The shared resources of rational agents:
Van Huyssteen's postfoundationalist facilitation of interdisciplinarity

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Introduction

Prof Wentzel van Huyssteen, a South African theologian and Princeton Theological Seminary's James I. McCord Professor of Theology and Science addresses three issues in his work: firstly, the nature of human rationality; secondly, the focus of theological reflection and finally, the ethos and methodology of interdisciplinary facilitation. Van Huyssteen argues for a postfoundationalist approach which entails a positive interpretation of postmodern attitudes and attempts to split the difference between modernist and postmodernist approaches. He explains that modernist approaches, drawing on foundationalist epistemologies, try to remove humanity from rationality, while postmodernist approaches, drawing on nonfoundationalist epistemologies, tend to lead to relativism by overestimating the contextuality of human rationality. The postfoundationalist, however, acknowledges that human knowledge is contextually shaped, but recognises that human rationality is not contextually bound.

Van Huyssteen (1999:113) argues that a postfoundationalist approach will enable one to fully acknowledge:

1   the role of context
2   the epistemically crucial role of interpreted experience
3   the way that tradition shapes the epistemic and non-epistemic values that inform our reflection about God and what some of us believe to be God's presence in this world
4   the need to point creatively beyond the confines of the local community, group or culture toward a plausible form of cross-contextual and interdisciplinary conversation

Hence, Van Huyssteen argues for a postfoundationalist approach as a viable third option beyond foundationalism and nonfoundationalism. Van Huyssteen (1999:113) explains that a postfoundationalist approach:

... should free us to approach our cross-disciplinary conversa-
tion with our strong beliefs and even prejudices intact, and
while acknowledging these strong commitments, to identify at
the same time the shared resources of human rationality in
different modes of reflection.

First, this essay will discuss Van Huyssteen's argument for the shared
resources of human rationality, because it is these shared resources that make
postfoundationalist interdisciplinary facilitation possible. Secondly, this essay
will discuss a postfoundationalist facilitation of interdisciplinary reflection
using Van Huyssteen's Gifford Lectures (published as *Alone in the world?*)
as example.

Shared resources of rationality

One of Van Huyssteen's main concerns is whether Christian theology, as a
disciplined reflection on religious experience, can really claim to be part of
the public, interdisciplinary conversation (cf. 1999:112)? Can theological
reflection become part of the public conversation without retreating into an
esoteric world of private, insular knowledge claims?
     Attempting to answer these questions, Van Huyssteen (1999:112)
approaches them from an epistemological angle and identifies the heart of the
issue by asking:

> ... how the epistemic and nonepistemic values that shape the
> rationality of theological reflection will be similar to or
> different from those that shape the rationality of other modes of
> reflection – especially the rationality of the natural sciences,
> which have acquired such a normative and paradigmatic status
> in our culture.

Taking the epistemic value (intelligibility) and quest (optimal understanding)
into consideration, along with the contextuality of rationality, Van Huyssteen
argues for a theory of rationality that encompasses both *experiential ade-
quacy* and *theoretical adequacy* in theological reflection. He explains:

> ... it would become clear that religious experience and the
> explanatory commitments implied by this specific kind of
> experience are not only closely interrelated, but are also crucial
> epistemic factors which very much determine the values that
> shape rationality in theological reflection (Van Huyssteen
> 1999:115).

Van Huyssteen (1999:117) proposes that if theologians and scientists strive to explain better in order to understand better, then they should first look at the issue of rationality before moving to their respective explanations. The issue of rationality should be the prime focus in trying to relate theology and science in a meaningful way (Van Huyssteen 1999:117).

Furthermore, Van Huyssteen's (2006:10) postfoundationalist approach does not deal with abstract thoughts or beliefs, but with rational people or rational agents. Van Huyssteen explains that humans, as embodied minds, are always embedded in a particular context. Van Huyssteen (2006:11) explains this move: "It is only as individual human beings, living with other human beings in concrete situations, contexts and traditions, that we can claim some form of rationality."

When referring to the epistemic values that theologians, philosophers and scientists employ as embodied minds, Van Huyssteen uses the phrase *the shared resources of human rationality*. In doing so, he alludes to the fact that we share epistemic values in our pursuit of optimal understanding. Thus, because it is these values that shape human rationality clarity is needed on these values if optimal understanding is to be achieved.

Rationality, then, is used to form and construct beliefs about reality. This is true for all humans as well as all modes of human reflection. Van Huyssteen (1999:114) states that: "... the nature of human rationality is to be found in the way that we use our intelligence to pursue particular epistemic goals and values, of which intelligibility may be the most important."

Van Huyssteen (1999:115) explains that the role of *intelligibility* as an epistemic value is crucial though it should not be interpreted as a search for conclusive foundations. Furthermore, in Van Huyssteen's (1999:115) view the degree of intelligibility in theology rests on the level of responsibility of its judgments. This means that theology needs to be responsible in judging the explanatory role of religious beliefs (Van Huyssteen 1999:115). Theologians would only isolate themselves if they were to appeal to revelation or inspired texts as foundations for intelligibility. Thus, it is imperative to acknowledge the shared resources of rationality at one's disposal:

> The epistemic quest for *optimal understanding* and *intelligibility*; and the epistemic skill of *responsible judgement* involving *progressive problem-solving* (Van Huyssteen 1999:12).

