEME) website: www.sgeme.org

¹ See McNelis 2014 for this interpretation of Lonergan's functional specialities (Lonergan 1972)

In the introduction to his book, Charles Massy says:

And yet, though intimately my country, I came to realise that for a long time I didn’t fully understand it. Consequently, at times, I caused immense damage to this country – in some paddocks, perhaps at least a few thousand years worth. I now know that if we want to profitably manage, nurture and regenerate country, then we need to fathom where it came from and how, what it is made of, how it works and functions, how it was managed before us, what organisms and vegetation reside on it, and how they in turn function and play a role. (Massy 2017 p.1-2)

His starting point is important – a personal acknowledgement that he didn’t understand the country and that his lack of understanding was causing immense damage. He also recognised that if he was going to manage, nurture and regenerate the country, he needed to work out where the country came from and how, what it is made of, how it works and functions. His discovery, then, turns to a decision, a foundational decision which transforms his horizon. It is a new yet still to be realised vision of who he is and who we are as humankind. This yet to be realised vision forms the presupposition of future decisions that he will make. It orients his future.

In seeking to realise this vision, he decides on a future direction, a policy that will guide his future actions, viz. that knowing or research on country is something important, something worthwhile.

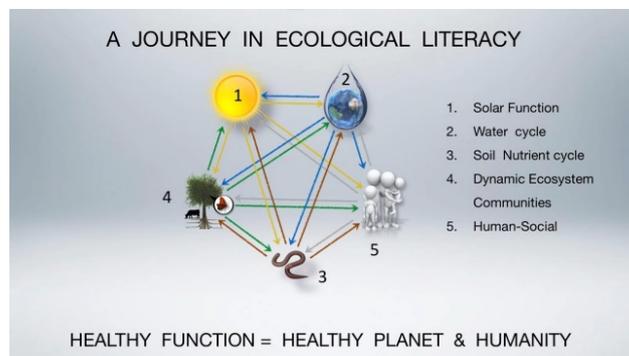
From among the different possible strategies for developing this knowing, he decides to return to the Australian National University (ANU) and do a PhD on human ecology.

Finally, he implements that strategy by taking practical action - enrolling at ANU – and thus, realising that strategy and, communicating to himself and to others his new direction.

But then the cycle begins in a new phase – he begins his research of human ecology – he reads books, he interviews people, he gathers data. He comes to his research with some interpretation already in mind, some implicit heuristic of how country works and functions.

Yet, his research challenges this implicit heuristic - it throws up data that he cannot account for. His book and his research are primarily the development of a new heuristic of country, a new way of interpreting the landscape, one illustrated in his diagram “A Journey in Ecological Literacy” (Massy 2018) which brings together the four functions that constitute a viable and sustainable country – the solar-energy function, the water cycle function, the soil-mineral nutrient cycle function and the dynamic ecosystem communities function.²

Figure 2: A journey in Ecological Literacy



Source: Massy 2018

² The diagram includes five functions. Four functions – solar function, water cycle, soil nutrient cycle and ecosystem – noted here concern the landscape. The fifth function, the human-social function, is discussed later in this paper.

He uses this new heuristic to trace the changes in the landscape in different parts of Australia – the History of the landscape.

Finally, he has to confront not just the changes in the landscape but what the farming practices of the past have done to it. He confronts the mindset that sustains these farming practices – what he calls the emergence of the “mechanical mind”. He is confronting his past and the fundamental presuppositions of farming in Australia, presuppositions about our relationship with country, one of ignorance and exploitation. He is also weighing up alternative mindsets – the way in which Indigenous peoples related to the land; the way in which the farmers he met related to the land; the way in which Ian McHarg (1971), Wendell Berry (1977), Thomas Berry (1988; 1999) and others understand our relationship with nature. In weighing these up (Dialectic), he discovers the best of the past and develops a new mindset, what he calls “the emergent mind”.

This discovery was not just a discovery but something he decided to act upon. It became the new horizon within which he operated (Foundations). It found expression in new Policies – to promote regenerative agriculture; in new strategies – on the one hand, to change his own farming practices and on the other, to write and publish a book – and thence, to work out what these new farming practices would be on his particular farm (given how its particular solar function, water cycle, soil nutrient cycle and ecosystem operated) and actually implemented these new farming practices and, also to work out when, where and how he would do the writing and the publishing given his particular circumstances.

