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A Multidimensional Approach to Children's Drawings of God in French-Speaking Switzerland: A Developmental and Socio-Cultural Account

Grégory Dessart

Grégory Dessart, 2019, A Multidimensional Approach to Children's Drawings of God in French-Speaking Switzerland: A Developmental and Socio-Cultural Account

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FACULTÉ DE THÉOLOGIE ET DE SCIENCES DES RELIGIONS (FTSR)

INSTITUT DE SCIENCES SOCIALES DES RELIGIONS (ISSR)

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THÈSE DE DOCTORAT

présentée à la

Faculté de théologie et de sciences des religions
de l'Université de Lausanne

pour l'obtention du grade de
Docteur ès sciences des religions

par

Grégory DESSART

Directeur de thèse

Prof. Pierre-Yves Brandt

Jury

Prof. Fotini Bonoti, University of Thessaly (Grèce)

Prof. Fabrice Clément, Université de Neuchâtel (Suisse)

Prof. Kevin L. Ladd, Indiana University South Bend (USA)

LAUSANNE

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Intitulée :

**“ A Multidimensional Approach to Children’s Drawings of
God in French-Speaking Switzerland: A Developmental and
Socio-Cultural Account”**

sans se prononcer sur les opinions du candidat.

La Faculté de théologie et de sciences des religions, conformément à ses usages, ne décerne aucune mention.

Lausanne, le 25 janvier 2019

David Hamidovic
Doyen de la Faculté de théologie et de sciences des religions

Acknowledgments

This thesis would not have been possible without the support some people have provided me with for parts or throughout the PhD adventure.

Firstly, I would like to thank researchers who will have left their footprint on my past and future work. Thanks to Prof. Pierre-Yves Brandt for trusting me on conducting this PhD research. He has supervised my PhD thesis and could teach me some freedom of thought by borrowing from a variety of fields. I could also learn more managerial, logistics- and funding-related aspects of research. He has supported me in carrying out studies, even when those had to be conducted across the North Sea. In the main, his footprint on my own work will deal with emphasizing the often dreaded “So what?!” question concerning one’s scientific findings as well as constantly relating pieces to the bigger picture. I am thus very thankful. I would also like to thank him and other researchers for having me on board of their larger project on children’s drawings of God. These are: Dr. Zhargalma Dandarova Robert, Prof. Dominique Vinck and Prof. Frédéric Darbellay.

Thanks to my temporary mentor, Dr. Richard Jolley, who has collaborated with me on the section of this thesis addressing emotional expression. He has provided support all along, and his most valuable contribution to my build-up as a researcher has been to foster that critical self-examination. He, along with Dr. Claire Barlow and Dr. Sarah Rose, at Staffordshire University, has taken me a few steps further into research on children’s drawings.

There is a very special researcher out there, who will forever inspire me and who virtually (like a little voice in my head) acts as a reviewer of my own work when I need to run a critical evaluation. Prof. Frank Larøi supervised my MA dissertation, which had an anchor in cognitive psychopathology. From the same family of researchers, I would also like to thank Dr. Julien Laloyaux, with whom I could share and explore ideas in connection with future research merging cognitive psychopathology and religious studies.

Dr. Zhargalma Dandarova Robert has consistently played Devil’s advocate, for the better. She bring that eye-opening perspective rooted in qualitative research and inspired by the broad body of studies from the history and scientific study of religions.

Dr. Christelle Cocco has brought yet another perspective into the conversation, particularly when it comes to handling digital tools and considering problems in the social and human sciences from a more mathematically rooted viewpoint.

Secondly, I would like to thank other researchers whose presence has been very important along the way. Dr. Simon Mastrangelo's presence has been invaluable as we have crossed those lands of research around the same period of time. Similar thanks go to Liudmila Gamaionova, Alexandre Grandjean, and Zahra Astaneh, with whom I could have rich conversations about my object of study. I would like to thank all researchers from the Institute for Social Sciences of Religions for their inspiring work in this field and for helping branch out to more qualitative methods of investigation. From other institutes at the Faculty of Theology and Sciences of Religions, Dr. Yann Dahhaoui and Apolline Thromas have shown extraordinary human qualities and amazing camaraderie.

More generally, I would like to thank all researchers I have met at various international conferences for the inspiring talks and conversations, especially at conferences of the International Association for the Psychology of Religion and the Polish Society for the Psychology of Religion and Spirituality. From attending a conference of the latter in 2016, there is certainly Krzysztof Krzysztof, with whom fruitful correspondence has taken place. From the very specific area of children's drawings of God, I would like to thank Kevin L. Ladd and Peter V. Pitts for being supportive and helping me access important sources.

Thirdly, I would like to thank people who have provided precious technical support. A million thanks to Monique Thiévent, from the Institute for Social Sciences of Religions, for her availability, good spirit and informed help with administrative tasks. Thank you Manuel Girardin for always findings easy solutions to apparent puzzles, and providing technical support to experiments. Thanks to Prof. François Bavaud for his pieces of advice on statistics.

Fourthly, I would like to thank my close friends and relatives, and particularly Stephanie Stefan, who has put up with this mad journey that the work up to a PhD thesis represents. She has always been available to bounce ideas off each other and could help me challenge my own thoughts on certain issues. Coming from a working-class family in Belgium, my parents have taught me to be industrious towards all tasks that I attend to in order to reach my goals, no matter how high these are. Big thanks to them!

Eventually, how not to thank all children participants who have taken part in this research project. Besides making my studies possible, the thoughts they have put in their drawings will forever leave me contemplative. Their parents and the educational staff (especially Sara Badertscher, EERF, and Véronique Rakic, Cath-VD) have been an amazing lever to conducting my research, and for this I thank them as well. Collecting drawings would not have been possible without the support from colleagues: Carine Karlen, Marie-Rachel Sudan, Dominique André and Dr. Christelle Cocco. Past the collection of raw data, it has been thanks to the various raters, who have worked rigorously, that my

visual data (i.e., drawings) have started to play a distinguishable melody. In that regard, I would like to thank particularly: Karine Laubscher, Margaret Bailey and Rita Banks.

This whole project would not have been possible without the financial support from the Swiss National Science Foundation (SNSF). This project was supported by the grant CR1111_156383. Similarly, I thank the University of Lausanne for employing me. I also thank various organizations, platforms and institutes who are doing outstanding work and who have been supporting parts of my project: ISSR (Institut de sciences sociales des religions), FTSR (Faculté de théologie et de sciences des religions), LaDHUL (Laboratoire de cultures et humanités digitales), DIHSR (Département interfacultaire d'histoire et de sciences des religions), PlaGe (Plateforme en études genre), ASPsyRel (Association suisse de psychologie de la religion) and finally the School of Psychology, Sport and Exercise as well as the Department of Psychology (Stafforshire University, UK).

Eventually, I would like to thank the panel of experts, Prof. Fotini Bonoti, Prof. Fabrice Clément and Prof. Kevin L. Ladd for accepting to review my work.

Summary

The current thesis has investigated children's representations of God in French-speaking Switzerland by relying mainly on visual data (i.e., drawings). A sample of N = 532 drawings of God were collected among 5- to 17-year-olds, girls and boys, who were met either during religious class or during regular schooling. Three lines of inquiry have addressed the following respective issues: de-anthropomorphization, gender-typing and emotional expression. The first two lines of inquiry were motivated by the further examination of main topics tackled in past research. The last one was meant to confront an issue that was never specifically addressed before, although prevalent across such data. For each line of inquiry, a quantitative study was completed by a more specific qualitative exploration.

Whether children would depict God as anthropomorphic or non-anthropomorphic depended on age and schooling. Being older and receiving religious education were associated with non-anthropomorphic representations. Whether a human God figure would endorse non-humanness (be de-anthropomorphized) only depended on age: the older the more likely de-anthropomorphized. Regarding the way children attribute gender to God (gender-typing), depended on age and participants' own gender. The older the more likely God would be depicted as masculine (frequency) and the more strongly so (intensity). Girls were less inclined to draw God as masculine than boys (frequency and intensity). Overall, God was predominantly masculine, although also mixed (masculine but also feminine) up to some degree. Emotional expression was assessed on intensity (relatively intense) and valence (from positive to negative). Mainly gender and schooling contributed to those dimensions: being a girl and receiving religious schooling were associated with more intensity and positive valence. Age influenced only valence: the older the more positive.

Overall, the idea of 'mature' God representations was empirically undermined, based on the prevailing ambivalence (understood as the co-existing opposites) across dimensions. There was a general developmental dependency for most dimensions examined, as well as differential (e.g., based on gender) variations. The assessment of distinct dimensions along all three lines of inquiry pointed to contrastive progressions. While humanness-non-humanness (de-anthropomorphization) evolved towards more ambivalence, the opposite was observed for gender-typing and emotional expression.

The current thesis indicates the particularly intricate nature of God representations through the complexity of specific dimensions they consist of and their relationships with participants' socio-demographics. This may provide a better insight into how individuals would then conceive of the divine later in adulthood, by grasping their foundations and evolution in childhood.

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GENERAL INTRODUCTION

What do you imagine God to be like? Does it look like anything? Maybe like a human being? Not really? Or not completely? Is it a woman or a man? Maybe neither? Or a bit of both? Is it emotionally cold? Is it warm? Is it rather positive or negative? So many questions...!

Conceiving of God and attempting to represent it can be quite problematic. Maybe today more than ever before. And for it to be problematic is in itself quite problematic. Gods and religions are very important to the vast majority of the worldwide population, and individual perceptions have psychological correlates, potentially helpful or harmful, and may bring substantial meaning to one's life. In the first place, this representation issue is complicated for four main reasons.

Firstly, it is a notion that we do not have a direct access to, apart from reports of religious experiences, and can only draw assumptions about. Similarly, we can only proceed from mediation, that is, even if we have a clear idea, communicating it still requires some specific language. That language may be visual. It may be graphic, such as in drawings.

Secondly, as any notion that is constructed and apprehended by human beings, it is dependent on the socio-cultural background of the individuals that are considered. It seems evident when looking around that where an individual grew up and has lived shapes how they will apprehend various notions, including the notion of God. The importance of the context also shows historically, and does not only depend on geographical circumstances.

Thirdly, at different points through history, various religious traditions have been critical and have even forbidden all representations of the divine. The Protestant reform has attempted to discard all objects that may foster idolatry, be it through statues, paintings or crucifixes. This can go as far as mentioning the name of God: in Judaism, the utilization of YAWH does not even directly express God. Islam does not only forbid representations of God, but deems vain to even attempt to do so while it is in fact impossible. This goes beyond Abrahamic religions. Iconic but also *aniconic* representations can be found in Hinduism. Therefore, representing the divine is not that straightforward.

Fourthly, and finally, besides relative openness to depicting God, depending on the frame of reference representations abound in some contexts and it might be difficult for an individual to choose from many if asked to represent God once. One may find inspiration from what they have been exposed to, even combine or attempt to create something new or more idiosyncratic.

One may focus on the wide cultural background or the historicity of representations of the divine, but this thesis is concerned with individual representations, seeking interest in their

psychological underpinnings. In that regard, it is fundamental to better understand how they vary across time, that is, across individual development. Identifying the influence of variables such as age, gender and religiosity may help predict such course of development up to adulthood. In order to gain such knowledge, it is worthwhile doing research with children of various ages.

God is often portrayed as anthropomorphic, and this is not trivial for that *sameness* with the human being may manifest common conceptual foundations to both concepts. However, there are often elements, such as a nimbus, a pair of wings or clouds, associated with God that also convey a sense of *otherness* with the human being. Conceptually drawing away from humanness by altering the human typicality of a figure may be expressed as *de-anthropomorphization*. Gauging the utilization of such a type of strategy may somehow reflect the ontological properties forming the divine. Some may argue that anthropomorphic representations of the divine are ‘immature’. However, exploring humanness in detail might reveal slight ontological nuances from a typical human being. On top of that, the main psychological perspective used in the current work will defend the idea that there is no such thing as ‘mature’ God representations, but only a broad variety of intricate dimensions used to characterize the divine.