Furthermore, Van Huyssteen (1999:116) argues without hesitation that experiences are interpreted experiences. He explains that, because of the interpreted and interpretative nature of experiences, theologians and scientists are empowered to identify the rational integrity of their respective disciplines by offering their own recourses of critique, articulation and justification. He

remarks that such a view responds appropriately to the postmodern argument that there are no universal epistemic systems (Van Huyssteen 1999:116). This allows for methodology to be constructed contextually without forcing epistemic values onto it. Thus, theologians and scientists construct methodologies appropriate to their respective disciplines and contexts, according to what seems reasonable in pursuit of intelligibility and optimal understanding (Van Huyssteen 1999:116). This means that theologians and scientists do not need to have similar methodologies. What is important is that they employ responsible judgement in constructing their methodologies.

Progressive problem-solving

Van Huyssteen comments that it is precisely the *revolutions* in the scientific research programme that illuminate the failure of a foundational epistemology, because its assumptions/foundations keep changing. Van Huyssteen (1999:126) explains:

> If the history of science provided us with a steady accumulation of truths, with no major revolutions, then we would have strong grounds for believing that we have in fact stumbled onto a foundationalist starting point for scientific epistemology. It is thus the occurrences of revolutions that show most clearly that, even in the natural sciences, we have not achieved the kind of universal basis for mediating disputes that the classical model requires.

Hence, Van Huyssteen (1999:128) states that if rationality were to be used to facilitate constructive interdisciplinary conversation, then a break from foundationalist thought is necessary. Ironically, extreme nonfoundationalists do not make this break, but mimic it. In other words, all postmodernist are not necessarily postfoundationalist.

Van Huyssteen (1999:165) refers to Larry Laudan who argues that the rationality and progressiveness of the modernistic model are closely linked to its problem-solving effectiveness. That is to say, it is the problem-solving ability of the modernistic model that led to it being judged as rational. In other words, it is not the process of justification through verification or falsification that makes scientific reflection rational (Van Huyssteen 1999:165). According to Van Huyssteen, rationality for Laudan is about making the most progressive choice of theory – choosing the theories that have the best problem-solving abilities while allowing for further development.

It follows that the rationality of science does not set it apart from other modes of rational reflection (Van Huyssteen 1999:165). Rationality is

defined as the ability to provide appropriate solutions to the problems identified in a specific context. Therefore, any mode of reflection can be regarded as rational if it provides adequate and appropriate solutions.

Following Laudan, Van Huyssteen (1999:166) also argues that the problem-solving abilities of a theory are important for evaluating such a theory. It is the ability of a theory to provide adequate and appropriate solutions that determines its rationality.

It is important to Van Huyssteen that Laudan links rationality and progressiveness quite closely which neatly fits with Nicholas Rescher's and Harold Brown's notion of a weak objectivity and *estimated truths* (cf. Van Huyssteen 1999:166). The truth of a theory is secondary to its problem-solving abilities. Van Huyssteen (1999:166) refers to Laudan when he writes that:

> ... appraising the merits of theories as answers to specific problems, it is more important to ask whether they constitute adequate solutions to significant problems than it is to ask whether they are *true* or otherwise justifiable within the framework of contemporary epistemology.

Thus in Laudan's view intellectual progress is a process of turning unsolved problems into solved problems through responsible judgement and adequate theory-choice (Van Huyssteen 1999:167).

Van Huyssteen (1999:173) observes that Laudan's view of rationality as a progressive theory choice validates disciplines that were previously thought to be irrational. Van Huyssteen (1999:173) explains that in terms of this view, theology, metaphysics and literary criticism are shown to have the ability: "... for making rational appraisals of, and judgments about, the relative merits of competing research traditions within them."

In this view, diverse disciplines are shown to be capable of progressive problem-solving. It follows that *progressive problem-solving*, as an epistemic value, allows for constructive interdisciplinary conversation, because it is an epistemic value shared by all (Van Huyssteen 1999:173) – not in a foundationalist sense, but in a contextually aware postfoundationalist way.

Drawing on Nicholas Rescher's reflections, Van Huyssteen (1999:128) explains that in a postfoundationalist approach to rationality the cognitive evaluative and pragmatic dimensions are merged into one. It is these merged dimensions that serve as a tool in constructing the best reasons for our beliefs and actions.[1] The reason for this is that the postfoundationalist does not seek any reason, but the best possible reasons for committing to specific beliefs and practices in a specific socio-historical context (Van Huyssteen 1999:129).

Following Rescher, Van Huyssteen suggests the first point of exploration should be what exactly happens when one makes a choice that one regards as rational. He (1999:129) writes:

> This will focus the problem of rationality on the question of the nature and status of rational judgment and on the scope or range of the epistemological *overlaps* shared by these two forms of rational inquiry (theological and scientific inquiry).