Charles Massy's book is not only the story of his journey into ecological literacy where he begins to understand the country better, but also a journey into a new understanding of who he is, what a farmer is, what we are as persons – an understanding that incorporates our relationship with the country, with the landscape, with nature. This discovery – it is a discovery about who he is - is the basis for his decision to bring about a new future, a new vision of regenerative agriculture and thus, to implement new farming practices.

Massy and the Functional Speciality Interpretation

You may have noticed I missed the fifth function that he discusses – the role of the human-social function. I want to turn to this function now and elaborate more on this, particularly in relation to the integral scale of values.

To begin, I want to note a couple of things.

First, the four functions – solar function, water cycle, soil nutrient cycle and ecosystem are what constitute a viable and sustainable landscape. *Per se* the human-social function is not one of these functions. Rather, these four functions place demands on us in the way we act in relation to country, to the landscape, to nature if we want to maintain the landscape.

Second, in his book Massy is largely operating within the functional specialty **Interpretation** – in terms of the functional specialities, he is all over the place, not distinguishing the different types of questions and the different types of methods he needs to answer those questions. I say he is largely operating in the functional specialty Interpretation because he is primarily proposing a heuristic, a structure that can be used to understand the particularities of any landscape and its history and that can be used to develop policies, strategies and specific actions to regenerate the landscape. While Massy is strong on the complexity of the landscape and the need for us to change our thinking around that, I suspect that his heuristic of the four functions needs further development and that it needs further work in how farmers use it as way of understanding their

particular landscape and as a way of working out policies, strategies and specific actions that respect that landscape.

Figure 3: The Functional Speciality Interpretation within the context of Functional Collaboration



Source: Society for the Globalization of Effective Methods of Evolving (SGEME) website: www.sgeme.org

That said, in a parallel way to his heuristic of the landscape, I want to suggest that the integral scale of values is a heuristic that can be used to expand on the human-social function and give it more precision rather than general wishful thinking. Further, it is a heuristic that can be used to understand the particularities of any society.

I can echo the sentiment of that previous quote from Massy by substituting the agricultural references with societal references:

And yet, though intimately my [society], I came to realise that for a long time I didn't fully understand it. Consequently, at times, I caused immense damage to this [society by the way I lived and worked]. I now know that if we want to profitably manage, nurture and regenerate [society and culture], then we need to fathom where it came from and how, what it is made of, how it works and functions, how it was managed before us, what [people and institutions inhabit] it, and how they in turn function and play a role.

While Massy strongly highlights the role of the human-social function in the degradation of the landscape, his reflections are of a general one-dimensional nature. They are in the realm of wishful thinking and urging farmers to change their ways. For me this one of the weaknesses of Massy's book. So, something more is needed. Indeed, something that becomes not a matter of wishful thinking or fear in the face of ecological disaster, but something that is integral to our humanity, to who each of is and wants to be, to who we are as societies and communities. It is something demanded of us, whereby we become better selves and better communities. Working out just what that is, is our challenge and always has been in the experiment of history.

The context for the integral scale of values

I want to put the integral scale of values in a series of contexts as a way of outlining some issues. I begin with Lonergan's discussion of the scale of values as a way of indicating what a scale of values is all about.

Context of Lonergan's writings

Lonergan begins Chapter 2 of *Method* by noting that his purpose is to assemble “the various components that enter into the human good... skills, feelings, values, beliefs, co-operation, progress, and decline.” (p.17).

In Section 2, he draws on the work of Dietrich von Hildebrand and Max Scheler to outline a preferential scale of values linked to feelings as intentional response. This is the initial context in which the scale of values is introduced – that of feelings and preferences:

Not only do feelings respond to values. They do so in accord with some scale of preference. So we may distinguish vital, social, cultural, personal, and religious values in an ascending order. (p.31)

My interest in the integral scale of values is not so much in the preferential scale of value but in how it can be used as a heuristic of society, a guide to understanding particular societies. Just as Massy develops a heuristic of the four functions of solar, water cycle, soil nutrient cycle and ecosystem to understand the landscape works, so too I'm interested in developing a heuristic of society.

In *Insight* and other places, Lonergan uses or refers to a different scale of values. For instance, in *Method* where he discusses progress and decline, Lonergan notes “our account of the structure of the human good is compatible with any stage of technological, economic, political, cultural, religious development”.

