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# FROM SUBJECTIVITY TO OBJECTIVITY: BERNARD LONERGAN'S PHILOSOPHY AS A GROUNDING FOR VALUE SENSITIVE DESIGN

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ABSTRACT: FROM SUBJECTIVITY TO OBJECTIVITY: BERNARD LONERGAN'S PHILOSOPHY AS A GROUNDING FOR VALUE SENSITIVE

This article explores the potential of Bernard Lonergan's philosophy of subjectivity as objectivity as a grounding for value sensitive design (VSD) and the design turn in applied ethics. The rapid pace of scientific and technological advancement has created a gap between technical abilities and our moral assessments of those abilities, calling for a reflection on the philosophical tools we have for applying ethics. In particular, applied ethics often presents interconnected problems that require a more general framework for ethical reflection. Lonergan's philosophy, which emphasizes the importance of selfunderstanding and self-transcendence in achieving objectivity, can provide a valuable perspective on VSD and the design turn in applied ethics. The article examines how Lonergan's philosophy can be applied to VSD and the design turn, and how scientific knowledge can be integrated into an ethics of science without reducing it to an external reflection. Ву adopting Lonergan's perspective, we can address the ethical challenges arising from scientific and technological advancements while promoting a more holistic approach to applied ethics.



## 1. Introduction

As ethical issues have changed, applied ethics has taken various "turns". The 1950s saw the emergence of the empirical turn, which emphasized using scientific data to guide moral judgment¹. Alongside that, we also witnessed the biomedical turn, which concentrated on ethical issues raised by developments in biotechnology and medicine². The 1970s saw the emergence of the environmental turn, concentrating on the moral challenges brought on by environmental

<sup>&</sup>lt;sup>1</sup> P. Borry, Schotsmans, K. Dierickx, *The origin and emergence of empirical ethics*, in G. Widdershoven et al. (eds), *Empirical Ethics in Psychiatry*, *International Perspectives in Philosophy & Psychiatry*, Oxford University Press, Oxford 2008.
<sup>2</sup> P. Borry, P. Schotsmans, K. Dierickx, *The birth of the empirical turn in bioethics*, in «Bioethics», 19, 1, 2005, pp. 49-71.

deterioration and climatic change<sup>3</sup>, and the 1980s heralded the "animal turn", focusing on questions of how we (should) treat nonhuman animals<sup>4</sup>. More recently, applied ethics has shifted to a "design turn", which, in light of scientific and technical breakthroughs, highlights the significance of the design process for new technologies, and argues that we ought to be incorporating human values into and throughout that design process in order to support and advance ethical norms<sup>5</sup>. The design turn further seeks to ensure that the advantages of technological breakthroughs are accessible to all, and it aims to close the gap between technical progress and our moral commitments. One of the most prominent and well-developed approaches for embedding ethics in design is value sensitive design (VSD)<sup>6</sup>.

VSD is a method of developing technology that considers moral principles and ethical ideals throughout the design process of technologies, making sure that they respect human autonomy, uphold our values, and advance welfare. Because VSD acknowledges that technical breakthroughs have broad ethical implications and that design choices have the potential to influence society and people's lives, VSD is essential to the design turn in applied ethics<sup>7</sup>. VSD seeks to advance more ethical and equitable design and use by incorporating ethical issues into the design process itself. However, both a lack of moral commitments in VSD and the lack of a philosophical grounding for values have raised concerns about the method's effectiveness for addressing these challenges. In this article, I present Bernard Lonergan's philosophy of subjectivity as

<sup>3</sup> F. Mathews, *Environmental Philosophy*, in G. Oppy, N. Trakakis (eds), *History of Philosophy in Australia and New Zealand*, Springer, Dordrecht 2014.

<sup>&</sup>lt;sup>4</sup> J.B. Callicott, *Animal liberation: A triangular affair*, in «Environmental ethics», 2, 4, 1980, pp. 311-338.