Drawing on the work of Calvin O. Schrag, Van Huyssteen (1999:133) argues it is rhetoric "that weaves together the cognitive, evaluative and pragmatic aspects of rationality." Rhetoric is used to demonstrate the reasonableness of beliefs and actions. Rhetoric is essential to rationality. It fuses the cognitive, evaluative and pragmatic dimensions together making intersubjective conversation manageable.

Moreover, Van Huyssteen (1999:133) argues that rhetoric makes interdisciplinary reflection workable. He (1999:133) explains that rhetoric functions as a tool in convincing others of the rationality of one's beliefs and practices. The beauty of rhetoric for Van Huyssteen (1999:133) is that it already implies the contextuality of belief and reaches beyond the immediate context in order to convince others on an interpersonal contextual level. Van Huyssteen (1999:133) suggests that the same is true in interdisciplinary conversation. Human beings become rational agents when they can provide good reasons for their beliefs and actions.

Van Huyssteen (1999:134) comments that by including rhetoric in a model of rationality, one broadens the scope of the concept of rationality considerably. However, he acknowledges that some would say that this

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[1] Veldsman (2004:282) clarifies: "From Rescher, Van Huyssteen takes up the three resources of rationality which he identified, namely the cognitive (finding good reasons for hanging on to certain beliefs), evaluative (finding good reasons for making certain moral choices) and pragmatic (finding good reasons for acting in certain ways) context. Although the former (that is, the cognitive) is more dominant, the latter two are regarded as of the same importance."

introduces relativity into rationality, but he explains that, on the contrary, rhetoric illuminates the accountability of rationality (Van Huyssteen 1999:134). Moreover, rhetoric allows a focus on the historical and social context. Rhetoric shows the practical side of rationality and the crucial epistemic role of interpreted experience (1999:134). Rhetoric understood in this way is an extremely useful tool in human rationality, as Van Huyssteen (1999:134) explains:

> If rationality is not just a matter of having some reasons for what one does, but aligning one's beliefs, actions, and evaluations with the best available reasons within a specific context, then all domains or levels of rationality are held together in the common or shared quest of finding the best available reasons to attain the highest form of intelligibility.

Hence, rhetoric:

> ... reveals a common/shared dimension in all human rationality, and a way to integrate the performative presence of rationality in various domains of our lives without again totalizing it in a modernist, rationalistic vision where different modes of knowledge are united in a seamless unity (Van Huyssteen 1999:134).

The rational agent

One of the unique aspects of a postfoundationalist notion of rationality is its shift from *rational beliefs* to *rational agents*. This broadens rationality even further by fusing rational beliefs with rhetoric, contextuality and personal commitments. All these aspects are brought together in one innovative concept, namely the *rational agent*.

To put it simply, rational reflection and personal value judgment have thus been merged, which implies that rationality and context are not only compatible, but in fact inseparable. Van Huyssteen (1999:143), in agreement with Harold Brown, defines rational judgment in the broader postfoundational epistemic sense as: "... the ability to evaluate a situation, to assess evidence and then come to a responsible and reasonable decision without following any preset, modernist rules."

This brings Van Huyssteen (1999:144) closer to the idea of *rational agents*, because rational judgments are understood to be made by: "... individuals who are in command of an appropriate body of information relevant to the judgment in question."

Brown suggests that rational judgment should be understood as an epistemic skill. Van Huyssteen (1999:144) refers to Brown's suggestion and explains:

> … there is nothing mysteriously intuitive about epistemic judgment…it can be included in a thoroughly naturalistic view of human cognition. Learning to make the right or appropriate decisions, or solve certain problems, therefore involves the development of intellectual skills that are in many ways, analogous to physical skills.

Van Huyssteen (1999:145) explains that a rational belief is now understood as a belief arrived at by a rational agent. Part of the reason for this shift is that rhetoric plays an important role in rationality (Van Huyssteen 1999:145) and a rational agent has the ability to make appropriate judgement calls in situations devoid of clear and definitive rules (an Huyssteen 1999:146).

Regarding relativity, Van Huyssteen (1999:147) explains that while the rational agent is conditioned by a historically specific context, the agent's reflection need not be completely determined by the context. There is a big difference between *context-determined* and *context-conditioned* beliefs, and the postfoundationalist opts for the latter. The rational agents' thoughts can transcend the particularities of their social and historical context.

Truth

Van Huyssteen explains Rescher's argument that the focus should shift from universal consensus to a pluralism of diversity. Van Huyssteen (1999:157) writes: "... the fact that different people have different experiential situations makes it normal, natural, and rational that they should proceed differently in cognitive, evaluative, and practical matters."

While *rationality* and *truth* are vital, Van Huyssteen concurs with Brown's, Rescher's and Mikael Stenmark's arguments for a weak link between the two (cf. 1999:158). Van Huyssteen (1999:158) refers specifically to Brown in this regard: "… we proceed rationally in attempting to *discover* truth, and we take those conclusions that are rationally acceptable as our best *estimations* of the truth".