But how could an anthropomorphic representation of any kind not involve gender? God may be conceived of as *suprasexual* (Thatcher, 2011), but any human-like depiction will express some form of femininity or/and masculinity, to some degree. If it does not, then it still implies a neutral form of gender. Gender issues are particularly delicate nowadays, and it should be all the more relevant to explore such matters when they concern the divine. Gender-typing God may be particularly liable to one’s socio-cognitive development, including one’s own gender, as well as normative pressures coming from one’s religious and cultural background.

God may also be ideated as a nurturant mother, a friendly guide, a wrathful judge and so on. All such characterizations do not seem devoid of emotions. God may be associated with relatively strong and positive emotionality, as strongly negative, or somewhere in-between. In that sense, it is rarely a cold notion bearing low emotionality, even though it might.

This work investigates children’s drawings of God, from 5 to 17 years of age, in the specific context of French-speaking Switzerland. It attempts to overcome some of the limitations found in past research in this area as well as develop new areas. Some limitations have concerned an intense use of mutually exclusive categories, which may sometimes overshadow finer nuances exhibited in such drawings, alongside with a lack of cross-cultural comparisons. It endeavors to explore further into the psychological underpinnings associated with a few central issues and to underline the graphic means children may mobilize in relation to them. Generally, the current thesis will show a particular interest

for how multidimensional God representations can be, alongside with the co-occurrence of qualities that would usually be considered to be opposite to each other - for example: anthropomorphic vs non-anthropomorphic, feminine vs masculine, emotionality positive vs negative.

Drawing on Past Issues and Exploring Further

Relevant pieces of past scientific contributions will be presented. These involve the general scientific literature as well as a larger research project from which the current work has ensued. After that proper contextualization, data collection and lines of inquiry constructed within this thesis will be outlined.

Main Issues Found in Past Scientific Literature

Religion holds significance for the vast majority of the worldwide population (Maoz & Henderson, 2013) and it may be crucial to understand related individual differences in the face of challenges embracing diversity in highly multicultural societies (Aldridge, 2007). God concepts may take part in individual coping strategies (Koenig, 2013) and represent a major source of meaning-making and worldview (Park, 2005). There is evidence of interrelations between those concepts and emotional outcomes (Corwin, 2012; Dezutter et al., 2010), psychological well-being (Rizzuto, 1979; Schaap-Jonker, Eurelings-Bontekoe, Verhagen, & Zock, 2002) and self-esteem (Benson & Spilka, 1973).

Past research on individual differences in God representations has shown efforts to provide concept maps of such representations. Different dimensions have been suggested, such as nurturing-judging, controlling-saving and concrete-abstract dimensions (Krejci, 1998), or punitive-nurturant and mystical-anthropomorphic (Kunkel, Cook, Meshel, Daughtry, & Hauenstein, 1999). Such accounts do provide a wide outlook on possible qualities associated with God representations and how they aggregate together - e.g., man, woman, brother, teacher, ruler corresponding to anthropomorphic God images in Kunkel et al.'s. However, most qualities being identified have often referred to social roles: nurturant (Krejci, 1998; Roberts, 1989), supportive (Nelsen, Cheek, & Au, 1985), powerful/judging (Krejci, 1998; Nelsen et al., 1985) or punitive/vindictive (Gorsuch, 1968; Hammersla, Andrews-Qualls, & Frease, 1986; Kunkel et al., 1999).

However, not only is it important to seek for inter-individual differences, like this area of research has done, but it is important to come to grips with how spiritual and religious life develops on a lifespan (Fowler, 1981). The basis to such type of inquiry begins with children as the source to religiousness in adulthood, and because they are particularly prone to radical changes on those aspects (Goldman, 1964; Nye & Carlson, 1984). Moreover, spirituality and religiousness appear to

have great significance for the young across the different spheres of their lives (Benson & Roehlkepartain, 2008). Therefore, a major benefit should be found in the identification of developmental patterns in the formation of God representations.

One possible method that often leads to rich responses on the notion of God may be found in drawings. Generally, visual data are particularly appropriate for the study of religious phenomena for they reflect influences pertaining to historical, social, cultural and geographical backgrounds (Pezzoli-Olgiati & Rowland, 2011). With respect to doing research with children, drawings are particularly relevant. They reflect the multidimensionality of children's religious worlds (Boyatzis, 2005; Gibson, 2008), and they are likely to make the participants feel comfortable with a task they are familiar with and often like doing (e.g., Brechet, 2015).

This leads to consider past research on children's drawings of God. Previous studies have provided useful information on several levels. Firstly, they have revealed major changes across development, especially in terms of a shift from anthropomorphic to non-anthropomorphic ones (Brandt, Kagata Spitteler, & Gillièreon Paléologue, 2009; Hanisch, 1996), more 'symbolic' / 'abstract' ones (Ladd et al., 1998; Pitts, 1976) or non-figurative representations (Dandarova, 2013). Secondly, religiosity appears to play an important role, both with regard to religious schooling (Brandt et al., 2009; Hanisch, 1996) and across religious denominations (Ladd et al., 1998; Pitts, 1976). Thirdly, gender of the child seems to have a strong influence on such representations (Brandt et al., 2009; Heller, 1986; Kay & Ray, 2004). Some studies have proposed direct measures of specific dimensions, such as 'symbolism' (Ladd et al., 1998), religious imagery - "Q-score" - (Pitts, 1976) or anthropomorphism - "A-score" - (Pitts, 1976).

However, past research in this area shows limitations mainly of two kinds. Firstly, some studies have deployed typological systems relying mostly on mutually exclusive categories, which may lack precision in regard to separate characteristics. An important possible improvement would be to inquire into dimensions that could be concerned across all - or at least, most - of a sample of drawings. Secondly, specific psychological dimensions should ideally be examined, and this is an aspect that is typically missed when addressing anthropomorphism vs the absence of it. As suggested by Gorsuch & Walker (2006), researchers should adopt domain-specific measurements when attending to spiritual development. A main advantage would be to provide accounts that are psychologically specific and to cover a set of domains building towards a comprehensive *mapping* of God representations based on specific and discriminant measures for each dimension examined.

Moving on to the larger research project from which this thesis ensued, the reader will be informed firstly about its goals then about its history and contributions to the scientific literature. This is important because it has conditioned the current scientific work, to some degree.

God Image, God Concept or God Representation

A clear distinction between God concept and God image can be found in past research. God concepts refer to ready-made signs and symbols that are provided by a specific religious and cultural environment, and are sometimes called *God ideas* (Rizzuto, 1970, 1979). They have been described as rational and explicit, theological sets of beliefs, theological and conceptual god-schemas (Davis et al., 2013). In contrast, God images apply to one's inner experience of God, which is due, at least in part, to their personal ways of assigning meaning to the former. This follows Freud's claims about the formation of *God representations*, which may be considered as equivalent to God images, from the perspective of object relations theory (Rizzuto, 1970, 1979). God images are characterized as mostly implicit, affect-laden and relational (Davis et al., 2013; Grimes, 2008), internal working models and emotional god-schemas (Hill & Hall, 2002).

However, it has been suggested that God images and God concepts could be redundant constructs (Piedmont & Muller, 2006). It may appear somewhat artificial to divide them clearly for several reasons. Drawing that distinction based on conscious vs explicit could be deceptive, especially when considering recent views on the heuristic power of apprehending consciousness as multifold, including the existence of various levels of it (Bayne, Hohwy, & Owen, 2016; Morin, 2006). For God images to be affect-laden, and God concepts not, consists in yet another difficult distinction to make. Theological ideas about God might be very emotional in many ways: for the emotions they trigger in an individual, for their emotions they might relate to the divine. In addition, abstract notions in particular seem to be emotionally connoted (Vigliocco et al., 2013). Furthermore, the way an individual construes God may be multiplex. The notion of *god-schemas* has been proposed to describe rather explicit, propositional ideas of God (Gibson, 2008). If such schemas correspond to what is accessible in one's working memory about God at a certain point in time, they are not necessarily devoid of deeper hardly conscious qualities that one associates with the divine. In the main, these arguments do not deny the relevance of those constructs in different contexts. Nevertheless, such a clear distinction between constructs will not be attempted in the current work. The main reason is that the current research interests lie in different concerns that involve potentially both constructs.

Overall, the terminology that will be used in the current thesis will reflect previous studies and the specific terms that they have used: if some authors have referred to "God image", it will be mentioned as such. The word "concept" may happen to be used in a wider context than the usual

propositional construct of “God concept”. In such instances, it will be compared to other concepts (e.g., the human being) and explicit theological properties will not be brought to the fore as they would when considering *concept* vs *image*. Importantly, be it for God concepts or God images, some forms of representations are inevitable. For this reason, the word “representation” will be used without meaning to refer strictly to “God representations” as “God images”. This seems particularly relevant when adopting visual methods, which necessarily implies representations. The terminology “God figures” will be used when specifically alluding to drawn God representations found in visual forms - such as in drawings.

In order for the reader to understand the perspective that will be adopted in regard to children’s drawings of God, a few points of clarification need to be outlined:

- Firstly, there is no assumption whether children do in fact believe in *a* god. The only assumption is that from being confronted with a huge variety of representations of the divine as they grow up, children necessarily develop some ideas about God. Therefore, it is possible to study God representations through the lens of the *sensitive* subject - that is the child - without necessarily assessing the “believing” subject. One may argue that such approach would consist in studying “God concepts”. However, it is not clear that a non-believer could not have a very intense unconscious relation to God. Moreover, believing or not believing might be an even more delicate debate to indulge in, in view of the complexity at stake and the multiple meanings possibly attached to it.
- Secondly, through the study of their drawings, it may be misleading to make a strict distinction between the God image and the God concept. Unconscious, affect-laden objects and explicit theological views might both be found in children’s drawings of God. For example, when considering the specific gender of God in a child’s drawing, it is not certain whether it was done consciously - or entirely consciously - nor whether it is the gender of that figure that would be relevant to the child in itself, or if it is the parental traits associated with one particular gender that actually matter. Underlying God’s femininity might help emphasize nurturance in that figure - although that quality may be found in a masculine figure too. Gendering God in a *queer* way may emerge from a form of subversive political statement provided by the child, based on social awareness of gender.
- Thirdly, by using visual methods, it will not be claimed that the researchers have gained access to a child’s very representation of God - be it a *God concept* or a *God image*, or the replication of a God representation. Instead, the child’s drawing will be

considered as one possible answer to the task of depicting God. Without necessarily being the direct translation of what is in the child's mind, it is the result of a subjective formation process (Günther-Heimbrock, 1999). While children certainly mentally manipulate some representations, there is no evidence that they do have a stable mental representation of God that they try to depict in their drawings. Nevertheless, drawn gods resulting from children's artistic activity (i.e., drawings of God) do build on various symbols that belong to different categories of concepts (e.g., sentient beings and non-sentient beings) and different domains (e.g., gender, emotions). With this in mind, rather than claiming to grasp one's *whole* God concept or image, the researcher may be interested in how God relates to those particular categories or domains for children presenting certain socio-demographics. It is therefore the drawn object that is assessed for it gives some indication about how God, as a shared cultural concept, seems to be apprehended by the participants. Because of that twofold nature of such representations - both provided by culture but also idiosyncratically manipulated by the individual - reflected as well as more emotional properties may transpire in drawings of God.

In summary, the resulting graphic composition found in drawings of God might arise from various, complex and intricate personal motivations (with a relatively wide range of levels of consciousness). More than studying the sensitive subject experiencing a certain idea (i.e., God), the scientific interest of the current thesis lies in the study of that idea through the prism of several main factors characterizing the child (i.e., age, gender, religiosity). Furthermore, it is not that idea as a whole that is examined. Instead, it is specific domains through which that idea can be expressed that are at stake. Before moving on to the particular lines of inquiry addressed in the current thesis and the practical research project, the main advantages presented by the drawing method when working with children will be outlined.