<sup>&</sup>lt;sup>5</sup> J. van den Hoven, *The Design Turn in Applied Ethics*, in J. van den Hoven, S. Miller, T. Pogge, (eds.), *Designing in Ethics*, Cambridge, Cambridge University Press, 2017, p. 11-31.

<sup>&</sup>lt;sup>6</sup> B. Friedman, D.G. Hendry, *Value sensitive design: Shaping technology with moral imagination*, MA: MIT Press, Cambridge 2019.
<sup>7</sup> *Ibid*.

objectivity as a novel way to understand and ground both VSD and, more broadly, the design turn in applied ethics.

Lonergan's philosophy places a strong emphasis on self-awareness and self-transcendence as means for achieving objectivity8. He contends that human subjectivity is an integral component of objectivity, rather than a roadblock to it; we can overcome our biases and arrive at a more impartial perception of reality by becoming aware of who we are and what those biases are<sup>9</sup>. This offers a useful viewpoint on the ethical issues raised by scientific and technological breakthroughs, which has significant implications for VSD and the design turn in applied ethics. Yet, despite its potential, Lonergan's philosophy has not been properly examined in relation to these domains. By investigating the possibilities of Lonergan's philosophy as a foundation for VSD, this article seeks to close this gap and present a potential principled grounding for the moral commitments that have been argued for in contemporary iterations of VSD. 10 The article shows how Lonergan's philosophy may be used to understand the objectivity of moral values and how this may aid us in understanding and grappling with the moral issues brought on by developments in science and technology.

### 2. Objectivity

The foundation of Lonergan's philosophy is the notion that through a process of self-transcendence, humans are capable of knowing objective reality<sup>11</sup>. According to Lonergan, objectivity is a dynamic and ongoing process of inquiry that is constantly open to modification and improvement rather than a set of unchanging facts that exist independently of human experience, and being "attentive,

<sup>&</sup>lt;sup>8</sup> C. Friel, *Faith and Feeling in Lonergan*, in «Australian eJournal of Theology», 21, 2013, pp. 139-154.

<sup>&</sup>lt;sup>9</sup> B. Lonergan. *Insight: A Study of Human Understanding. Vol. 3. Collected Works of Bernard Lonergan*, University of Toronto Press, Toronto 1992.

<sup>&</sup>lt;sup>10</sup> B. Friedman, D.G. Hendry. *Value Sensitive Design*, cit.

<sup>&</sup>lt;sup>11</sup> M.H. McCarthy. Authenticity as self-transcendence: The enduring insights of Bernard Lonergan, University of Notre Dame Press, Notre Dame 2015.

intelligent, reasonable, and accountable" is the process by which objective knowledge is attained<sup>12</sup>. This calls for a readiness to doubt one's presumptions, look for fresh data, and engage with others.

The objective philosophy of Lonergan directly affects moral principles as well. He holds that moral principles are not merely cultural norms or subjective beliefs, but rather objective facts that can be learned through the same process of inquiry that produces scientific and factual knowledge<sup>13</sup>. According to Lonergan, moral principles are rooted in the fact that people are rational beings, and this makes moral ideals discoverable through a process of reflective self-awareness, in which people consider their own behaviors and motivations and work to bring them into coherence with objective ethical standards<sup>14</sup>. Self-reflection requires the challenging of presumptions, contemplation of different points of view, and conversation with others. In this process, people can learn values like justice and fairness, respect for others' autonomy, and dignity.

Lonergan's larger philosophical framework, what he refers to as the "Generalized Empirical Method", provides the intellectual foundation for his notions of dignity, fairness, and respect for autonomy<sup>15</sup>. This approach is predicated on the notion that people have a natural tendency to want to know and comprehend the world around them, and that knowledge comes from experience. According to Lonergan, our perception of the world is comprised of three fundamental processes: experience, understanding, and judgment. <sup>16</sup>

<sup>&</sup>lt;sup>12</sup> B. Lonergan, *Method in Theology*, Darton, Longman, and Todd, London 1973, p. 20.