Figure 4: Comparing the preferential scale of values and terminal values of a society

Preferential scale of values (related to feelings)	Terminal values of a society
Religious	Religious
Personal	
Cultural	Cultural
Social	Political
	Economic
	Technological
Vital	

Source: author

In the Lonergan literature, the first three, technological values, economic values and political values, are regarded as an expansion of social values. Notably what is missing here is vital values and personal values. Presumably vital values such as food, clothing, shelter are not included as it is the common ground around which technological, economic and political values are oriented; personal values are not included because each person is originating value, the source of innovation and progress in technological, economic, political, cultural and religious values.

Notwithstanding, it is unclear why there is a difference in the two scales of values and how they relate to one another (see below).

Functional collaboration

A **second context** is Functional Collaboration – in talking about the integral scale of values I'm not trying to explain what is happening in any particular society, nor am I trying to understand its history, nor am I evaluating or critiquing a society, nor I am offering a horizon for the future, nor am I proposing policies, strategies and particular activities. I am simply proposing a heuristic, a guide,

a structure which underpins the other functional specialties – history, dialectic, foundations, policies, systematics and communications. So, a heuristic whereby we can grasp the trajectory of a society in History, critique that trajectory in Dialectics, articulate a new vision of society in Foundations, work out new trajectories in Policies and how to implement them in strategies and practical action (Systematics and Communications).

Value as a transcendental notion

Having discussed the relationship between feelings and values and before he outlines his structure of the human good, Lonergan discusses three things – the notion of value, judgements of value and beliefs, each of which is an important context for the structure of the human good.

A **third** context is value as a transcendental notion.

Value is transcendental notion. It is what is intended in questions for deliberation.
(p.34)

As a transcendental notion, value is concrete, not abstract, as it operative in all our questions for deliberation. It is the driving force within us, an unrestricted desire to create something worthwhile. It is this unrestricted desire

Value as a transcendental notion finds expression in judgements of value as to what is indeed worthwhile.

The structure of the human good/society

A **fourth context** is the structure of society – here I am referring to Lonergan's structure of the human good as the structure of society (see Lonergan 1972, p.359).

But we do not live alone. The personal is also the social. We are born into a society which is already constituted by the cumulative decisions, choices and past actions of many people. We appropriate its social, cultural and religious heritage, its taken-for-granted ways of doing things and its products.

Figure 5: The Structure of the Human Good – A heuristic of society

<i>Individual</i>		<i>Social</i>	<i>Ends</i>
<i>Potentiality</i>	<i>Actuation</i>		
capacity, need	operation	cooperation	particular good
plasticity, perfectibility	development, skill	institution, role, task	good of order
liberty	orientation, conversion	personal relations	terminal value

Source: Lonergan 1972, p.48

In this diagram, I have highlighted the connections between the elements as Lonergan discussed them. In this structure, Lonergan distinguishes three levels of the good:

- the particular good, the good as realised or actualised – the highlights relate the particular good to the capacities, needs and operations of the individual; needs include 'wants of very kind' which could be categorised as vital, social, cultural, personal and religious needs.

- the good of order, the processes whereby the particular good is regularly and co-operatively achieved – on the one hand, it is related to the potential plasticity and perfectibility of each person and thus, the good of order informs actual development and skills of the individual; on the other hand, the good of order is related to the co-operation between individuals, the establishment of institutions and within them the roles and tasks assigned to different persons.
- The third level is terminal value which as chosen is the outcome of our liberty, orientation and conversion, and personal relations. It is here that the integral scale of values is relevant.

Before I move on to considering the integral scale of values in the context of the structure of human good/society, I want to make a couple of comments.

First, the structure of the human good/society is, first of all, a heuristic for understanding the past. It seems to me that most of the discussions of the human good are in the context of morality and ethics and tend to look to the future to what should happen without developing an understanding of what has and is happening now and in the past – Research, Interpretation, History and Dialectic. Besides the question of what value(s) will I choose now, there is also the question of what value(s) have I already chosen.

Second, while the term 'terminal value' in the diagram is singular, there are many different terminal values – it is whatever we choose as worthwhile. Each day we make hundreds of choices – what to eat, when and how long to sleep, what to learn, who to interact with and the nature of this interaction, how to get around (walking, public transport, driving, flying etc.), what goods and services to buy, what work we do, where we live and with whom we live, what language(s) we speak, what demands we make on other people, what causes we support and how, what sort of person we want to be, etc. Some are conscious deliberate choices, but most of our choices are regular – they are the inherited taken-for-granted choices within the society we live or, they have their roots in past conscious deliberated choices of our predecessors.