Advantages of the Drawing Method with Children Participants

There are a few benefits from analyzing drawings when conducting research with children, and in particular on notions that can be abstract, such as God. Firstly, employing drawings may be particularly useful due to the familiarity children generally have with this task. Secondly, when it comes to rather complex topics, drawings might be better suited for children to express their thoughts (Brooks, 2005). Thirdly, a wide age range may also easily be used for comparisons on that basis, while this might be more complicated based on verbal means. Moreover, this method may help in regard to not only verbal limitations, but also misleading verbal reports (Kagan et al., 1982). Fourthly, potentially

overwhelming social demand might be maintained to a minimum thanks to a task that resembles a play activity in which the child focuses on a medium - that is, the page - rather than an interviewer (Kirova, 2006).

A few objections to the use of drawings can be found in the psychology of religion, however. The main argument relies on the assumption that drawings of God must be biased towards anthropomorphic forms (Barrett & Richert, 2003; Barrett, Richert, & Driesenga, 2001). Barrett et al. (2001) have reported the observation in previous studies of a concrete-to-abstract shift. However, it seems more appropriate to speak about an anthropomorphic-to-non-anthropomorphic (Brandt et al., 2009; Hanisch, 1996; Pitts, 1976), a figurative to non-figurative (Dandarova, 2013) or about a tendency towards a greater utilization of symbols (Ladd et al., 1998; Pitts, 1976). Pinpointing a general concrete-to-abstract trend may appear somewhat farfetched. As it will be shown in the current thesis, may require further nuances, in respect of both 'concrete' and 'abstract'. Concrete has often been associated with anthropomorphic representations of God, and abstract with non-anthropomorphic ones. With this in mind, the claim that drawings bias children towards anthropomorphic representations of the divine, as seen above, does not seem to be a valid claim. Evidence provided in the first section of the current thesis will speak against such a binary view, given that anthropomorphic God figures are rarely uniquely human, and non-anthropomorphic God figures can be either figurative or non-figurative. Such non-figurative figures have also been described in past research (Dandarova, 2013). Taking into account that drawings enable children to represent God in non-anthropomorphic and even non-figurative ways, visual methods appear to still be relevant after considering that possible anthropomorphizing bias.

Another objection may consist in tackling the idea that a drawing cannot sum up the way a child conceives of the divine. However, this is not a necessary pretention of research examining drawings of God, and this is certainly not the pretention of the current work. Images, be it through modes of production (e.g., composing a drawing) or reception (e.g., assessing a picture), may be particularly fit to qualify God (Bassett, Miller, Anstey, & Crafts, 1990), and there is some advantage to using free-drawing tasks. Free tasks may allow researchers to capture the more *emic* (Yelle, 2011) or authentic (Eldén, 2012) understanding of the divine on the part of the subjects (in this case, the children participants). While experimental protocols often seek answers from the subjects through predetermined formats, a free-drawing task allows to embrace potentially more issues. The main particularity is that scales will be created after drawings have been collected, in order for them to fit the data, rather than before.

A more general opposition to basing research on children's drawings has come from previous attempt to relate drawings directly to intelligence (see Jolley, 2010 for a review) or personality and

emotional disturbance (see Arteche, Bandeira, & Hutz, 2010 for a review). Past research has failed to find consistent evidence that there should be any such relationships. Indeed, it appears that drawings are not most appropriate instruments to measure such general abilities displayed by children. Instead, they might be better suited for two other purposes: being analyzed for themselves through their esthetic qualities; analyzed the topics being depicted for themselves. The former approach has been used in the scientific area of children's expressive drawings, with the assessment of children's utilization of esthetic techniques across years (see Jolley et al., 2016 for a review). The latter is mainly the one approach that has been adopted throughout the current thesis. More precisely, there should not be objections to assessing a specific topic through the depiction of that same topic. Shortcomings observed in past research did seem to occur when researchers attempted to draw rather distant connections between a given topic (e.g., drawing of a person) and non-topic-related abilities (e.g., intelligence). In the present case, insofar as drawings of God are utilized to examine representations of God among children, the approach appears legitimate.

In summary, the drawing method presents many advantages when doing research with children on the topic of God. Although there are some potential drawbacks found under certain conditions, the way the method is has been used in the current work has avoided those. Therefore, it can be stated that the ends to which drawings were included in this thesis comply with a valid application.

Initial Proposal and History of the Larger Research Project

Interdisciplinary Project Funded by the Swiss National Science Foundation (SNSF)

The current PhD thesis ensues from a larger research project submitted to the SNSF as an interdisciplinary project: "Drawings of gods: A Multicultural and Interdisciplinary Approach to Children's Representations of Supernatural Agents" (grant: CR1111_156383).

The main applicant is Prof. Pierre-Yves Brandt, professor of the psychology of religion at the University of Lausanne and at the University of Geneva. Co-applicants are: Zhargalma Dandarova Robert (lecturer at the Institute for Social Sciences of Religions), Prof. Dominique Vinck (professor at the Institute for Social Sciences), and Dr. Frédéric Darbellay (associate professor at the University of Geneva).

It has received funding from the SNSF since Spring 2015, including this doctoral work. It is deeply rooted in psychology all the while attempting to integrate contributions from the computer sciences (e.g., machine learning, pattern detection, automatic analysis). Besides being innovative in this regard, it also aimed to fill in a major gap in previous knowledge in the area of God representations

in children, that is: large cross-cultural and interfaith accounts. Indeed, the majority of previous studies have focused on Western Christian environments.

The project breaks down into four sub-projects, of which the PhD is a part, as follows:

- *Subproject A. Collect and organize children’s drawings of gods.*

This consists mainly in developing digital infrastructure allowing for the integration, organization and maintenance of the large amount of data (currently over 6’000 drawings of God), which relies for a great part of international collaborations.

- ***Subproject B. Case study in Switzerland.***

It corresponds exactly to the current PhD thesis, focusing on a French-speaking Swiss sample, being meant to suggest new paths of investigation, especially some that could potentially be extrapolated to samples of drawings from other countries. One goal was to benefit from some cross-cultural comparisons.

- *Subproject C. Multicultural investigations: age, sex, education and cultural/religious background.*

This taps into the wider interest to conduct cross-cultural comparisons, based on data collection waves in different countries, and to take advantage of the development of new methods and tools to analyze the data.

- *Subproject D. An integrative and multi-factorial model of children’s representations of god.*

This final aspect pertains to the combination of various inputs from the several lines of inquiry that would have been coordinated by then.

Before moving on to more specific aspects associated with the current thesis, some additional background may be useful to the reader. A brief description of different steps that have led to the currently funded project will be presented.

Brief Look at the History of the Larger Project

It follows a chronological path that has started with an exploratory qualitative analysis of a small sample of children’s drawings of God collected in French-speaking Switzerland by Carole Herren under the supervision of Prof. Pierre-Yves Brandt in 2001-2002. This has led to a few possible directions for future research revolving around anthropomorphism and emotions, particularly through the role of a face-to-face perspective in depictions of religious subjects (Brandt, 2002). Another step was taken in 2003 when Yuko Kagata Spitteler, one of his students in Geneva, decided to collect similar drawings from Japan, where she originates from. This corresponded to a first dip in quantitative research for

this expanding project. In 2005, a couple of students at the University of Lausanne - Anja Kniffka and Aurélien Schaller - conducted a similar research project in French-speaking Switzerland, using instructions leading to rather associative ideas around the notion of God. They asked children to draw whatever came up to their mind when they thought of God. An effect of the task wording was reported in Dandarova et al. (2016), showing an influence on the (decreased) occurrence of direct and anthropomorphic God figures.

From 2008 onwards, some data have been collected by Dr. Zhargalma Dandarova Robert in two different parts of Russia, showing great cultural and religious differences: Buryatia (Siberia) and Saint-Petersburg. The output of a first wave of research carried out on a Buryat sample can be found in Dandarova (2013). It addressed, among other issues, cultural imitation from outside one's referential religious system as well as developmental trends occurring in relation to figurativeness in the depiction of God figures.

Progressively, research teams have partnered with the main group based at the University of Lausanne, being coordinated by Prof. Pierre-Yves Brandt and Dr. Zhargalma Dandarova Robert. New data were collected in Romania, Iran, the Netherlands and Nepal, and data already published on the basis of a research project in the USA could also be added due to its similarity (Ladd, McIntosh, & Spilka, 1998). In that context, sharing data between research teams had become essential, and an online database has been developed to host and grant open access to the data: <http://ddd.unil.ch/index.php>. This connects with the latter, for which an improved database has been designed and data migration is ongoing. Next to such a type of digital infrastructure, digital tools have been developed, including an annotation tool (<https://d2d.vital-it.ch/#/>), which was presented during an international conference (Dessart et al., 2016).

Data collection for the current PhD project had begun ahead of its official start, between 2008 and 2010, which represents about half of the data examined in this thesis. That wave of data collection was carried out by Julie Montandon, Bastien Minoti, Vimi Gobin, Isabelle Rieben, Prof. Pierre-Yves Brandt and Dr. Claude-Alexandre Fournier, and was coordinated by the last two. The other half of the data have been collected between 2015 and 2016 by the author, with the help of Karine Karlen, Marie-Rachel Sudan, Christelle Cocco and Dominique André. This second data collection wave was intended to fill gaps in certain age years (especially above 12 years) and among children participants seen during religious schooling, which permitted to balance the sample equally according to age, schooling as well as gender.

Research Within the Current Thesis

Rationales, Aims and Objectives of this Work

Based on past scientific literature and steps taken by the larger research project, the orientation of this thesis will be outlined.

The general rationale of this thesis was to explore children's drawings of God further by applying well-suited methods, as well as to develop new areas of research.

The aim was twofold. Firstly, this work was meant to clarify issues already brought up in previous studies, and in particular: anthropomorphic vs non-anthropomorphic God representations, and gender-typing. Secondly, emotionality in drawings of God would represent an important exploratory issue to address and develop.

The objectives were fourfold. One first objective was to move beyond a binary understanding of anthropomorphism in God representations by identifying simultaneous sameness-otherness with the human being. A second objective was to bring more nuance in the study of gender-typing God as well as identify co-occurring tendencies and evaluate how they may act synergistically. To systematically assess emotional expression on specific dimensions would be a third objective. Finally, one last objective to meet was to relate all aspects considered to the independent variables mentioned above. Specific research questions were formulated according to each line of research, which will be exposed in detail in their related chapters.

As a result, the present thesis therefore proposes a rather comprehensive inquiry into children's drawings of God through the exploration of three main issues, with each one referring to a distinct domain. Firstly, relations between the human category and other ontological categories, as apprehended through sameness-otherness with the human being and de-anthropomorphization. Secondly, gender-typing, as a way of attributing gender to anthropomorphic God figures is particularly liable to social and religious norms and may reflect a series of underlying normative pressures. Thirdly, emotionality associated with drawings of God represents more embodied and less *cold* conceptual aspects of God representations, which may reveal a relative degree of personal significance. Each line of research tackling those issues has involved the construction of *ad hoc* measurements.

Data and Methods

A dataset of 532 children's drawings of God collected in French-speaking Switzerland was used. It was completed with 6 qualitative interviews at one-year interval (longitudinal and nested sampling). The main independent variables were age, gender and several measures of religiosity (i.e., religious

education, religious affiliation, prayer practice). Mainly content analysis - or similar methods - was employed to code the raw data (i.e., drawings), which was carried out either by independent judges or by the author, depending on the necessity.

The concrete scientific background to the issues addressed in this thesis and its specific contribution will now be outlined.