Rescher, in turn, also warns against talking of better reasons as better *approximations* of the truth (Van Huyssteen 1999:159). Rescher argues that what is achieved in scientific reflection is not an *approximation* of truth, but an *estimation* of truth (Van Huyssteen (1999:159).[2]

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[2]   Van Huyssteen (1999:158) comments: "As far as scientific theories go, our present world picture thus represents a better estimate than our past attempts only in the sense that it is, comparatively speaking, more warranted than they are because a wider range of data has

Consequently, according to Van Huyssteen (1999:159), truth itself is redefined in a postfoundationalist approach to rationality. Truth could now be defined as: "... the best possible estimates or judgments that we are able to make in the present moment".

Transversality

Van Huyssteen (1999:135) explains that transversality refers to the point of contact where one line intersects a system of other lines or surfaces and observes that Calvin Schrag appropriates this concept from mathematics for his discussion on rationality. Schrag[3] follows Sartre[4] and proposes that the notion of transversality indicates how human consciousness and self-awareness are unified. Schrag argues that self-awareness and experiences of past consciousness are transversally integrated to form consciousness (Van Huyssteen 1999:135). In other words, past consciousness – which, along with self-awareness, also formed over time – informs present consciousness. One is therefore conscious of the *now* only through the lens of what has passed in time. Van Huyssteen (1999:135) explains that Schrag's intent is to: "... justify and urge an acknowledgement of multiple patterns of interpretation as one move across the borders and boundaries of the different disciplinary matrixes".

Transversal rationality is an intersecting of various forms of discourse or modes of thought.[5] It is a lying across, an extending over and linking

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been accommodated." This is one of the reasons why Van Huyssteen argues for interdisciplinary research, because it will yield an even better estimation of the truth.

[3] Schrag (1992:149) writes: "the story of transversality as a philosophical concept in modernity is an account that links transversality with a subject-centered philosophy of consciousness. The plot of this story has been prominently illustrated in Sartre's appropriation of transversality in his effort to solve the problem of the unity of consciousness."

[4] The metaphor of transversality in philosophy has its roots in Jean-Paul Sartre's existential theory of consciousness. Van Huyssteen (2006:20) cites Sartre: "The I is the producer of inwardness...Consciousness is defined by intentionality. By intentionality consciousness transcends itself. It unifies by escaping from itself...It is consciousness which unifies itself, concretely, by a play of *transversal* intentionalities which are concrete and real retentions of past consciousness." Sartre, according to Van Huyssteen, fuses transversal rationality with consciousness and self-awareness. This is unified by an experience of self-presence in which diverse past experiences are transversally integrated (2006:21).

[5] Richard R. Osmer (2008:172), a Princeton colleague of Van Huyssteen, distinguishes between *correlational*, *transformational* and *transversal* models of cross-disciplinary dialogue and comments: "Unlike the transformational approach, the transversal model presupposes a more fluid and dynamic understanding of the relationship between disciplines. Disciplines are not pictured as distinct language games but as networks that transverse one another and share the common resources of rationality. While this model has much in common with the correlation approach, it gives greater attention to the pluralism found in virtually every field today. In light of this pluralism, cross-disciplinary dialogue must become more concrete than is typically the case in correlation models."

together (Van Huyssteen 1999:136). Van Huyssteen (1999:136) states that transversal rationality: "... emerges as a place in time and space where our multiple beliefs and practices, our habits of thought and attitudes, our prejudices and assessments, converge".

This leads Van Huyssteen 1999:136) to argue that transversal rationality makes it possible to acknowledge contextuality more appropriately and move from one discourse to another.[6] The transversality of rationality leads the way to a new understanding of interdisciplinary conversation.

Van Huyssteen (1999:136) insists that the notion of transversality is of the utmost importance to the postfoundationalist, because it reveals:

> ... the shared resources of human rationality precisely in our very pluralist, diverse assemblages of beliefs or practices, and then to locate the claims of reason in the overlaps of rationality between groups, discourse or reasoning strategies.

Van Huyssteen (1999:139) writes:

> Transversal/postfoundationalist rationality thus enables us to shuttle in the space between modernity and postmodernity: the space of interpreted experience and communicative praxis which enables praxial critique, articulation, and disclosure ... A postfoundationalist notion of rationality thus creates a safe space where our different discourses and actions are seen at times to link up with one another, and at times to contrast or conflict with one another. It is precisely in the hard struggle for interpersonal and interdisciplinary communication that the many faces of human rationality are revealed.[7]

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[6] Schrag (1992:149) writes: "… certain tendencies in the employment of the vocabulary of transversality need to be resisted. Chief among these tendencies is the rationalistic impulse to sublate the several usages in the various disciplines into a higher concept that totalizes the different faculties of knowledge into a seamless unity viewed from above, as well as the positivistic impulse to determine a usage that is somehow paradigmatic and normative for all the rest, inviting a hegemonic *unity of the sciences* seen from below."