Third, if we consider the structure of the human good/society as a heuristic for understanding the past, then terminal value is what we have chosen. The structure of the human good/society, then, locates an analysis of values operative within a society within the broader context of the co-operative and institutional processes whereby we achieve those values and, the particular goods actually achieved. Terminal values chosen are expressed in our institutions, our housing, our built environments, our approaches to ecology, our culture, our agriculture etc.

Fourth, the structure of the human good/society is a heuristic structure in that it supposes that we will understand a particular society when we discover the answers to a series of inter-related questions: what particular goods are being achieved? what capacities of the individual are being activated in achieving particular goods? what needs are being met through the achievement of these particular goods? what terminal values are being achieved and through what schemes of co-operation?; what understanding of themselves (their capacities, needs, plasticity, liberty) and other people (personal relations) is embodied or expressed in the terminal values chosen, the schemes of co-operation operating and the particular goods achieved?

Fifth, the structure of the human good/society as outlined by Lonergan can, in my view, appear easily understood. However, while the good is concrete, as a heuristic it is abstract – selecting the significant, essential and relevant elements. It is a first approximation of the human good/society. Getting a grasp of how the eighteen elements are related to one another, an overall insight into the structure is difficult and demanding. The challenge, then, is to grasp the presence of the structure as a whole in all our activities.

An explanatory understanding of terminal values

A **fifth context** is an explanatory understanding of a particular terminal value – what is it? We can provide two types of answer to that question – a descriptive definition and an explanatory definition. In a descriptive definition, we would identify our motivations and values and how we achieved them - terminal value as it relates to us. However, if we are to get beyond our own articulation of our values (what we 'intend' in our actions) to what we have actually chosen, then, we need to grasp what constitutes the achievement of a particular value.

At the beginning of *Insight*, Lonergan uses the example of circle. In asking: what is a circle? He points to an explanatory definition of circle as "a locus of coplanar points equidistant from a centre". He goes on to show how insight pivots between an imagined circle, one with lines with depth and of certain size and the circle whose lines have no depth lines and where size is not relevant. It is an explanatory definition that picks out what are the relevant, significant and essential elements that constitute a circle.

Just as the explanatory definition of a circle is abstract, systematic, complete and universal, so too will explanatory definitions of terminal values. The data we turn to is the particular goods that are achieved and the activities or processes within the good of order or schemes of co-operation whereby they are achieved. An explanatory definition of a terminal value is an interpretation of this data. A terminal value will be constituted by selected significant, relevant and essential elements and their relations. These elements and their relationships are the conditions for the occurrence of a particular terminal value (McNelis 2014 p.147-149).

Furthermore, institutions seek to achieve a range of particular terminal values (either explicitly or implicitly) and all their activities and processes are geared towards achieving those values (with varying degrees of success). As highlighted in social science research, the meanings of these activities and processes are subject to different interpretations from a range of perspectives: economic, political, cultural etc. Each of these perspectives picks up a certain dimension of the co-operative schemes of recurrence undertaken by these institutions.

An explanatory definition of a particular terminal value, however, selects the relevant, significant and essential elements that constitute that value. As such, it selects aspects of activities and processes, so a particular value does not fully encompass particular activities and particular processes and thus, there isn't a one-to-one correspondence between a particular terminal value and the recurrent schemes within the good of order. Terminal values are what is intended. Recurrent schemes within the good of order work to achieve multiple terminal values. The extent to which the recurrent schemes within the good of order achieve this range of multiple terminal values as intended is an open question. On the one hand, some values may be given priority over others. On the other hand, the activities that achieve a particular terminal value may not be incorporated into the recurrent schemes to achieve what is intended or may be insufficiently incorporated.

Values as an integral scale

Lonergan discusses the (preferential) scale of values in a section on feelings (1972: Chapter 2, Section 2). There he outlines a scale of preference – vital, social, cultural, personal and religious – and provides a description of each along with some examples. As I've noted above, there is a multiplicity of values and so, this scale is a scale of different types or categories of values and each value can be categorised into vital, social (technological, economic, political), cultural, personal and

religious categories³. Moreover, the use of the term 'scale' indicates different levels for these categories of values, some sort of hierarchy with one level higher/lower than another.