Lines of Research

Three main lines of research were explored to address domain-specific issues in relation to God representations: human being and ontological characterization, gender-typing and emotional expression. A fourth line of research was added in order to provide a more *emic* perspective to interpreting the data on each of the previous three lines. Each of them will now be briefly described - the actual studies and outcomes will be presented in separate chapters throughout this thesis.

1. The concept of God as ontologically intertwined with the one of the human being: de-anthropomorphization and sameness-otherness with the human being

Past research has often drawn a parallel between anthropomorphic vs non-anthropomorphic God figures, on the one hand, and concrete vs abstract God figures on the other hand (Barrett & Richert, 2003; Ladd et al., 1998; Pitts, 1976). It can be challenging to make such a strong epistemological distinction, especially since the human being, as a figure, can be used for metaphorical purposes. Moreover, in the specific case of drawings, all representations (including more 'ethereal' ones) rely on concrete symbols.

Nevertheless, following that perspective, children's drawings of God have been analyzed according to the degree of 'symbolism' they displayed (Ladd et al., 1998; Pitts, 1976) or their degree of anthropomorphism (Pitts, 1976). A strict categorical system has also led to classify drawings according to whether the God figure was anthropomorphic or not (Hanisch, 1996). More recent distinctions touching on similar issues have proposed to either construct a variety of ontological categories allowing for greater nuance in regard to anthropomorphism vs non-anthropomorphism (Brandt et al., 2009), or discriminate between figurative or non-figurative God representations (Dandarova, 2013).

There are two main issues in that respect that should be tackled with the current line of research. Firstly, it has consistently been shown in the broader literature on children's drawings that they tend to rely more on metaphorical means of expression as they grow older. This is the case for the depiction of various topics besides God concepts, such as the soul (Yamada & Kato, 2001), death (Bonoti, Leondari, & Mastora, 2013; Tamm & Granqvist, 1995), romantic relationships (Brechet, 2015)

or emotions (Jolley, Barlow, Rotenberg, & Cox, 2016). Therefore, attending to more ‘abstract’, ‘non-figurative’ and even non-anthropomorphic means of expression in drawings of God cannot guarantee that their assessment is not just a general translation of more advanced cognitive abilities.

A second issue pertains to how anthropomorphism has been observed. In fact, from inspecting the current Swiss sample - as well as samples from previous studies (Brandt et al., 2009; Dandarova, 2013; Ladd et al., 1998; Pitts, 1976) - it could be asserted that anthropomorphic God figures rarely seemed to be ‘only’ human, but presented characteristics that made them different from a typical human being (e.g., nimbus, rays of power, celestial background). It is precisely this combination of humanness and non-humanness that this line of research came to consider.

From these two issues associated with previous studies, it could be concluded that anthropomorphism (vs not) should be examined as domain-specific to God representations, that is, changes observed in drawings should reflect conceptual underpinnings of the God concept, rather than merely general cognitive development. One such possibility would be to address combined *sameness* and *otherness* with the human being. Such combination was claimed to be pervasive across many religious traditions, including Christianity (Guthrie, 1993). The current research would thus investigate how this may evolve across cognitive development in children. This may be apprehended through *de-anthropomorphization*, more specifically: how a mostly human God figure is ontologically ‘altered’ to produce a figure that is not only human.

Such an approach relies on a proclivity for over-inclusiveness proclivity in children (Gelman, 2004) and conceptual change (Carey & Spelke, 1994; Thagard, 1988). It also draws upon a *hybridist* view of concepts (Vicente & Manrique, 2016).

2. Gender-typing God and socio-normative pressures

From the vast majority of anthropomorphic God representations in children’s drawings it is important to notice that the image-maker (i.e., child) cannot avoid gender-typing because gender is intrinsically attached to such figures. This is an important observation, as gender appears to structure and regulate the everyday social world and human interactions.

Previous studies on children’s drawings of God have systematically utilized categorical measures, and often stemming from a restricted/binary conception of gender (Bucher, 1992; Daniel, 1997; Hanisch, 1996; Kay & Ray, 2004; Klein, 2000; Tamm, 1996). There is still evidence of the use of a *neither female nor male* gender category: from *undifferentiated* (Brand et al., 2009; Dandarova, 2013) to *neuter* (Ladd et al., 1998). However, the former referred to anthropomorphic figures only, and the latter concerned all types of God representations (non-anthropomorphic included). Beyond discrepancies in terminology, limiting the number of gender categories to a single one makes findings

difficult to interpret. There might either an absence of differentiation between femininity and masculinity, or a manifest combination of both through androgyny (Riegel & Kaupp, 2005).

On the whole, children may use “typical” ways of showing gender affiliation (i.e., female or male) or refer to less usual categories - such as *undifferentiated* or *androgynous*. *Accountability* to one particular category (West & Zimmerman, 1987, 2009) may be conveyed through the *display* (Goffman, 1976) of specific features. Additionally, it may be expressed with relative levels of intensity (e.g., strong femininity). A logical consequence would be to look at gender from categorical and dimensional perspectives. A possible approach, used in the current thesis, consists in combining two types of measurements, which address: gender categories (e.g., feminine) and gender intensity (e.g., levels of femininity), respectively.

Such an approach may help bring more nuance in research on children’s gender-typing of God. This is all the more necessary that this aspect tends to be particularly ambiguous in the religious domain, as it can be noticed from men dressing with long robes in Christian iconography and among ordained people. Despite history-dependent significance in regard to gender, nowadays’ stereotypes are not likely to escape children’s attention.

The current work also offers to move the investigation further by examining four different normative sources of influence: cultural androcentrism of God; hegemonic masculinities; same-gender preference; gender flexibility. This consists in a second study that relies on cross-cultural comparisons between samples from: French-speaking Switzerland, Japan, Buryatia and Saint-Petersburg. Each type of influence is defined in detail in the related chapter.

On the whole, this puts forth a strong incentive to construct more comprehensive and sensitive measures of gender-typing as well as to consider different cultural environments.

3. Emotionality expressed in the whole picture of God

Up to this point, the analysis of children’s drawings of God proposed in the current thesis has been very focused on both cognitive/conceptual and socio-normative/identity aspects of God representations. Yet, there is a third area that seems to be omnipresent and has potentially far-reaching significance for most individuals, which concerns the emotional properties of such representations. There is a lack of psychological research on emotions that may be associated with God representations (Emmons, 2005). Three areas have been concerned so far: one’s relationship with God (e.g., Corwin, 2012), one’s felt emotions towards God (e.g., Samuels & Lester, 1985) and one’s attribution of emotions as experienced by the God figure (e.g., Gray & Wegner, 2007). Another path to take would address emotional characteristics overall associated with God representations, following a more holistic approach. For example, the concept of a chair may endorse much different

emotionality from the concept of friendship. This does not mean that one individual directly attributes emotions to a chair or to friendship as a matter of experience, but those may be construed as emotional to varying degrees (for example, of intensity or valence).

Visual artifacts are particularly appropriate to assess emotional properties. In fact, pictures can be eminently emotional in themselves (Goodman, 1968) and even compel the beholder (Freedberg & Gallese, 2007; Merleau-Ponty, 1945). God representations might be particularly prone to much emotional expression given their potential life significance and how a believer may relate to them personally.

The expression of emotions in children's drawings of God has received some attention in past research but has hardly been analyzed specifically. Quantitative studies have usually referred to emotions either through the use of emotionally connoted labels (Tamm, 1996) or by including emotional characteristics in broader categories (Brandt et al., 2009; Harms, 1944; Kay & Ray, 2004). As for qualitative studies, they have mostly focused on the affective significance of God images while relying on depth psychology theories (Coles, 1990; Demmrich, 2015) or have treated drawings as only complementary to a larger interview scheme (Coles, 1990; Demmrich, 2015; Heller, 1986; Reimer & Furrow, 2001; Streib, 2000).

In order to express emotions in their drawings children are likely to employ esthetic devices belonging to three main categories: literal expression, subject matter and formal properties (e.g., Jolley, Fenn, & Jones, 2004). Overall children's ability to use such techniques expressively has shown a general age-incremental trend (Jolley et al., 2016). Nevertheless, past research in the area of children's expressive drawings of emotions has focused on discrete emotions in tasks where children are asked to perform as best as they can (e.g., Bonoti & Misailidi, 2006). But there would be merit in examining emotionality overall, as expressed spontaneously, in order to reflect the child's subjective perception of a specific topic (in this case, God).

Those techniques may be used to communicate emotions according to certain dimensions of emotionality. Research in the psychology of emotions has consistently reported two central dimensions: pleasure-displeasure (i.e., valence) and activation-deactivation (i.e., intensity or arousal) (e.g., Cacioppo & Gardner, 1999; Scherer, 2005).

Therefore, the current thesis proposes an analysis of two important emotional dimensions as they are expressed in children's drawings of God, that is: emotional intensity and emotional valence. The main objective is to appraise the respective contributions of general personal characteristics (such as age and gender) and topic-specific variables (such as religious education, religious affiliation and prayer practice).

4. Understanding pictures of God: Symbolization and meaning construction

A fourth line of inquiry was initiated in order to provide a more complete appreciation of children's drawings of God. It first appeared important to collect children's reflections on their own drawings, as well as others', through individual qualitative interviews. This could imply a general interpretation of a drawing as a whole (e.g., an entire scene or a broad quality attributed to God), or a more located meaning construction based on specific elements in a drawing (e.g., the presence of a beard or long hair). Previous research has shown endeavors to study personal understandings of religion, that is, as an experienced and *lived religion* (McGuire, 2008; Streib, 2008). This line of inquiry aims to grasp children's own interpretations and meaning associated with pictures of God, as suggested by (Günther-Heimbrock, 1999). Visual data can be read at many different levels, and considering the discourse individuals make around them may be important (Margolis & Pauwels, 2011), especially since it could be one key to gaining a more *emic* understanding, which often lacks in the study of religions (Yelle, 2011). In that regard, drawings could be regarded as a lived socio-cultural practice being embedded in a particular context and coming with a subjective and meaningful discourse (Ivashkevich, 2009; Pearson, 2001). An attempt to grasp both an *emic* and *etic* understanding of children's drawings of God may find ground in the adoption of a mixed-method approach (Hill & Maltby, 2009).

A second rationale was to benefit from a follow-up with some children who had taken part in the quantitative study to seek for changes overtime, between a first drawing of God and a second one (longitudinal research). The study of God representations in children has thus far never offered a longitudinal account that would permit stronger conclusions about developmental tendencies, as formerly suggested by Pitts (1976).

Consequently, qualitative interviews were conducted individually with participants from the larger quantitative study one year after their initial drawing of God had been produced, and discussions targeted each of the three main issues highlighted in the current thesis (i.e., human being and ontological characterization, gender-typing and emotional expression). Mostly, this additional line of inquiry has pointed to the multiple meanings that may be attached to symbols. For example, gendered attributes may reveal non-gender-specific qualities in God: the insertion of a beard in the drawing has been stated by one participant to stand for wisdom in the divine mainly - not necessarily masculinity - and this may be emotionally loaded. Similarly, adding a beard, although it is a traditional sign in the Christian world, still contributes to work on anthropomorphic features.

It had been initially intended to exploit the data produced by those interviews much more thoroughly. Unfortunately, time restrictions have made it difficult to go into detail and provide a

systematic analysis. They will nevertheless be useful to nuance the interpretation of results on each of the main issues from the current thesis as well as suggest keys to future research. Their necessary contribution will be presented in the Discussion chapter concluding the current thesis.

Some Situated Research

Research is never carried out in a vacuum, and it appears fair to the reader to report three main sources of influence. This thesis has been situated within a specific socio-cultural and geographical area, within a specific time-frame and a social research environment. Firstly, bits of contextual information about collecting data in Switzerland among children will be given. Secondly, the different approaches adopted were oriented, up to some point, by the author's background in cognitive psychopathology. Thirdly, as one sub-project of a larger interdisciplinary research project, some aspects have been conditioned by external factors. Those two sources of influence will be briefly presented.