<sup>&</sup>lt;sup>13</sup> W.E. Conn, *Bernard Lonergan on Value*, in «The Thomist: A Speculative Quarterly Review», 40, 2, 1976, pp. 243-257.

<sup>&</sup>lt;sup>14</sup> M. Ambrosio, Bernard Lonergan and John Finnis on the Question of Values, Understanding Values, in «Center for Catholic Studies Faculty Seminars and Core Curriculum Seminars», 2, 2013.

<sup>&</sup>lt;sup>15</sup> A. Beards, *Generalized Empirical Method*, in «The Lonergan Review», 3, 1, 2011, pp. 33-87.

<sup>&</sup>lt;sup>16</sup> J. Dadosky, *Lonergan on wisdom*, in «Irish theological quarterly», 79, 1, 2014, pp. 45-67.

Experience is the unprocessed information we gather from our interactions with the outside world and our senses. Comprehension is the process of organizing that experience into meaningful patterns and relationships to make sense of it. Making assessments and conclusions based on our perception of the world is an act of judgment. Lonergan believes that the purpose of human inquiry and understanding is not merely to collect information, but rather to reach self-transcendence, or the full realization of one's potential as a human being<sup>17</sup>. Self-transcendence is the capacity to see beyond our own narrow viewpoint and to acknowledge the inherent dignity of all people.

Understanding the connection between objective knowledge and moral ideals can thus be understood using Lonergan's philosophy of "subjectivity as objectivity", which in turn offers a way to anchor moral ideals in objective reality and, by highlighting the significance of self-transcendence, reflective self-awareness, and continuing inquiry, to promote ethical behavior in a world that is increasingly affected by technological breakthroughs.

### 3. VSD and moral commitments

Historically, value sensitive design (VSD) has seen criticism for not rooting its "values" in any moral commitments<sup>18</sup>. Early VSD literature frequently avoided broader philosophical arguments regarding the nature and justification of specific values, focusing instead on the technical aspects of designing for values<sup>19</sup>. Due to its lack of philosophical foundations, the process of selecting and ranking values was also somewhat ambiguous and prone to subjectivity. Detractors furthermore suggested that designers could

<sup>&</sup>lt;sup>17</sup> B. Lonergan, *Insight*, cit.

<sup>&</sup>lt;sup>18</sup> N. Jacobs, A. Huldtgren, Why value sensitive design needs ethical commitments, in «Ethics and information technology», 23, 2021, pp. 23-26.

<sup>&</sup>lt;sup>19</sup> C. A. Le Dantec, E.S. Poole, S.P. Wyche, *Values as lived experience: evolving value sensitive design in support of value discovery*, in «Proceedings of the SIGCHI conference on human factors in computing systems», Association for Computing Machinery, New York 2009.

be tempted to give higher priority to values that are more practical or useful for their own interests or the interests of their clients, such as efficiency or profitability, even when these might come into conflict with more general human values like welfare<sup>20</sup>. Such problems might also be exacerbated if designers are unaware of the moral (or other) underpinnings of the values they have in mind during the design process. In other words, rather than serving to advance and defend moral principles, VSD runs the risk of becoming a vehicle for instrumentalizing them for other ends. This criticism has sparked a renewed interest in the philosophical underpinnings of VSD, and scholars have turned to various ethical theories and frameworks to provide a principled base for the norms VSD seeks to advance<sup>21</sup>.