In *Insight*, in a different context from that of *Method in Theology*, Lonergan put it this way.

... within terminal values themselves there is a hierarchy; for each is an intelligible order, but some of these orders include others, some are conditioning and others conditioned, some conditions are more general and others less. (Insight p.625)

He doesn't elaborate on the constituent elements of this hierarchy, i.e., the different kinds, types or categories of terminal values. The significance of this statement lies in the relationship between the elements that constitute the hierarchy, viz. an intelligible order which conditions or is conditioned by another intelligible order.

Other authors following Lonergan (for example, Byrne 2016; Doran 1990) have not only accepted this scale of preference but have also proposed that they are an 'integral' scale of values. In other words, these values form a complete ordered set of values. Thus, all values will be included in these categories – it a complete set of values. Further, it is an ordered set where (i) each level is distinct from other levels (and do not overlap), (ii) each is related to the others, and (iii) together these categories of values form an intelligible whole.⁴

A key question that has puzzled me for many years now (and for me still remains unanswered) is: on what basis has Lonergan proposed this integral scale of values?

So, how do we get from a general statement about intelligible orders in which some are conditioning and others conditioned to the integral scale of values.

Bob Doran has proposed that the five levels of the integral scale of values are isomorphic with the five levels of the structure of human consciousness: vital values with experiencing, social values with understanding, cultural values with reflecting and judging, personal values with deliberating and deciding and, religious values with loving (see Doran 1990, p.95 and Doran 2005, p.181). For good reasons, Patrick Byrne rejects this view as the foundation for the scale of values (see Byrne 2016, p.403-405).

In his discussion of the foundation for the scale of values, Patrick Byrne draws on Lonergan's discussion of higher viewpoints in Chapter 1 of *Insight* and explanatory genera in Chapters 8 and 15 (Byrne 2016, Chapter 14). This for me seems the most promising avenue as the basis for the integral scale of values.⁵

In Chapter 15, Section 3, Lonergan draws on "the fundamental properties of insight" and the accumulation of higher viewpoints to ground the hierarchical structure of explanatory genera. As he notes:

Images that represent viewpoints lead to insights that accumulate into higher viewpoints. This transition can be repeated. Images apart from insight are coincidental manifolds; but images under insight cease to be coincidental, for their elements become related intelligibly. Potency corresponds to the imagined empirical residue. Form corresponds to the insight. Again, direct insight expresses itself in abstract classical laws; this abstractness is an indeterminacy that leaves room for the inverse

³ In *Topics in Education* (Lonergan 1993[1959], p.37), Lonergan discusses three kinds of value – aesthetic, ethical and religious. The five level scale is later development.

⁴ See Lonergan 1992, p.416-417 for as discussion of integral in the context of an integral heuristic structure

⁵ The discussion of explanatory genera is quite technical and detailed and only the broad outlines can be discussed here. For a more detailed discussion, I recommend you look at the sources noted here.

insights that grasp statistical laws; the compatibility of classical and statistical laws leaves room for the coincidental manifolds that provide the potency for the higher forms. Not only do all these elements mesh together to provide a single coherent account of explanatory genera and species, but the resultant account has no competitors, for to the best of my knowledge, no one else has attempted to work out the pure theory of genera and species, where the genera and species are conceived not descriptively but explanatorily. (Lonergan 1992, p.466)

This establishes the possibility of a hierarchy of explanatory genera - physical, chemical, biological, psychological and human – and the possibility of a series of logically autonomous sciences. Within each genus, different species systematise differently their different underlying manifolds (Lonergan 1992 p.464) and thus, the possibility of a series of logically autonomous sub-sciences within each science (see Lamb 1965).

The foregoing only provides a heuristic for working out an integral scale of values – that a single coherent account of the scale of values will consist of a number of levels in which each level will systematise to some extent the underlying manifolds and the next higher level will systematise to some extent residual underlying manifolds. But, how do we move from a hypothesis about explanatory genera and species to grasping an integral scale of values?