[7] Van Huyssteen's phrasing here is important. He suggests that Schrag's transversal rationality is also a postfoundationalist approach to rationality. This means, according to Van Huyssteen, that Schrag's approach should also be distinguished from postmodern approaches. However, Van Huyssteen's postfoundationalist notion of rationality, whilst making use of Schrag's transversal rationality, is distinct from Schrag's model of rationality. Van Huyssteen still calls his approach a postfoundationalist approach. Van Huyssteen (1999:139) writes: "Schrag's work on the resources of rationality…manages to avoid the extremes of the modernist nostalgia for one, unified form of knowledge, as well as the relativism of extreme forms of postmodernism. As such it greatly enhances the notion of postfoundationalist rationality that I am developing here."

Van Huyssteen comments that these transversal spaces are safe for interdisciplinary conversation (Van Huyssteen 1999:139). They are spaces where one can stand in a critical relationship with one's own tradition without fear of rejection. They are spaces outside of any participating reasoning tradition and therefore safe for all involved.

Furthermore, Van Huyssteen (1999:140) points to Brown's argument that a transversal understanding of rationality provides the possibility for contextually developed rationality to be of significance for other contexts as well. Brown explains that science, for example, was developed in the Western world, but its significance justifiably transcends Western culture (Van Huyssteen 1999:140). In other words, the focus and scope of scientific reflection crosses cultural lines. Because of the type of knowledge it seeks, scientific reflection has significance for all cultures living in this world.

Furthermore, in *Alone in the world?* (2006) Van Huyssteen argues that transversality makes it possible to operate in a particular context as well as to transcend that context in striving toward intersubjective discussion without the need for a superimposed metanarrative. Therefore, transversal reasoning facilitates the difference in interpretation of different disciplines (Van Huyssteen 2006:19). The reason for this is that while the problems are interpreted differently, these interpretations are equally legitimate, provided that the methodologies used by these different disciplines are open for discussion. Van Huyssteen (2006:19) writes:

> ... interdisciplinary dialogue can...be seen as multidimensional and thus convergent path moving toward an imagined vanishing point: a transversal space where different voices are not in contradiction, nor in danger of assimilating one another, but are dynamically interactive with one another.

Moreover, Van Huyssteen (2006:19) argues that this interpretation of rationality also roots out the tendency to unify all the faculties of knowledge. Scientific knowledge is no longer viewed as superior to other forms of knowledge. Van Huyssteen (2006:19) refers to Wolfgang Welsch, who argues for transversal reasoning as a move away from static notion of rationality: "... the axis of reason is rotated from verticality to horizontality, and human reason itself now becomes a dynamic faculty of performative transitions that interconnects the various forms of human rationality".

Postfoundationalist facilitation of interdisciplinarity

This section intends to clarify the understanding of the aspects involved in a postfoundationalist facilitation of interdisciplinary reflection. While this approach could be used in any interdisciplinary conversation, this section intends to assist the theologian specifically. In order to clarify each aspect, Van Huyssteen's interdisciplinary reflection in his Gifford Lectures will be discussed and used as an example.

It is important to note that, in his Gifford Lectures, Van Huyssteen pieces together three arguments. One of the arguments concerns the abstract nature of his postfoundationalist approach. By drawing on evolutionary epistemology he grounds his postfoundationalist approach by showing its rootedness in the biological evolution of the human mind and rationality.

The second argument is focused on the re-interpretation of the *imago Dei* metaphor in Christian theology with the evolutionary development of *Homo sapiens* in mind.

The last argument, beautifully woven into the main argument, is focused on the necessity for interdisciplinary conversation. Here, once again, Van Huyssteen argues for his postfoundationalist approach drawing not only on the philosophy of science, but on disciplines such as evolutionary epistemology and paleoanthropology.

In other words, while moulding a renewed interpretation of the *imago Dei*, Van Huyssteen illuminates the *shared resources of human rationality* and grounds this notion of human rationality in the evolution of *Homo sapiens*. Thus, throughout his work on the *imago Dei*, Van Huyssteen substantiates what he has been arguing for human rationality and its workings. Therefore, his Gifford Lectures do not only argue for a more appropriate understanding of the *imago Dei* metaphor, but serve as a validation of his conviction that theology and the sciences are significant in reflecting on what it means to be human.

This section does not focus on these arguments, but rather on Van Huyssteen's postfoundationalist facilitation of this interdisciplinary conversation and reflection. It does so by identifying and distilling four aspects important to the postfoundationalist in facilitating interdisciplinary reflection.

Although postfoundationalist facilitation does not follow fixed rules in interdisciplinary reflection, it is possible to distinguish between four aspects. These aspects are not mutually exclusive and should not be understood as a step-by-step methodology. Still, the conversation itself does materialise in four aspects. These are:

- identification of transversal points
- identification of reflective partners
- discussion of the arguments in search of the best available account of the transversal issue
- taking back *what was learned* to the respective research traditions

These four aspects are equal in importance and *responsible judgment* is needed throughout the process.

Identification of transversal points

According to Van Huyssteen (2006:40), trying to devise a way of integrating whole disciplines such as theology and science is a futile exercise. Therefore he proposes that transversal points or *shared variables* be the focus of interdisciplinary reflection.