The early work of Batya Friedman and company, who popularized the idea of value sensitive design in the 1990s, is exemplary of this issue. In their work, they acknowledged the value of moral principles in design, but they did not offer a conceptual framework to support those principles<sup>22</sup>. Instead, to decide which values should be given priority in a particular design, they used *ad hoc* techniques like stakeholder consultation and intuition. Similarly, early VSD researchers like Phoebe Sengers and Kirsten Boehner highlighted the need for design to represent societal values but did not clearly outline how such values should be determined and prioritized<sup>23</sup>. In response to these gaps, recent positions like those of Jeroen van den Hoven and Pieter Vermaas argue for more

<sup>&</sup>lt;sup>20</sup> A. Borning, M. Muller, *Next steps for value sensitive design*, in «CHI 2012 Proceedings of the SIGCHI conference on human factors in computing systems», Association for Computing Machinery, New York 2012.

<sup>&</sup>lt;sup>21</sup> S. Umbrello, The Ecological Turn in Design: Adopting a Posthumanist Ethics to Inform Value Sensitive Design, in «Philosophies», 6, 2, 2021, p. 29. See also S. Umbrello, Imaginative value sensitive design: Using moral imagination theory to inform responsible technology design, in «Science and Engineering Ethics», 26, 2, pp. 575-595, 2020, pp. 575-595.

<sup>&</sup>lt;sup>22</sup> B. Friedman, *Value-sensitive design*, in «Interactions», 3, 6, 1996, pp. 16-23.

<sup>&</sup>lt;sup>23</sup> P. Sengers, K. Boehner, S. David, J. J. Kaye, *Reflective design*, in «Proceedings of the 4th decennial conference on Critical computing: between sense and sensibility», Association for Computing Machinery, New York 2005, pp. 49-58.

principled approaches to VSD based on well-established ethical theories like consequentialism, deontology, and virtue ethics<sup>24</sup>. Yet even these methods have seen criticism for failing to account for the unique cultural and historical contexts in which design is located, and which can (and often do) impact on the values in need of consideration during design. One way or another, VSD needs a foundation for values, and one which is philosophically well-grounded.

philosophy offers potential framework Lonergan's one for comprehending the interplay between subjectivity and objectivity, well as the significance of moral principles in flourishing. By anchoring VSD within this framework, designers would be better able to recognize and rank the moral values that are most crucial in a certain design environment while also recognizing the significance of the cultural and historical circumstances that helped form those values. This would make it possible for designers to produce technologies which are more morally sound and responsive to values while also ensuring that their work supports the autonomy and dignity of all those involved.

It is also worth highlighting that Lonergan's theory emphasizes the necessity of self-transcendence and the pursuit of the common good, further enhancing its potential as a foundation for VSD. According Lonergan, people have an inbuilt potential selfto transcenden, ce which enables them to put aside their personal interests and pursue the common good. The idea of the common good recognizes that people are social beings that influence one another via their behaviors. People must cooperate in order to advance justice, fairness, and equality. In the context of VSD, Lonergan's focus on the common good offers an insightful viewpoint on the design process, as VSD aims to foster design practices which result

<sup>&</sup>lt;sup>24</sup> P.E. Vermaas, Y.H. Tan, J. van den Hoven, B. Burgemeestre, J. Hulstijn, *Designing for trust: A case of value-sensitive design*, in «Knowledge, Technology & Policy», 23, 2010, pp. 491-505.

in technologies that are considerate of the needs and values of the people who will use them. By putting the common good first, designers may ensure that their creations not only benefit specific users but also improve society as a whole. This is crucial when developing technologies which can have a significant impact across society, such as social media platforms, autonomous vehicles, or automated industrial machinery. Lonergan's philosophy also places a strong emphasis on the value of justice and fairness interpersonal interactions, maintaining that people are morally required to treat others with justice and fairness. Others' autonomy is to be respected, and individuals are to be treated with respect and decency. With regards to design, this entails creating technologies that respect the autonomy and dignity of the users who will interact with such systems. Most centrally, this means that technologies must not entrench or further discriminatory practices, impair certain users' abilities to control their lives, and users must retain control of their personal information (in addition to other concerns).