One way of proceeding is to return to the “Structure of Human Good” and think about the relationship between the top left row/column (need/desire) and the bottom right row/column (terminal value). Sebastian Moore, a pre-eminent Lonergan scholar, has written extensively on desire (Moore 1985; 1989). Some short quotes highlight the significance of desire in human living: from *Let this Mind be in You* “My original desire is for I know not what. It is undifferentiated. It is for I know not what *because* it is an original happy state of myself not yet knowing how to extend itself.” (p.15); from *Jesus The Liberator of Desire*, “...the growth of a person is the progressive liberation of desire. It is the process whereby desire finds ever more deeply its subject, whereby desire comes to be in one who can say, ever more deeply and wholly, “I want.”” (p.17); “Desire is love trying to happen.” (p.18); “The development of desire is a progressive changing of what is desired and who is desiring” (p.19).

Insight is an investigation into the desire to understand and the operations whereby we move from not knowing to knowing. In *Method*, Lonergan discusses value as a transcendental notion, as what is intended in questions for deliberation, as the desire to achieve something worthwhile. The transcendental notion of value underpins all our striving and achievement. From this perspective, prior to knowing deliberate about whether we will proceed down the path of knowing and whether we will choose this path. Knowing is a terminal value which has its origins in the desire to understand. This desire is realized through a series of operations (experiencing, understanding, judging) whereby we move from not knowing to knowing. Just as there is a multiplicity of terminal values, there is also a multiplicity of knowns underpinned by this desire to know.

I am proposing here that, as we relate to others (our sociality), desire unfolds in five dimensions – vital, social (technological, economic, political), cultural, personal and religious – and the values we choose seek to realize these desires. Within ourselves, we can identify, distinguish and link these five dimensions of our desires. We can then go on to work out how each dimension of our desire is realized through a series of activities or co-operative schemes of recurrence. The following table **descriptively** links a dimension of our desire with a specific type of value and, how one dimension relates to another and together form an integral scale of values.

Value	Dimension of our desire
Vital	our desire (and recurring need) to sustain our health and vitality
Technological	our desire (and recurring need) for know-how to transform the potentialities of nature in order to sustain our health and vitality
Economic	our desire (and recurring need) to produce a standard of living (goods and services) using our know-how
Political	our desire (and recurring need) to reach effective agreement on how we cooperatively work together to produce this standard of living
Cultural	our desire (and recurring need) to discover, express and develop meaning and value in our living together
Personal	our ever-present desire (and need) to grow and transcend our current identity and to live in a larger and better world
Religious	our ever-present desire (and need) to find a place within the history of the universe

This is one possibility that I am currently exploring as I try and make sense of the integral scale of values.

Some comments and speculations on the integral scale of values

Regenerative agriculture as an example of the integral scale of values

Let me return to the theme of this Workshop, *Authentic subjects transforming cultures: regenerative farming, a parable for our times*, and illustrate how the integral scale of values informs regenerative farming.

An economy is 'the totality of activities bridging the gap between the potentialities of nature, whether physical, chemical, vegetable, animal, or human nature, and, on the other hand, the actuality of a standard of living' (Lonergan 1998, p.232). Agriculture is the first part of the transformation of materials into a standard of living. It not only provides food for humans but also food for animals, fibre (cotton), leather, fuel (ethanol), timber etc.

The production of these agricultural products incorporates technological, economic, political, cultural, personal and even religious values.

In regard to **technological values**, we need to think of technology not as products as it is in common parlance but rather as know-how. So, instead of thinking of technology as latest innovations in tractors, tillage and seeding equipment, irrigation and watering systems, harvesting equipment etc., we think of it as the know-how that went into producing these goods. This know-how would include knowledge of the four functions that Massy talks about as they apply in a particular landscape, the knowledge of the agriculture products themselves and how they can be planted, irrigated and harvested, the knowledge of markets and prices, the knowledge required to produce certain types of equipment used on the farm etc. But it could also include such things as knowing how to transact the sale of goods and services (money) and how to maintain control of equipment, land and other physical resources (private property).

In regard to **economic values**, we can think of the circuits of production:

- the basic circuit whereby the food, fibre, timber etc. is grown and extracted and passed down the production and distribution chain until finally it enters into the standard of living
- the surplus circuit whereby equipment such as fencing, tractors, harvesters, planters, sprayers, pumps, trailers, trucks, computers, sheds etc. are produced and used in the basic circuit to produce goods and services
- the distribution circuit whereby land is bought and sold and, finance is raised

In regard to **political values**, we can think of the processes whereby farmers, producers of equipment, buyers of agricultural products, the community generally reach agreement about what equipment will be produced, prices, the use of land for particular purposes, how, when, where and by whom agricultural products will be sold and bought etc.