Collecting Data in Switzerland and Among Children

Doing research with children is never easy a task, and investigating a religious topic certainly does not make it any smoother. Indeed, there are a few challenges pertaining to this kind of research. A first challenge is to the permission from educative institutions that are in contact with children. A second challenge consists in reaching to their parents and even grab their attention in order to get an answer (be it negative or positive). A third type of challenge depends on whether the data collection takes place in a school institution during teaching or during an extra (catechism) activity in a parish or at the home of the religion teacher, for example. Both have practical aspects that need to be taken into consideration for the activity to go well. A fourth challenge deals with the group format of the activities. Indeed, while it might be time-saving to see children from the same class altogether as a group, as well as bring comfort and reassurance to them, it also involves group management. In particular, in the current research children worked individually on their drawings, and it was fundamental to manage independent work for each individual from the group.

Religious Education in French-Speaking Switzerland

Switzerland is historically a predominantly Christian country, with the Protestant (Reformed) Church and the Catholic Church being largely predominant. Those main religious traditions are in decline since 1960, following a general trend towards more secularization among European countries. Some data are provided by the Institut suisse de sociologie pastorale (SPI; Swiss Institute for the Sociology of Churches)¹. There has been an increasing amount of residents reporting to have no religious affiliation.

¹ <https://kirchenstatistik.spi-sg.ch/religionslandschaft-schweiz/?lang=fr> (only available in French or German)

This is particularly the case of big cities, such as Geneva and Lausanne (in French-speaking Switzerland). In Geneva, less than 40% of the population defines itself as Christian.

There is a general teaching program between cantons called “Plan d’études romand (PER)” that proposes - among other educational aspects - the teaching of “Ethique et culture des religions”, which would translate into “Ethics and general knowledge about religions”. The PER relies on the 2006 Article 62(4) of the Federal Constitution: all the while cantonal freedom in terms of public teaching is promoted, that particular paragraph invites cantons to reach reasonable harmonization of schooling between cantons. It also depends on the 2007 “Accord intercantonal sur l’harmonisation de la scolarité obligatoire” (HarmoS), which is an intercantonal agreement aiming to harmonize teaching programs across cantons.

Despite some coordination, each canton functions separately and is allowed to do so with much latitude. Consequently, there exists differences between cantons with regard to how classes about religion are taught, if at all. Schools in the cantons of Vaud and Valais offer a class that provide children with a broad overview of the main modern religions (Christianity, Islam, Judaism, Hinduism). A particular emphasis is put on Christianity, due to the mainly Christian identity of Switzerland. In Valais, that non-confessional class is given either by the teacher or by a clerical member, while in Vaud, it is only the teacher. No religious class is scheduled in schools of laic cantons - such as Neuchatel and Geneva. In the canton of Fribourg, confessional religious class is offered as part of the teaching program for Catholic or Protestant children, respectively. To receive confessional religious teaching (catechism) in other cantons, children need to seek for a Sunday school type of teaching - which can be provided over the weekend or over the week outside of their regular schooling curriculum. The canton of Fribourg is a particular case in that regard: confessional religious teaching is provided in school, as part of the curriculum. It is Christian, either Catholic or Protestant/Reformed. Children who were met in the canton of Fribourg were included in the ‘religious schooling’ group of the current sample. Generally, all children seen during religious teaching, independently of the canton, were identified as part of that religious schooling group.

The number of participants from the current sample was balanced based on the type of schooling: either regular schooling or religious schooling. Data collection having taken place prior to the current thesis work includes all participants seen during regular schooling (as well as a small portion seen during Sunday school). The participation of those children in Sunday school activities was not controlled. Nevertheless, one may expect that such participation would be substantially less spread in that sub-sample compared to the religious schooling sub-sample. This is particularly foreseeable given that most children from the ‘regular schooling’ group were from the canton of Geneva, in which children might be expected to attend Sunday school less often than in other cantons.

The reason why the focus was put only on a Christian type of religious teaching - being either Catholic or Protestant/Reformed - is that the sample and the socio-demographic distinctions had to be representative of most the population in French-speaking Switzerland. It is worthwhile that the canton of Jura is not mentioned because no data were collected there for the current thesis.

Ethics, Information and Consent

Matters concerning ethics in scientific research taking place in Switzerland are dealt with a central institution called Swiss Ethics as well as with cantonal commissions. However, ethics institutions are particularly concerned with bio-medical issues, including psychological studies using biological samples. There are no guidelines however, and there is no obligation to submit a project to their attention if it does not imply biological samples and does not address health-related issues.

Nevertheless, this does not discard the necessity to handle the information and consent aspects of the research. Some discrepancies can be observed between the pre-PhD phase and the PhD phase. The former has proceeded with an 'opt-out' consent format. More precisely, written information was provided to the schools or the clergy (depending on whether children were completing the activity within the context of regular schooling or during religious teaching, usually taking place additionally to the regular schooling program), which was transferred to the participants' parents through those instances. The latter has preferred an 'opt-in' way of receiving consent. The main reason for this change was that this option appeared preferable for it actively solicited the parents, who could thoughtfully make a decision. Moreover, this makes children's participation more straightforward as there is then a clear positive answer in that regard, rather than a negative absence of answer. Such decision does not alleviate the approach employed with the former.

In all cases, be it for opt-in or opt-out, as long as there would not be any opposition from their parents, children were invited to participate in the study only upon their own consent. If a child did not feel like taking part, they would be given another type of drawing activity to do, just to keep them busy.

A Background in Cognitive Psychopathology

The main perspective adopted in this PhD thesis has been to examine a number of sources of influence (e.g., age, gender, education, religiosity) on the data (i.e., children's drawings of God) and their respective effects on outcome variables (e.g., score on a femininity scale for the God figure). Employing a developmental approach, age has been the most important possible contributor. More specifically, rather than identifying broad stages of development in children's representations of God, the focus has been put on dynamic processes and how cognitive development may exert some force moving in a particular direction for a specific dimension in drawings. Such force may be synergistic or

antagonist to the influence of other contributors. By obtaining some understanding of the course of specific dimensions throughout childhood, the current work is underlaid with the prospect of explaining how individuals may *in fine* represent God in adulthood.

The idea of dimension may not be independent from practices in cognitive psychopathology. Indeed, that field of research addresses different kinds of experiences or phenomena as exhibited to various degrees (e.g., intensity, frequency) among individuals in a way that does not draw a clear (qualitative/categorical) line between individuals concerned with a type of experience or phenomenon - i.e., diagnosed with schizophrenia - and others who are not - i.e., individuals free of mental 'illness' or diagnosed with another condition. Instead, it seeks to assess experiences or phenomena as potentially occurring to any individual.

Its influence on studies carried out for the current doctoral work may be noticed mostly in some reluctance to employ exclusive categories to process the data. This consists in acknowledging the multidimensional nature of the data. Indeed, drawings (especially 'free' drawings) may display complex co-occurrence of characteristics.

For example, according to a merely categorical approach, drawings of God may be categorized as either anthropomorphic or non-anthropomorphic, then break down into sub-categories to one or the other. However, some properties may go overlooked because of 'forced' categorization, particularly in the case of some overlap. Contrary to this, a dimensional approach would attempt to measure one or several dimensions across all drawings, thus embracing as much data as possible for one particular aspect - similar to cognitive psychopathology considering all individuals for one experience or phenomenon.

Of course, this is not an all-good-or-all-bad case, and categorization appears necessary sometimes. Nevertheless, the idea of measuring one particular aspect on most of the data, then another one and so on, following a dimensional approach, shows an evident advantage, which is to consider a phenomenon across the sample.

Working Within the Framework of a Larger Interdisciplinary Project

The context within which this doctoral research has taken place has borne some influence on the work as well as on the author's approach to scientific research. That context is formed mainly by being part of a larger interdisciplinary project and being based at the Institute for Social Sciences of Religions (ISSR) - University of Lausanne. Its impact may show through epistemological decentering, on the one hand, and through being committed to a project holding one's thesis to a particular position within that larger framework, on the other hand.

Regarding the former, the author has been involved in research on children's drawings of God carried out collectively by an interdisciplinary team composed of psychologists, anthropologists, sociologists and more intensively with a postdoctoral colleague coming from the Digital Humanities and having a background in civil engineering (Dr. Christelle Cocco). Although this may have taken much time away from the doctoral work, apprehending similar data (i.e., drawings from different countries and religious traditions) from various perspectives, including the computer sciences, has helped to think 'outside the box'. Empirical work drawings upon the computer sciences (Cocco et al., 2017) as well as reflective and epistemologically oriented contributions have been co-written in that context (Cocco et al., 2018; Darbellay et al., 2018). Additionally, sensitivity for qualitative analyses has been stimulated by taking part in seminars and discussions organized at the Institute for Social Sciences of Religions (ISSR) at the University of Lausanne.

Concerning the latter, besides bearing expectations to produce an in-depth examination of children's drawings of God from a Swiss sample, this thesis has also launched exploratory methods that would possibly serve later cross-cultural applications at the level of the larger project. The most challenging aspect was twofold. Firstly, a sufficient balance had to be found between religious- and cultural-specific analyses that suited the Swiss sample all the while keeping an eye on later possible application on samples from different religious and cultural environments - with minimal adaptation. Secondly, participating in a larger project that also relies on one's data means that all data need to be as comparable as possible. This implies great efforts of data cleaning and data harmonization, as well as conforming to certain standards - involving high-quality scans of drawings and precise formats. Moreover, one single modification of the data (e.g., filename) in one location had to be corrected at every other location.

Organization of the Current Thesis

This thesis is composed of three main lines of research: de-anthropomorphization and sameness-otherness with the human being; gender-typing; emotional expression. Each line is based on a quantitative study followed by a more qualitative inquiry. An additional contribution applied to each line, discussing how children may articulate symbols and construct meaning in their drawings with regard to each issue.

Firstly, issues addressing anthropomorphism in God figures will be reported. A quantitative study replicating previous findings and moving further into specific de-anthropomorphization strategies will be presented. It will be followed by a more qualitative examination of a sub-sample of drawings. Both studies will be concerned with the Swiss sample.

Secondly, gender-typing anthropomorphic God figures will be attended to through a quantitative dimensional-categorical account of the Swiss sample. It will be furthered in a cross-cultural study using samples of drawings from four different cultural backgrounds (i.e., Switzerland, Japan, Buryatia and Saint-Petersburg).

Thirdly, emotional expression will be analyzed in a quantitative study assessing all drawings of God from the Swiss sample. In addition, an inventory of potentially emotion-loaded religious themes will be carried out in order to stretch our understanding of this issue around more topic-specific observations.

Finally, a general discussion will be provided to conclude the current thesis to highlight the following: summary of the current research, outcomes and scientific contributions, and future research.

FIRST SECTION - HUMANNESS AND NON-HUMANNESS IN GOD REPRESENTATIONS

Anthropomorphizing objects around us is so trivial that it tends to receive only poor attention, but examples abound. From the good Mother Earth to the lively candles and teapots cast in Disney movies. It is carried out by children, young adults and beyond. Indeed, it is pervasive: a spontaneous and easy way of explaining what is going on in the world.

God is no exception to this phenomenon. God being a friend, a guide, or that old bearded man living up in the sky... anthropomorphic representations of the divine permeate many cultural environments, and certainly the one of the participants from the main French-speaking Swiss sample. Even when hoping that God has heard one's prayers, anthropomorphism lies there in the background.

However, when they depict God as a human character, it is not only a human being that children want to depict. They also want to underline that it is not *any* human. In order to do so, they may emphasize its dual nature: human and non-human. In order to achieve that, they may bring elements into the works that take on part of its humanness to accentuate its non-humanness. While this is not the only way to characterize the divine, it appears to be widespread. For example, God will be portrayed as a bearded man with a halo, or sat on a throne in the sky... all things that ordinary human beings do not have or do. There might be an abundance of methods to do so.