Furthermore, it is imperative that specific theologians, practising a specific kind of theology in a specific theological tradition enter into interdisciplinary conversation with specific scientists, working in specified sciences on clearly defined, shared issues (Van Huyssteen 2006:4-5). This should be understood as a move from *the contextual* to *the transversal* (Van Huyssteen 2006:40). This means that interdisciplinary reflection starts in one's own discipline. The theologian cannot attempt interdisciplinary reflection before a specific transversal issue has been identified. Thus, the first aspect is to identify a shared issue[8] that provokes multidimensional/ multidisciplinary explanation.[9]

Here Van Huyssteen identifies human uniqueness as a transversal point in theology and science. In theological reflection the metaphor of the *imago Dei* intends to illuminate the special place bestowed on human beings in Creation. As such, it is a way of understanding humans in this world and the role they have to fulfil. However, this metaphor has been interpreted in a variety of ways for millennia and seems to be subject to contextual factors and cultural evolution (Van Huyssteen 2006:159).

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[8] Van Huyssteen makes a very interesting suggestion here: "Because of the transversal rationality of interdisciplinary discourse, not only shared problems and common concerns, but also criteria from other reasoning strategies can indeed be appropriated between disciplines as diverse as theology and the sciences" (2006b:75).

[9] Van Huyssteen notes that Richard Osmer distinguishes between four levels of cross-disciplinary thinking: interdisciplinary, intradisciplinary, metadisciplinary and multi-disciplinary. It is Osmer's multidisciplinary reflection that Van Huyssteen refers to as transversal points. This kind of reflection is: "… based on the assumption that various disciplines are needed to comprehend complex phenomena" (Van Huyssteen 2006:4; footnote 3).

In the sciences, especially evolutionary biology, the question of *human uniqueness* also illuminates a way of understanding humans in this world. Interestingly, while keeping to an evolutionary explanation after Charles Darwin, this issue also seems to be subject to contextual factors and cultural evolution (Van Huyssteen 2006:106).

Apart from offering different explanations about the origin of human beings*, human uniqueness* in science and the *imago Dei* in theology do not necessarily influence each other directly. However, the implications of these two issues do seem to be far-reaching and conducive to conflict between theological and scientific reflection. Still, it would be imprudent to juxtapose these two issues, creating a *choice* for either religion or science, because, on closer inspection, both these issues change in time and context. Yet they do have huge implications for understanding humans within this world.

Therefore, *Human uniqueness* in science and the *imago Dei* in theology are a shared point of interest and, therefore, a transversal point requiring interdisciplinary reflection.

While he intends to reflect on human uniqueness in science and theology, the issue of rationality also plays a part. He does not only want to know how this issue is understood in either reasoning strategy, but also asks about the validity of each reasoning strategy's understanding of human uniqueness. Thus, the rationality of each discipline pertaining to this specific issue is also a point of discussion. Van Huyssteen therefore takes up two questions:

1. How is human uniqueness understood in theology and the sciences?
2. What is the validity of such interpretations within each reflective domain?

This implies that the rationality of each interpretation, pertaining to human uniqueness in the respective disciplines, needs to be evaluated as well. Consequently, Van Huyssteen (2006:43) asks if interpretations of human uniqueness in theology are rational and, if so, to what extent they contribute to the search for meaning in this world.

Furthermore, if the metaphor of the *imago Dei* is rational, how do scientific interpretations of human uniqueness enrich this metaphor in contemporary culture? (Van Huyssteen 2006:68). With this clearly defined transversal issue, Van Huyssteen turns to the sciences in search of rational agents that could help reflect on it.

Identification of reflective partners

This phase is arguably the most difficult one, seeing that whoever engages in conversation will ultimately help to shape the outcome of the interdisciplinary reflection. Not only does one need to identify the necessary disciplines regarding the transversal issue, but one has to identify rational agents who reflect appropriately in these research strategies. The reason for identifying rational agents in a research strategy is to ensure that one engages with the discipline appropriately. The rational agent will help to illuminate the nuances in the discipline as well as mapping the focus and boundaries of the respective tradition. Important here is that one should respect the boundaries of one's own tradition and not overstep the boundaries of other domains of reflection. Therefore, identifying appropriate rational agents in the disciplines one intends to engage with is of utmost importance.

In identifying these rational agents in conversation, there are a few questions that guide the search. The first question that should be asked is:

● Where does the rational agent's reflection intersect with the issue?

In other words: What is his/her transversal position? Van Huyssteen, for example, identifies evolutionary epistemologists who reflect on the cognitive evolution of *Homo sapiens* and paleoanthropologists who reflect on the evolutionary origin and development of *Homo sapiens*. In theology the metaphor of the *imago Dei* tries to place humanity, as created in the image of God, in a particular relationship with God and creation.

● In what way does the conversational partner approach this transversal issue?

In the case of human uniqueness the evolutionary epistemologists and paleoanthropologists approach this issue from an evolutionary stance. However, evolutionary epistemologists do touch on philosophy.