In regard to **cultural values**, we can think of the meanings that inform the life of a farmer – the importance they place on learning, on connecting with other farmers, on sustainable farming, on paying attention to what is happening on their farm etc.

In regard to **personal values**, we can think of the changes in technological, economic, political and cultural practices initiated by each farmer.

In regard to **religious values**, we can think of the farmer's stance on the ultimate destiny of humanity and the universe whether a dystopian view or a view based on the discovery that I am loved and in love with the *Mystery* that is at the centre of the universe. And how these values, flow through to an appreciation for the natural ecologies of the farm.

Implications of the integral scale of values for human living

It is commonplace among social scientists to define disciplines by linking them with different domains of society, e.g., economics with the business and the market, politics with government and their bureaucracies, culture with norms, beliefs, customs, kinship systems etc., religion with religious practices, rituals and beliefs. But such descriptive definitions are not sufficient here.

Moreover, social scientists are notable for their attempts to seek explanations by relating the occurrence of events to human motivations and attitudes: social surveys ask respondents to nominate their motivations in various situations; economists attribute economic activity to self-interest or some other motivation; Marx identified the interests of different classes as the driving force of history; Weber sought to identify the purpose and meanings that individuals attach to their actions etc.

In our everyday taken-for-granted living, anticipating the actions, responses, attitudes and motivations of social agents (whether individuals or institutions) are particularly important as we work out how to negotiate our world, how to get what we need or want to achieve, how we develop solutions to immediate practical concerns. However, pinning down the defining characteristics of particular motivations and interests is somewhat elusive.

An explanatory definition of the integral scale of values takes us beyond identifying certain domains of activities and certain activities as economic or political or cultural and certain. On the one hand, it raises the question as to what activities/process constitute a particular value or particular class of values. On the other hand, it suggests that the integral scale of values is a dimension of all our activities and that all our activities have vital, social, cultural, personal and religious dimensions. So, housing for instance is an expression of vital, social (technological, economic, political), cultural, personal and religious values.

This presents us with a twofold challenge as we move forward. On the one hand, the challenge of implementing those activities and processes that will actually achieve a particular terminal value. Too often, while we might think we about achieving a particular value, we are not because we have not grasped the set of activities/processes required to achieve that particular terminal value. On the other hand, a particular terminal value depends upon the achievement of lower terminal values but also plays a role in achieving higher terminal values. Our challenge, then, is working out how to integrate these activities and processes within the larger framework of an integral scale of values and adjust the activities and processes that constitute lower terminal values such that they contribute to achievement of higher terminal values.

Luke Briola, our keynote speaker for the Workshop, mentioned group and general bias (Briola 2021). The integral scale of values proposes that higher values have a higher priority as they condition lower lower values. However, it seems to me that bias is giving undue priority to one type of value over other types. For example, bias can give undue priority to economic values (such as the financial viability of rental properties) over cultural values (such as stable housing); it can also give undue priority to religious values (such as a Eucharistic celebration) to the exclusion of other values (such as health and safety). The integral scale of values seeks to give each type of value its proper priority. Individual and group bias is not so much a turning away from the good as giving certain types or certain values an undue priority because therein lies the interest of the individual or group and the achievement of that value aggrandizes self or a group – it legitimates this priority by focusing on this value to the detriment of what is worthwhile, an integral scale of value. General bias is the refusal to grasp an integral scale of values in our activities.

Disciplines

Social scientists entrenched in their specialised discipline have analysed human activity according to their particular discipline. As a result, we lack a coherent and comprehensive framework for an analysis of society. It becomes impossible to transcend these partial analyses. If we are, however, to develop sound and comprehensive policy solutions for the critical issues of time, how do we put together the different insights of different disciplines and understand how these insights relate to one another and as a whole (in the context of housing research, see Clapham 2012:485).

Despite much talk about developing interdisciplinary practices, a synthesis of the various disciplines (for example, Frodeman, Klein & Pacheco 2017; Bammer et al. 2013; Bhaskar, Danermark & Price 2017; Blunden 2010; Spash 2012; Gerber & Steppacher 2014), little substantial progress has been made.

The pure theory of genera and species - physical, chemical, biological, psychological and human - referred to above, provided the grounds for a series of logically autonomous sciences and sub-sciences. The integral scale of values provides the grounds for a series of logically autonomous human sciences, each with its specific terms and relations, each of which systematises a dimension of humanity. If we are to understand a society or one its constructions, then, we need to understand all the different dimensions as an integral scale of values.