Two lines of inquiry are proposed for the current issue. They have both attempted to unpack further the means by which children may accentuate God's humanness all the while it is not only human. The first line of inquiry on this issue is presented through two different chapters. The first chapter proposes an overview of relevant theoretical considerations as well as a revised perspective. The second chapter offers two empirical studies: an attempt to replicate past findings, and some testing of *de-anthropomorphization* strategies based on this revised perspective, respectively. Additionally, different types of God representations were conceptualized in order to situate each of those two studies according to the types of drawings under scrutiny. Then, the second line of inquiry consists of a third chapter. It proposes an in-depth inquiry into fine esthetic techniques (especially relying on formal/abstract properties) utilized to suggest non-humanness alongside humanness.

The overall purpose was to move beyond a binary anthropomorphic vs non-anthropomorphic opposition and seek for the co-occurrence of both. How children may proceed and what specific strategies they may use in order to obtain such mixture, especially in their drawings of God, was then meant to be explained. While this generally concerns cross-domain strategies, an additional aspect to

consider was how humanness may be reduced within the human category. Considering the deeply conceptual nature of this particular inquiry, a main interest lay in developmental patterns characterizing certain strategies.

The first and the second chapters were submitted initially as one long chapter to the editors of a collective scientific book: *Children's drawings of gods: an interdisciplinary approach* (Eds. P.-Y. Brandt, Z. Dandarova Robert, C. Cocco, D. Vinck, & F. Darbellay - publisher: Springer). They required that a distinction be made between theoretical and empirical considerations. This translated into one chapter proposing a revised theoretical model and a second chapter presenting an empirical application on a case study from French-speaking Switzerland.

It is worthwhile for the reader to take note that there is a certain level of redundancy between the first line of inquiry (first and second chapters) and the second line of inquiry (third chapter) of this section. This is due to willingness to submit the third chapter as a separate article to a scientific journal.

Finally, with regard to contributions, all chapters were entirely written by the author of this thesis. The second and third chapters have benefitted from specific feedback and discussions, particularly on their methodology, with Prof. Pierre-Yves Brandt. He is therefore considered a co-author of those chapters submitted, or about to be submitted, to the collective book, and to a scientific journal, respectively.

Chapter 1 - Children's God Representations: Are Anthropomorphic God Figures *Only* Human?

Abstract

In many religious traditions, anthropomorphism plays a central role in visual representations of the divine. As suggested through the notion of *minimally counterintuitive* properties (e.g., Boyer, 1994), some peculiar ontological arrangements (e.g., ontological violations) tend to characterize religious representations. In the case of human-like God figures, such ontological peculiarities may consist of either: a combination of humanness and non-humanness (e.g., a human figure with wings), or a lack of central characteristics presenting qualities that are central to the human category (e.g., a face). The former corresponds to Guthrie's (1993) observation of the recurrent *sameness-otherness* combination with the human being to depict the divine. Such conceptual arrangements may change across a child's development. However, research on children's God representations has systematically considered anthropomorphic figures as distinct from non-anthropomorphic ones. The current chapter proposes a revised developmental model that accounts for domain-specific properties used by children to signify the special position of God as compared to human beings. That model is particularly appropriate to consider God representations as depicted in children's drawings.

Introduction

Anthropomorphism is present in most interpretations of the world that humans may provide. Are pine trees not standing fierce and tall against wind and snow? Is the moon not smiling at us? As Vosniadou (1989) has proposed: “They thus provide psychological explanations of the sun's movement (e.g., the sun hides behind the mountain, the sun went home to sleep, the sun plays with the moon, etc.), and attribute to the sun (and moon) certain human-like qualities related to the ability to move independently (i.e., intentionality, playfulness, fatigue, etc.)” (p. 13). Although this has to be taken with a grain of salt given that it can also reflect analogical thinking, it still underlines the central role of the human being to explain phenomena involving inanimate entities.

This applies to rather important aspects of life, including religion. In that regard, the following observation is striking: “Because no clear line separates models of humans and models of other things and events, we are able to find, with no sense of incongruity, all manner of humanity in the nonhuman world.” (Guthrie, 1993, p. 194). As underlined by Guthrie, gods in many religious traditions have exhibited combined sameness-otherness with the human being. Sameness concerns anthropomorphic traits and otherness deals with qualities that are not human. A revised developmental perspective will be proposed based on the notion of *de-anthropomorphization* - which was advanced within the current framework. It supposes that a human God figure be made less human, either by (also) endorsing nonhumanness (which equates to Guthrie's *otherness*), or by lacking central human characteristics.

It would be valuable to examine whether children proceed to such ontological mixture when they are asked to describe God, and if so, how. Children might do so to varying degree across development. Such scientific insight may lead to a better understanding of psychological underpinnings of God representations observed at different points in childhood. In addition, this could also help explain such representations found in adulthood. Moreover, religious education could be expected to play a role as well. The current chapter will thus address anthropomorphism in God representations and mostly draw upon cognitive approaches to concept development.

To elaborate on such aspects might be difficult to put into words for children, and opting for visual methods, such as drawings, appears to be particularly appropriate. Moreover, the non-limiting frame offered by an open-ended question about how they imagine God, without forcefully bringing their attention to matters of sameness-otherness, assures to maintain as much spontaneity and richness of answers as possible. The general argument will therefore progressively lead to past literature on children's drawings of God.

Anthropomorphism in Religions

One may ask why anthropomorphism is so prevalent in our daily lives, why it appears in all religious systems, up to some point, and why it seems to persist overtime, both on a social level and on an individual level, throughout development. Guthrie (1993) gives some directions when stating that humanlike models are adopted and remain mainly because they show concern for what is most important to human beings in their world, that is, manifestations of humanness (p. 201). Anthropomorphism goes beyond religious or secular thinking. It encompasses the human's tendency to interpret and perceive any aspect of the world by applying human models. An operational definition could be: "systematic application of human-like models to nonhuman in addition to human phenomena" (Guthrie et al., 1980). The main reason why human beings do over-anthropomorphize events around them is to maximize our chances for survival, by recognizing human presence in our environment (Gombrich, 1956), with sometimes false positives, especially when information is somewhat ambiguous (Guthrie, 1993, p. 90). Formerly, it had advanced that children attend to the world based on the understanding they have of their own parents, and conceive of god in line with such anthropomorphic understanding (Bovet, 1924; Piaget, 1929). This all ties in to what has been called the *human agency hypothesis* or the *anthropomorphism hypothesis* (Barrett & Richert, 2003; Barrett, Richert, & Driesenga, 2001), positing that intentional agents (e.g., animals, supernatural agents), are generally explained preferentially in reference to human beings. Additionally, individuals are also likely to attribute not only intellectual qualities but also emotional states to God (Gray & Wegner, 2010; Haslam, Kashima, Loughnan, Shi, & Suitner, 2008).

The incentive to do so, at a cognitive level, may be due to the existence of a Hypersensitive Agency Detection Device (HADD) that produces an inclination to perceive agency in most natural events, even those involving non-animate objects (Barrett, 2000, 2004). Anthropomorphism would be entailed by a preference for human agency, given that the human being is the "most outstanding exemplar" of the category sentient beings (Barrett & Keil, 1996). The HADD may help the formation of religious concepts and also serve to maintain them (Barrett, 2004). A similar, though slightly broader perspective is the one of Bering's (Bering, 2002) Existential Theory of Mind, which is understood as a "biologically based, generic explanatory system that allows individuals to perceive meaning in certain life events." (p. 4). Close to the notion of agency, the detection of purpose in events is usually called teleological reasoning (Kelemen, 2004).

Besides possible cognitive mechanisms involved, the meaning endorsed by anthropomorphism in God is also relatively important. According to Guthrie (1993), God is often depicted with both theological *otherness* to and *continuity* with the human being. While continuity

appears to be rather spontaneous otherness is cultivated through education and intellectual reflections.

After this overview on anthropomorphism, involving constructs such as agency detection, the argument will continue by addressing theories in connection with how individuals process various ontologies, in the sense of categories of being.

Cognitive Approaches to Religion

The cognitive science of religion has offered thought-provoking accounts of individual perceptions regarding the ontological status of the divine. The ones that are of interest for the current chapter relate to the *preparedness hypothesis* and to *ontological violations*. They will be addressed successively. Eventually, the socio-cultural status of religious representations and the function of analogical thinking in that regard will be discussed.

The Preparedness Hypothesis

Research in the cognitive science of religions has suggested that children are cognitively equipped from the beginning for processing information about God in terms of correct theistic assumptions, unlike their knowledge about human beings that has to be learned (Barrett et al., 2001; Kelemen, 2004). This has subsequently been called the *preparedness hypothesis* (Barrett & Richert, 2003). The evidence provided relies strongly on Theory of Mind (using false belief tasks) and concerns children in their very early stages of development. Barrett et al. (2001), for example, have shown that 3-year-olds would fail to recognize the knowledge and perceptual fallibility of a person (often the child's mother) vs God, unlike slightly older children (4- to 6-year-olds). Other agents were included in that research (e.g., ant, bear, tree) and - in the absence of extraneous information - children tended to perceive them similar to human beings, but God seemed to receive a special treatment as a quite different agent. However, these findings are limited firstly because performing well on a false belief task for God at 3 years old does not necessarily equate with a good performance years later, and the reasons may be different. Next to poor performances for the human being at 3 years old, this could be interpreted more like an early failure to attribute limits to any sort of agent than a predisposition to understand God. This research is nevertheless insightful in respect of the early differentiation occurring between God and the human being, processed as dissimilar agents up to some point.

These observations bring fine nuances in respect of anthropomorphism in religions, without contradicting Guthrie's thesis. Indeed, it has been proved that when individuals are put under cognitive constraints they tend to automatically explain events involving God in more

anthropomorphic terms than they would usually do (Barrett & Keil, 1996). As acknowledged by Barrett and Richert (2003), not all divine attributes are likely to endorse *preparedness* because they are “conceptually burdensome” (e.g., non-temporality, omnipresence). A possible implication for developmental differences in the representation of God might be that older children may be more able to apprehend non-anthropomorphic properties of God due to more advanced cognitive functioning - in particular, better working memory skills. This breadth of research is nonetheless very specific to the perception of intentional agency, and this may only tap into one very specific aspect of God representations.

Ontological Categories of the Divine in Children

It has been suggested that what makes the social transmission of religious concepts successful is that they endorse attention-grabbing *ontological violations* (Boyer, 1994; Boyer & Walker, 2000). Such violations take place through the inclusion of *minimally counterintuitive* properties (Boyer, 1994; Norenzayan, Atran, Faulkner, & Schaller, 2006; Sperber, 1996; Upal, 2011) on the backdrop of a main ontological category. Such a category may be the human being, for example - which fits a Western Christian environment. As initially observed by Boyer (1994), religious entities are often represented as non-physical entities resembling human agents psychologically but that are not bound to biological constraints.

From a developmental perspective, the notion of *ontological violation* as being typical of religious entities is not self-evident because it requires the perception of a reasonable degree of counter-intuitiveness, which cannot be guaranteed at early stages of development. Focusing on a series of studies on preschool children it can be seen that firstly Harris et al. (Harris, Brown, Marriott, Whittall, & Harmer, 1991) have shown that it is not always clear for children whether an imagined creature may or may not become real. Secondly, plausible causality may be subject to various levels of credulity among young children (Johnson & Harris, 1994). Thirdly, even though somewhat elaborate at times, children’s distinction between living entities and inanimate objects remains often uncertain (Carey, 1985; Wellman & Gelman, 1992; Wright, Poulin-Dubois, & Kelley, 2015). It is therefore unlikely that it would be precisely because of that counter-intuitiveness creating salience that religious beliefs are socially transmitted. Rather than positing a voluntary attention-grabbing effect of religious entities through ontological peculiarities the current paper will focus on conceptual changes taking place across the child’s development. It will nevertheless draw upon this previous body of research showing that God, as a religious entity, may encompass several ontological categories, with the human being having a particularly important place.