In a variety of respects, Lonergan's philosophy of objectivity has the power to substantially alter VSD. First of all, it would give a solid foundation for the moral commitments VSD so needs. By looking to Lonergan's philosophy, VSD can draw on a more substantial and principled understanding of morality based on justice, autonomy, and respect for dignity, rather than solely on the arbitrary values and preferences of designers. For instance, in the design of new equipment within the medical domain, a VSD strategy based on Lonergan's philosophy would give equal weight to the autonomy and dignity of healthcare professionals and the safety and well-being of patients. To do this, designers would have to look past their prejudices or preferences and examine the wider ethical consequences of their design choices.

Second, this grounding would compel practitioners of VSD to engage in a more thorough and introspective moral deliberation process.

Designers would need to carefully analyze the moral consequences of their work and engage in a process of debate and reflection with stakeholders, including end-users, impacted communities, and ethicists, rather than depending solely on intuition or personal ideals. To ensure that the values and perspectives of all stakeholders are effectively reflected in the design process, this would require VSD practitioners to be more open and accountable in their decision-making.

Furthermore, encouraging VSD practitioners to think about the larger social and cultural settings in which their work is located can help them to account for the social and cultural ramifications of their work, as well as the larger economic, political, and historical variables that influence the design process, rather than considering design as a solely technical or instrumental activity. To ensure that the design process is more inclusive and responsive to the needs and values of diverse populations, designers would need to be more thoughtful and critical in their approaches.

The three previous points represent a significant departure from how VSD is currently carried out. VSD frequently begins with the identification of stakeholders before attempting to balance their interests in the design of technologies or systems. But according to Lonergan's philosophy of objectivity, we should first have a solid grasp of what is good before designing the systems and technologies that would represent those values. This calls for a more philosophically informed approach, which VSD at the moment lacks, despite Friedman and Hendry's commitment to at least three universal values: human wellbeing, justice, and dignity<sup>25</sup>. Second, user-centered design, which emphasizes orientation toward the user and the value of user feedback, is frequently used in VSD. This strategy, however, is often individualistic and arbitrary, and may

<sup>&</sup>lt;sup>25</sup> B. Friedman, D.G. Hendry. *Value Sensitive Design*, cit.; see also S. Umbrello, *Combinatory and complementary practices of values and virtues*, in «Filosofia», 65, 2020, pp. 107-121.

not result in the attainment of common goods. In contrast, Lonergan's philosophy of objectivity places a strong emphasis on the necessity of developing technologies and institutions that support a common understanding of what is desirable. Finally, VSD frequently lacks a clearly defined ethical framework, instead often relying on vague utilitarian strategies for balancing the interests of stakeholders. The emphasis on fairness and respect for others' autonomy in Lonergan's philosophy of objectivity, however, can offer a more principled way to reconcile divergent interests. In comparison to current practices in VSD, Lonergan's concept of objectivity thus offers a more philosophically founded, objective, and principled approach to VSD.

#### 4. Conclusions

Lonergan's theory of objectivity presents a strong foundation for VSD to ground moral commitments and values, addressing longstanding historical gaps in the theory.

By looking to Lonergan's work, VSD could provide more principled strategies for solving societal issues by focusing on the ideals of justice, fairness, respect for autonomy, and human dignity. This would entail a shift in emphasis toward values as the primary organizing factor of VSD, necessitating a deeper understanding of philosophical and ethical ideas.

This strategy may have drawbacks, such as requiring designers to have knowledge of Lonergan's philosophy or introducing the danger of forcing a certain ethical framework on the design process.

Yet even so, incorporating Lonergan's philosophy into VSD has many advantages, such as a more solid and transparent ethical underpinning for decision-making, a clearer articulation of values and objectives, and a greater potential for social impact.

Finally, the potential advantages of incorporating Lonergan's theory of objectivity into VSD may offer designers a chance to

develop more morally and socially responsible approaches to challenging issues. STEVEN UMBRELLO è Ricercatore presso il Centro per le Scienze Religiose Bruno Kessler di Trento

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