Theologians, on the other hand, tend to draw from philosophy, Scripture and religious tradition – thus, approaching this issue from a religious stance. It is important to note that all these conversational partners are embedded in a context, meaning that their arguments and explanations are shaped by extra-disciplinary factors as well. The third important question to ask is:

● To what extent do the arguments of the rational agents keep true to the cores and boundaries of their respective strategies?

Van Huyssteen (2006:106-107) explains that:

> … Charles Darwin's conception of human identity and human nature with its very specific focus on the evolution of human cognition still functions as the canonical core of the ongoing discourse on human evolution.

Van Huyssteen (2006:107) then argues that contemporary evolutionary epistemology reflects on the epistemic implications of this Darwinian view on human cognition. Furthermore, he argues that the insights of paleoanthropologists become important, offering a context/milieu in which the embodied human mind transcends its biological roots. Regarding the use of the *imago Dei* by theologians, Van Huyssteen evaluates a wide spectrum of interpretations and throughout this process he identifies prominent and crucial themes that shape the metaphor of the *imago Dei* in theological reflection. He is thus left with a clearer understanding of what the metaphor of the *imago Dei* intends to refer to. In other words:

1.   What is the intention of the metaphor?
2.   Would this to which it refers, be incoherent with how evolutionary epistemologists and paleoanthropologists define human uniqueness?

This makes it possible to enter interdisciplinary reflection and discuss the best available account of human uniqueness in evolutionary epistemology, paleoanthropology and theology.

Discussion of the arguments in search of the best available account of the transversal issue

What occurs in this phase, quite simply, is a discussion of the reasons behind the beliefs and convictions argued for by the reflective partners. This makes it possible to evaluate the level of consensus and dissensus in the transversal space and illuminate specific points where the arguments depart from one another. Interestingly, points of contact between different arguments also rise to the surface.

Now, the reflection materialises not as a battle between arguments, but rather as a discussion of various points of agreement and disagreement on particular aspects of the arguments offered. The reflection does not need to end in total consensus, nor is this the intention of such a reflection. The intention of such a reflection is to allow the reflective partners to discuss particular aspects of each another's arguments.

Van Huyssteen (2006:212) comes to conclude that:

> Transversal lines of argument between evolutionary epistemo-
> logy and paleoanthropology converge and intersect on the fact
> that the very first modern humans were distinct in the evolution
> of their symbolic, cognitive fluid minds that directly led to
> symbolic, creative behaviour.

Van Huyssteen (2006:212) explains that this implies human uniqueness: "…
emerged as a highly contextualised and physically embodied notion". He
adds: "Paleoanthropologists, like evolutionary epistemologists, have linked
this emergence of consciousness and symbolic behaviour directly to the
emergence of religious awareness" (Van Huyssteen (2006:212). Furthermore,
Van Huyssteen (2006:214-215) states that Tattersall's work shows that: "…
the potential arose in the mind to undertake science, create art, and discover
the need for religious belief, even though there were no specific selective
pressures for such abstract abilities at any point during the past."

Van Huyssteen (2006:214) also refers to Steven Mithen argument
that: "Science, art, and religion are all deeply embedded in the cognitive
fluidity of the embodied human mind/brain."

Thus, Van Huyssteen (2006:213) concludes that human behaviour
cannot be understood apart from the religious dimension, because:

> … since the beginning of the emergence of *Homo sapiens*, the
> evolution of those characteristics that made humans unique
> from even their closest sister species, i.e., characteristics like
> consciousness, language, symbolic minds and symbolic beha-
> viour, is directly related to religious awareness and religious
> behaviour.[10]

Van Huyssteen (2006:213) makes it clear that this should not be understood
as an argument for the truth of any religion, nor for the existence of God.[11]
What the theologian should take from this is that:

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[10] Mithen (1996:177:178) comments: "…we can be confident that religious ideologies as
complex as those of modern hunter-gatherers came into existence at the time of the
Middle/Upper Palaeolithic transition and have remained with us ever since. This appears to
be another consequence of the cognitive fluidity that arose in the human mind, which
resulted in art, new technology, and a transformation in the exploitation of the natural world
and the means of social interaction."

[11] Interestingly, this statement is similar to a much earlier statement by Pannenberg (1988:313-
314): "…it is only in the form of religion and of *one* religion among other that the divine
reality can be perceived by human beings. Religion, then, is the primary human form of
perceiving the reality of God. As such, the issue of religion also belongs to anthropology.
This is in itself a witness to the reality of God, the creator of everything; to argue that the
human being is by nature the religious animal is certainly not to demonstrate the reality of
God, but is indispensable in any affirmation of that reality…The truth of a particular
religious belief is, of course, another matter."

> … the most responsible Christian theological perspective on human uniqueness requires a distinct move away from esoteric and overly abstract notions of human uniqueness and a return to embodied notions of humanness where our embodied imagination, sexuality, and moral awareness are directly linked to the fully embodied self-transcendence of believers who are in a relationship with God (Van Huyssteen 2006:267).