The Semi-Propositional Nature of Cultural and Religious Representations

Cultural representations are not necessarily understood literally. In fact, they might be *semi-propositional* for they are evocative and in-context notions that do not ineluctably have a tangible existence in the natural world (Sperber, 1975, 1996). If they are semi-propositional, cultural representations still ignite genuine emotions, for example in the course of religious rituals. Religious propositions are evocative and leave the sphere of 'normal' meaning (Atran, 2002). It is based on his understanding of culture as a shared cognitive structure, with various intertwined ideas and conducts. Such a cognitive approach, besides normally addressing specialized information processing systems and explicit representations, puts a special emphasis on the social and the cultural (Clément, 2003). Shared (religious) representations are explicit, but part of their structure might remain implicit, being based on a cognitive structure that is not systematically accessible to one's consciousness.

Besides accounts of cultural representations being counterintuitive or semi-propositional, there is a possibility for them to be taken for granted. This claim has been made in relation to *cultural analogies*. Cultural analogies may have a binding effect between domains of knowledge by highlighting their commonalities, drawing conceptual connections between human and non-human beings, for example (Descola, 2005). Kaufman and Clément (2007) have proposed a social naturalism thesis that emphasizes two major aspects. Firstly, analogy-making is a basic operation that acts as a binder of relational networks typical of human culture. Secondly, *quasi-perceptual* systems of inference are at work in order to notice forms that are socially relevant within a given society. By underlying the intuitive quality of *cultural analogies*, they have proposed that these are based on mainly unconscious mental foundations. Those shared foundations offer a limited range of possible patterns of meaning, which makes cultural representations commonsense and rather intuitive through the continuity of analogical mapping. As they put it: "... natives "see" the analogical mappings that make sense of their society as a whole without being able to justify them." (p. 245). Analogies therefore enable the folk apprehension of even highly complex or hardly graspable notions - such as the concept of God. Importantly, the metaphoricity of analogies can be forgotten by being socially conventionalized (Johnson, 1981; Miller, 1979). By lacking access to their historicity and their progressive construction, individuals may conceive of various cultural forms as 'natural' truths.

At a cognitive level, this view is partly competing against a more standard ontological understanding of minimally counter-intuitive qualities of religious entities. The latter mainly focuses on domain-specific information processing, positing that subjects necessarily use a causal, sequential thinking that divides representations into different parts according to the domains those cover. The current explanation, however, suggests that analogical reasoning is mostly at work in the context of collective

representations, involving a holistic form of reasoning - hence the rather intuitive nature of religious entities within a community.

This chapter section has presented notions that are central to conceiving of religious ontologies. While it covers theoretical aspects that draw significantly on analogical thinking and metaphoricity, it will now be suited to attend to more general concept development. The formation of categories and the acquisition of domain-specific knowledge in childhood will be covered.

Concept Development: Children's Cognition and Socio-Cultural Background

Categories and Domain-Specific Information

Children's intuitive physics and intuitive psychology are so elementary that they may guide their basic early categorization of the world into a category of physical objects and a category of sentient beings (Carey & Spelke, 1994). Thus, if God be perceived as an intentional agent (Barrett et al., 2001) as a consequence of categorization process it would likely fit the psychology/sentient beings category. In addition, having "humans as the most outstanding exemplar of this category it would be expected that God would share many properties in common with humans" (Barrett & Keil, 1996, p. 243). Indeed, children do identify persons as persons based on their action-related agency (Wellman & Woolley, 1990), which may be perceived very similar, up to some point, to God's.

Basic domains, such as physical objects, biology or psychology, undergo major conceptual changes throughout childhood. For example, *differentiation* occurs for concepts of dead and inanimate, and *coalescence* takes place for the concepts animal and plant, which are both included in a new *living thing* concept (Carey, 1985, 1988). Carey and Spelke (1994) define conceptual change as follows: "Conceptual change involves change in the core principles that define the entities in a domain and govern reasoning about those entities. It brings the emergence of new principles, incommensurable with the old, which carve the world at different joints." (p. 179). Accordingly, it consists in the creation of new ontological categories through conceptual differentiation (*ibid.*).

Wellman and Gelman (1992) have proposed that *foundational frameworks* are constructed as children's concepts coherently fuse into theory-like systems of understanding. In that context, they stress the importance of *coherence* and *consistency*, which concern, respectively: the reliance of one concept on another, and the contradictions between concepts. One could then hypothesize that the god concept is *coherent* with the one of the human being but not fully *consistent* with it. The degree of non-consistency could represent the extent to which god is perceived as different from a "standard"

human being. Following this line of thought, it appears that maintaining such coherence alongside partial consistency is rather intuitive than not, therefore leading to maintain conceptual bonds between God and the human being.

Children nevertheless do face conceptual challenges when confronted with overlapping properties or transgressions in core principles of some categories. For example, sand does abide by the continuity principles of physical objects but does not obey cohesion, and therefore fits *matter* better. Likewise, the Christian God may display love and benevolence, which are qualities typically attributed the concept *person*, which is also part of *living things*. At the same time, God may not be understood only as a living thing, but is not necessarily as a *physical object*, and so on. Conceptual reorganization may occur in children based on their own experiences and education, which goes beyond simple conceptual enrichment (Carey & Spelke, 1994). Education is a particularly relevant potential source of influence on developing a concept of God, given that unlike for many concepts there is no real-life referent for this category. Using *mappings across knowledge domains (ibid.)* may apply to the notion of God, and modifications in the core principles of the domains concerned would then be expected to lead to alterations to God representations.

In a similar fashion, children may use *analogical reasoning*, which is defined as the “identification and transfer of an explanatory structure from a known system (the source) to a new and relatively unknown system (the target)” (Vosniadou, 1989). Such reasoning can take place between two systems across domains on the basis of similar salient properties and evoke structural resemblance and facilitate knowledge acquisition for new conceptual systems where current knowledge is unable (e.g., in the absence of a real-life tangible referent, such as in the case of God). The more richly structured a representation system is the more potential it has for drawing relational analogies with others. Analogies between God and a person may be based on either surface properties (e.g., physical human-like resemblance) or structural properties (e.g., intentions, thought, deliberate action), and, referring earlier claims, one is not more abstract than the other but situated at a different level of analogy. Theory change may occur through the use of (other) analogies when existing theory is deemed no longer adequate. This is how religious education or frequent reflection on the topic of God may lead to a wider variety of analogies - besides the human being, which is the most frequent one. Furthermore, multiple analogies may support the understanding and acquisition of complex concepts (Spiro, 1988). This corresponds even more closely to how God is understood in a Western Christian environment, as complex and of a manifold nature (Gibson, 2008). Progressive de-anthropomorphization of God representations and ontological hybridism may therefore partly be explained by resorting to analogies.

The Importance of Testimony in Children's Development of Various Concepts

Children may have spontaneous ideas about certain notions, and for example be called "intuitive theists" (Kelemen, 2004) when it concerns their initial understanding of the religious domain. However, they do not grow up in a vacuum. They may rely much on claims that are made by other people around them. In particular, Harris et al. have investigated how children's development of certain concepts might depend on what they hear or see from adults, that is on the testimonial evidence that is provided to them. Harris and Koenig (2006) have shown that children's acceptance of other individuals' testimony does not only apply to the empirical domain but also to domains for which they cannot benefit from first-hand observations, such as religion and spirituality. Importantly, they do not only repeat what they are told, but they rework that information into coherent conceptualizations of the domains concerned. Indeed, testimonial might be at times incomplete and they need to fill in the gap. Testimonies may also not only complete children's current understanding of a notion but be clearly conflicting with their own views (e.g., the fact that the earth is shaped as a globe). Those intuitions do not seem to block later acceptance of testimonial claims.

Harris, Pasquini, Duke, Asscher, and Pons (2006) have explored children's judgement about different sorts of entities between 4 and 8 years of age: real entities (e.g., cats), scientific entities (e.g., germs), endorsed beings (e.g., Tooth fairy, God), equivocal beings (e.g., monsters), and impossible entities (e.g., flying pigs). The goal was to examine children's intuition about the ontological status of such entities. Importantly, apart from real entities, children have never had access to firsthand observations for the other kinds of entities under scrutiny. On that basis, their own beliefs, their perception of others', their degree of certainty and the types of justification they use likely reflect the surrounding discourse about the entities concerned. Similar patterns were observed between beliefs about the scientific ontological category and the endorsed beings category. However, children were more confident that scientific entities exist - arguably reflecting the relative degree of consensus about them in the discourse they are exposed to. The types of justifications they gave also differed. Interestingly, while they gave more generalization arguments to justify the existence of the former they were also less sure about their appearance - unlike for endorsed beings (such as God).

This new set of evidence departs slightly from assumptions made by theory-theorists that children progress towards more objectivity, as well as from a strictly Piagetian framework, given that they rely on second-hand observations. The importance of children's background, from early on, can be shown also through a careful re-reading of Evans's (2001) study by Harris and Koenig (2006). Evans (2001) has compared 6-, 9- and 11-year-olds belonging to two different groups - coming either from a

fundamentalist or non-fundamentalist community - with regard to their understanding of creation and evolution. Findings indicate that children from the fundamentalist group, at all ages, support creation explanations more strongly than in the non-fundamentalist group, even among 6-year-olds.

Trust is an essential aspect of testimony reliance. Children prove to be sensitive to informants' accuracy, to predict future behaviors on that basis and to adjust their own attitude to specific informants as sources of information (Clément, Koenig & Harris, 2004; Koenig, Clément & Harris, 2004).

In the case of religious beings, of course, their minimally counterintuitive qualities (MCI; Boyer, 2001) add to the reasons why children should remember and recall them a certain way, besides being influenced by claims they hear about them.

Complexity of God Figures: A Multiple View

Un-dichotomizing a Binary-Based Change and Calling into Question Non-Anthropomorphic-Abstract/Symbolic Connections

It seems necessary to propose a somewhat more nuanced outlook on children's drawings of God with regard to the issue of anthropomorphic-concrete and non-anthropomorphic-abstract/symbolic connections that have been made in past research. Such assumptions have strongly relied on a Piagetian framework of cognitive development to explain how growing out of the concrete operational stage (by 11-12 years old) may coincide with more abstraction abilities in children, which should thus translate into more "abstract" or "symbolic" God representations, that is, non-anthropomorphic ones. Positing that non-anthropomorphic figures are more abstract/symbolic appears mistaken in that a human figure, a bird, a cloud or a light are no more no less abstract than one another. In fact, both a light and a human being may be used as metaphors for protection and guidance, and their drawn form does not impact on their level of abstraction.

Nevertheless, the notion of centration-decentration - still borrowed from the Piagetian framework - might be more useful to interpret such a shift in children's God representations. Centration is characteristic of the preoperational stage and consists in looking at only certain - *egocentric* - aspects of a situation (Piaget & Inhelder, 1969). In the present context, it may lead young children to focus particularly - and almost exclusively - on anthropomorphic properties, but as their cognitive development goes on children may simultaneously take into account other, non-anthropomorphic, aspects of the God figure as they conceive of it by proceeding to stronger decentration. Although this notion seems to apprehend the occurrence of non-anthropomorphic

features better than abstraction abilities it still struggles to explain how such features should even appear, given that there is no incentive to do so. Indeed, unlike a problem-solving situation, expressing a representation of God may not consist in looking at a relatively wide range of elements otherwise present 'out there' from the very beginning, but may require to tap into a potentially complex conceptual network, with ontological categories overlapping when activating the concept of God.