Concluding remarks

Charles Massy has raised a critical issue for the future of humankind and confronts the issue of agriculture and its impact on the ecology of the land. He concludes *Call of the Reed Warbler: A New Agriculture - A New Earth* with the following words:

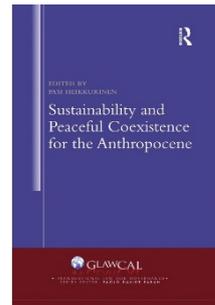
And then suddenly, out of the reed beds of Lake Bundawindirri, I hear a bird calling... it is the beautiful, piercing song of a reed warbler... I like to think it is a song for the Earth

– a song of possibilities, an exultation that, if allowed, the Earth and its life forms and creatures can be regenerated again. Yes, she is calling us in a poignant, heartfelt cry for all creation – a metaphor for us humans to once more become the enablers, the nurturers, the lovers of Earth. (Massy 2017)

So, the ramifications of his book are much broader than agriculture.

In 2015, a group of scholars from different disciplinary backgrounds decided to meet to explore the possibilities for research collaboration. This semi-formal colloquium was held on the campus of the United Nations mandated University for Peace in Costa Rica. Three 'Peaceful Coexistence Colloquiums' have now been held, the first in Costa Rica and the second and third in Finland.⁶

In 2017, Dr Pasi Heikkurinen, the host of the Colloquium produced an edited book, *Sustainability and Peaceful Coexistence for the Anthropocene*. As the title suggests, the book brings together, sustainability, peaceful coexistence and Anthropocene.



The blurb at the beginning of this book broadens the challenge of Charles Massy's discoveries in the limited area of agriculture to the whole of society⁷:

The rapid industrialisation of societies has resulted in radical changes to the Earth's biosphere and its local ecosystems. Climate scientists have recorded and forecasted worrying global temperature rises going back to the early twentieth century, while biologists and palaeontologists have suggested that the next mass extinction is on its way if the current rate of species loss continues. To avert further ecological damage, excessive natural resource use and environmental deterioration are challenges that humanity must deal with now. The human species has had an impact on the natural environment so significant that the present geological era can be referred to as the 'Anthropocene', the age of humans. The blame and responsibility for the prevailing unsustainability, however, cannot be assigned equally to all humans.

In the words of Stewart Brand, "humanity is now stuck with a planet stewardship role" (Brand 2010, p.272). But what does that mean? Does it mean taking a step back and letting nature 'run wild'? Does it mean that we have to take responsibility for the whole earth? That does not mean conquering or dominating the earth. But it could mean we pay more attention to nature and our ecology and our impact on it. It does mean that we need to understand more fully our complex ecological systems and the complex systems that achieve technological, economic political, cultural and religious values. It does mean that we take responsibility for what we do and take responsibility not just for preserving the natural world and reducing our impact on it as we draw resources from it for our standard of living or even living more harmoniously with nature. It does mean that we no longer use the natural world as the dumping ground for our garbage and waste – one of the despicable practices of current business is to externalise costs. Indeed, what we need to do is positively promote and actively enhance the natural world.

We cannot do this without paying attention to the natural environment and to the environment we have built, particularly our cities. We cannot do this without developing better heuristics. Massy among others has developed heuristics for our landscapes. I have pointed to two heuristics – the

⁶ Philip McShane presented a paper entitled *Structuring the Reach towards the Future* at the 3rd Colloquium (see McShane 2019).

⁷ I was introduced to this book through a website, [Openers of the Positive Anthropocene](#), developed by four Lonergan scholars - James Duffy, Terrance Quinn, Philip McShane and Robert Henman – who critically respond to the book.

structure of the human good/society and the integral scale of values - as way of doing this for societies. We can do this without understanding actually what has and is happening, without evaluating and critiquing our current and past visions of our relationship with the natural world, without developing new visions of who we are in the universe (and who we are in relation to the natural world), without developing new directions, without developing new strategies, without putting in place new ways of doing thing. In short, we cannot do without a method for 'engineering the future' (McShane 2019b Ch5, 2019a, 2019c, 2020). Amid the mess of history, its achievements and disasters, Bernard Lonergan discovered the key to making progress, a method for engineering the future, Functional Collaboration. It is his major achievement and legacy.

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