However, the methodology of religion and theology remains internal and cannot be appropriately explained by science (Van Huyssteen 2006:269). Still, the internal methodology of religion should be open for discussion by theologians, philosophers of science and scientists. This, as shown above, should be done transversally and not haphazardly by agents lacking the necessary expertise regarding the issue.

This leads to the fourth aspect within a postfoundational facilitation of interdisciplinary reflection. Van Huyssteen (2006:270) states:

> … an interdisciplinary theologian should ideally make two moves: take the interdisciplinary results from specific multidisciplinary conversation back into his or her intradisciplinary context to enrich current research in theology; and at the same time keep the interdisciplinary conversation going with scientists who are interested in the broader religious, or specific theological, perspectives that theology might bring to the table.

Taking back what was learned to the respective research traditions

This is a move from the *transversal* back to the *contextual*. Van Huyssteen (2006a:663) explains:

> … interdisciplinary dialogue always points us back again to the broader boundaries of our own disciplines where disciplinary lines of argument necessarily diverge again and move back to *intra*disciplinary contexts, carrying with them the rich interdisciplinary results of the multidisciplinary conversation.

Van Huyssteen (2006:276) turns to fellow theologians reflecting on human uniqueness. He engages theologians such as Edward Farley, Gordon Kaufman, Christian Smith and Abraham Heschel, who reflect on the metaphor of the *imago Dei* by incorporating notions of embodiment. He also engages philosophers such as Alasdair MacIntyre. Moreover, Van Huyssteen identifies the theological anthropologies of Robert Jenson, Philip Hefner, Phyllis

Bird and Michael Welker[12] as including a strong emphasis on embodied personhood. According to Van Huyssteen, their work could serve as models of appropriate theological anthropologies because they include a strong notion of embodiment.[13] Thus, to be human, Van Huyssteen has learned means to have an *embodied consciousness*[14] and from this perspective he engages the above theologians in intradisciplinary conversation (Van Huyssteen 2006:276).

Related to this, is the issue concerning the momentary or limited nature of the interdisciplinary conversation. Van Huyssteen makes it abundantly clear that the interdisciplinary conversation is meant to be just that. There is no intention of constructing an *interdisciplinary discipline* or a *multidisciplinary discipline*. This would not only lead to a fragmented discipline, but to a discipline without an identity, tradition or context. Such a discipline would not do justice to the *reflective domains involved* and be incapable of absorbing the multiple foci intended.

Thus, the aim of Van Huyssteen's postfoundationalist facilitation is to create space for interdisciplinary conversation as needed, but not to create a new multidisciplinary discipline as such. This is really important to Van Huyssteen and the reason why he draws so heavily on the notion of transversality. There is no intention of constructing an abstract, philosophical discipline which is meaningful to a privileged few. Research strategies and traditions should be upheld. Important though, a postfoundationalist notion of rationality makes it possible to uphold these research traditions in a non-hierarchical relationship, as well as empowering these research traditions to converse on shared variables.

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[12] In his most recent publication *The Theology and Science Dialogue: What Can Theology Contribute* (2012), Welker argues that the anthropology of Paul in the New Testament offers the possibility for multidimensional reflection. Welker (2012:40) writes: "I should like to show that Paul's anthropology, influential in the history of theology and philosophical thought to the highest degree, can offer a clear, if complex microanthropological approach. This approach is compatible with macroanthropological constellations and is open to dialogues with the sciences in that it centers not only on the natural and bodily dimensions of the human being, but also clearly favors *rational approaches* even to the deepest dimensions of human spirituality."

[13] Van Huyssteen (2005:122) comments: "In Phyllis Bird and Michael Welker's writings there is a very conscious move away from theological abstraction towards seeing the imago Dei in a highly contextualized, embodied sense that respects the sexual differentiation between men and women, even as they exercise responsible care and multiply and spread over the earth".

[14] In a later article, "When We Were Persons? Why Hominid Evolution Holds the Key to Embodied Personhood" (2010), reflecting on Charles Darwin's work and person, Van Huyssteen (2010:329-330) writes: "It is in the *embodied* self, then, that we will find the key to relational communication, and thus for successfully overcoming the challenge towards a nuanced, holistic notion of self, and for rediscovering that ever since prehistoric times religious behavior also has been a definitive part of human behavior".

Conclusion

Van Huyssteen's postfoundationalist facilitation of interdisciplinary conversation and reflection creates transversal spaces in which specific theologians, practising a specific kind of theology in a specific tradition, can enter into conversation with specific scientists, in specified disciplines and contexts, on specific aspects of identified transversal points. Reflective domains are respected and the assimilation of these domains is not tolerated. Postfoundationalist facilitation, therefore, intends to be conducive to constructive conversation between disciplines, for example, theology and paleoanthropology, by employing epistemic values such as transversality and responsible judgement – the shared resources of human rationality. A postfoundationalist notion of rationality and interdisciplinary conversation truly takes on: "… the responsibility to pursue clarity, intelligibility and optimal understanding as ways to cope with ourselves and our world (Van Huyssteen 1999:2).

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