Types of God Representations and their Multiplicity

God representations might be particularly composite and complex, and such complexity may be modeled in different ways. The generic term *god representations* (Davis, Moriarty, & Mauch, 2013) may comprise two distinct kinds of representations (Lawrence, 1997; Rizzuto, 1979): the *God concept*, being explicit, intellectual and conscious, on the one hand, and the *God image*, being implicit, emotional and mostly unconscious, on the other hand. The former may be called the "head" God and the latter the "heart" God (Davis, Moriarty, & Mauch, 2013). Another distinction has been made by Barrett and Keil (1996), who have posited that people hold at least two parallel god concepts: one is anthropomorphic and readily accessible in daily life, particularly when cognitive resources are limited, and another one is theological and deeply reflected upon, and mostly non-anthropomorphic. According to these authors, the task itself could not drive on its own people to anthropomorphize a God concept that is exclusively non-anthropomorphic. An alternative view may be that the God concept is twice anthropomorphic instead: it is rooted in anthropomorphism from early conceptual development, drawing on the human being as an exemplar of the psychological category, and it is also likely explained in very anthropomorphic ways when cognitive resources are limited due to our general inclination to anthropomorphize the world around us. Therefore, the more theologically elaborate characteristics of the God concept may reflect only more cognitively advanced accounts about God, without changing its mere anthropomorphic core. This interpretation is scientifically more economical, given that it does not assume the existence of several God concepts, but only different aspects of it that are evoked differently depending on the situation. Also, without corresponding exactly to descriptions of the God concept or the God image, it lines up with notions of implicit and explicit expressions of that concept somehow.

Consistent with this idea, several God schemas may be derived from a God concept in which they are embedded (Gibson, 2008). A schema can be defined as: "a cognitive structure that represents knowledge about a concept or type of stimulus, including its attributes and the relations among those attributes" (Fiske & Taylor, 1991). Schemas are stable and accommodate new information and experiences into their structure rather than otherwise (Neisser, 1976). God schemas can be distinctly triggered, and even occasionally overlap, at different points in time (Hill & Hall, 2002), which according

to Gibson (2008) lends itself to the notion of a *working God concept*, temporarily accessible to one's consciousness, just like it is the case of the working self-concept. Consequently, based on one's recent experiences God may be more readily accessible as loving or judgmental, for example, without those qualities having to refer to distinct concepts, but only to different schemas.

Conceptual Hybridism: A Case for God Representations?

Looking at this issue with a more ontological lens on, one may suppose that God representations are conceptually hybrid, drawing on various concepts, and mostly the human being, in order to form as a concept. This paves the way for the current claim that the God concept may be hybrid. Vicente and Martinez Manrique (2016) have argued in favor of the existence of conceptual hybridism. But before delving into more advanced theoretical considerations it will be necessary to have in mind two central notions of concepts borrowed from the cognitive sciences: *prototypes* and *exemplars*. Prototype theories posit that a prototype is an average representation of a concept, thus it is liable to change and depends on input properties of exposure to new entities that belong to that category (Lin & Murphy, 1997). The other notion is *exemplars*. Exemplars are prominent examples of a given category and their prominence is representative of the frequency of encounter with them (Reisberg, 2015). Exemplars may be retrieved from memory more quickly and with more ease due to their high accessibility (Rohrer, 2002).

Now, in their defense of conceptual hybridism, Vicente and Martinez Manrique (2016) have suggested that two theoretical perspectives are particularly relevant. The first one, the Varying Abstraction Framework (Verbeemen, Vanpaemel, Pattyn, Storms, & Verguts, 2007), posits that several exemplars - or pseudo-exemplars - can be available for one same category and that these might even be merged together into one representation. Pseudo-exemplars are derived from both prototype-like and exemplar-like properties. Varying levels of abstraction may be reached, from total abstraction involving one prominent single exemplar to lesser degrees of abstraction, meaning that several exemplars are competing because simultaneously accessible in memory. The second one, the Conceptual Structure Approach (Moss, Tyler, & Taylor, 2007) proposes that concepts, as they are activated in memory, depend on special features, on the distinctiveness of those features and how likely they are to occur together. Their distinctiveness is based on their prototypicality, and the way a concept is activated will depend on the relationships between several key features characterizing its internal structure. It is also claimed that features not being eventually selected can still bear influence on the ones that will access the working memory and therefore be explicit.

Both hybrid perspectives are potentially insightful for considering God representations. In the context of drawings of God, children might be calling forth a conceptually hybrid representation for

the task. This might be due to either the co-activation of several pseudo-exemplars to one's awareness or to the co-occurrence of key features characterizing that concept. Moreover, both perspectives are able to account for slight differences occurring between instances of recall of a concept (e.g., leading to varying god representations) all the while one central criterion for hybrid concepts is maintained, that is, *functional stable coactivation* (Vicente & Martinez Manrique, 2016). On the whole, a hybridist view of the God concept stands as a good candidate to explain why drawn God figures tend to combine several semantic categories (e.g., human being, bird and other animal sub-categories, light, fire and other inanimate categories, vegetal and so on).

Ontological categories have classically been explained as combinations of predicates and terms depending on predicability relations concerning basic categories of existence (Sommers, 1959). There are two central distinct aspects of concept development, either through the emergence of a new category (implying conceptual insight) or through refinements (then not necessarily ontologically based) between two close categories (Keil, 1983).

If the expression of categories of being (ontological categories) associated with God changes across individual development, either in their nature or in the respective prominence, there must be some reasonable explanation why. Drawing on previous research, one consistent observation is that the human being is an early and very important category for conceiving of God. One plausible explanation may thus be that a progressive conceptual differentiation from the human being operates following cognitive development. To do so, human features may be dropped aside or/and some "extraneous", non-human elements are included in the conscious formation of the God representation. Alternatively - and not necessarily in contradiction - it might be that there are variations across development regarding the relative prominence (or selection) of exemplars or features within the conceptual network. Besides these process-oriented considerations it is likely that the forces that drive such conceptual refinement pertain both to the general formation and evolution of categories occurring throughout a child's development, on the one hand, and to specific education on one particular topic. For example, it is naturally expected that anthropologists have a sensibly different view on the social world than non-anthropologists, which does not hold essential truth but only a way of understanding, a theory. Similarly, religious schooling might lead to a more worked-on concept of God.

Having all those notions in mind, it is now possible to consider past research on children's drawings of God, with the binary view on anthropomorphism that has generally been proposed. The next step after that will be to suggest a revised developmental perspective on God representations. That perspective lends itself well to empirical testing on visual data, such as children's drawings.

Anthropomorphic vs. Non-Anthropomorphic God Figures in Children's Drawings of God

A classical view on God concepts is that they are initially “crudely” anthropomorphic (Gorsuch, 1988) but then come to grow into more symbolic or abstract forms of representations, following the child's general cognitive development. Different theoretical frameworks have been used to explain such a change overtime: while a Freudian perspective would posit that the God concept presents itself as the projection of one's father (Freud, 1927) under a Piagetian framework God is assumed to be understood after one's own parents, and can only be appreciated with more distance as one reaches higher stages of cognitive development (Piaget, 1929). Such a shift could be revealed in experimental tasks (Goldman, 1964) and interviews (Nye & Carlson, 1984), but mostly it has been shown in children's drawings.

When asked to draw God, younger children are usually found to compose very anthropomorphic representations, unlike older children who tend to draw non-anthropomorphic. This was suggested by Harms' (Harms, 1944) seminal paper on children's drawings of God, in an US environment, but has been replicated in various Western Judeo-Christian environments (Hanisch, 1996; Kay & Ray, 2004; Ladd, McIntosh, & Spilka, 1998; Pitts, 1976; Tamm, 1996) as well as in non-Western and non-Christian environments, such as Japan (Brandt, Kagata Spitteler, & Gillièreon Paléologue, 2009) and Buryatia (Dandarova, 2013). This is firstly consistent with a widespread major role of anthropomorphism that can be shown in the religious domain, which is consistent with Guthrie's thesis of anthropomorphism, and secondly this somehow supports the primary role of cognitive development over culture.

From this body of research different age ranges have been reported: 3 to 18 years of age (Ladd et al., 1998); 9 to 19 years of age (Tamm, 1996); 6 to 15 years of age (Dandarova, 2013); 6 to 10 years of age (Pitts, 1976); 7 to 14 years of age (Brandt et al., 2009); 7 to 16 years of age (Hanisch, 1996). For reasons of sampling and methods discrepancies - as well as occasional lack of data available - it is difficult to detect whether there is a sudden drop of anthropomorphism or if it is a progressive phenomenon taking place over years instead. Based on Hanisch (1996), the existence of a sudden shift may be hypothesized. Moreover, drawings of God judged to be non-anthropomorphic are likely to be observed to some extent at any age (e.g., Tamm, 1996).

Besides age, religious education and socialization seems to play a “facilitating” role towards the use of non-anthropomorphic God representations. Hanisch (1996) has reported an earlier shift among children being formally exposed to religion compared to children who had had no prior

exposure to religion: anthropomorphic figures dropped from 70.3% to 21.1% between 10 and 16 years of age in the former, and went down from 91.9% to 76.2% between the same age range in the latter. A similar effect of religious schooling was found in Brandt et al. (2009). Concerning potential differences between religious denominations evidence is inconsistent whether this is a significant factor (Pitts, 1976) or not (Ladd et al., 1998).

There are a number of issues with the usage of terms describing what is not anthropomorphic across those studies. Some authors referred to *symbolic* (Ladd et al., 1998), *abstract* (Pitts, 1976), *non-anthropomorphic* (Brandt et al., 2009; Hanisch, 1996) or *non-figurative* (Dandarova, 2013). Besides disparity of meaning and terminology, it is not always very clear what is being assessed, whether it is the God figure identified in the drawing or the entire drawing composition. In addition, different forms of epistemic hurdles have been noticed: a binary view of anthropomorphism has often been adopted to describe developmental changes (e.g., Tamm, 1996); categories of being might be somewhat arbitrarily ordered along some level of abstraction (e.g., Brandt, 2009). Examples of more adjusted measures can be found in Ladd et al. (1998) and Pitts (1976), who have specifically employed measures of symbolism and anthropomorphism, respectively. However, there is a lack of clarity regarding what the precise object of study is in the former, and the latter has used measurements that may be appropriate for drawings of human beings (see the Goodenough-Harris Draw-A-Person test) but show limited application on often incompletely human-like drawings of God. Yet what is common to all such research is that there seems to be an overall tendency for children to draw away from merely anthropomorphic God representations as they grow older.

This general literature review of relevant theoretical constructs, on the one hand, and of children's drawings of God, on the other hand, can now lead to the eventual goal of the current chapter, which is to suggest a revised developmental perspective on anthropomorphism in God representations.

A Revised Developmental Perspective on Anthropomorphic God Representations: Progressive *De-Anthropomorphization*

As it has been shown already, anthropomorphism in religion can be understood as the “systematic application of human-like models to nonhuman in addition to human phenomena” (Guthrie et al., 1980). The current perspective departs from such views by looking at this issue from the other end. Anthropomorphic forms of God in individual representations will be considered a first conceptual

anchor. Unlike the HADD postulated by Barrett, the current view does not attend to perception under cognitive constraints, but instead on the deep conceptual construction of the divine.

The main issue at stake is therefore how such representations lose their humanness, that is, how they are *de-anthropomorphized*. According to this revised perspective, it is not (only) a matter of shift (i.e., from anthropomorphic to non-anthropomorphic), but (also) a question of balance between ontologies (i.e., between humanness and non-humanness). *De-anthropomorphization* will be defined, as a first step. As a second step, the developmental course of God representations, on that basis, will be hypothesized. More specifically, the following question will be attended to: if God representations are initially mostly anthropomorphic, how do they become progressively less 'human'.

What is Entailed by *De-Anthropomorphization*?

There are a few theoretical assumptions that are implied by the wording *de-anthropomorphization*.

Firstly, *un-doing* something supposes that there is an initial representation of that something. In this case, it means that the subject conceptually grasps the idea of a human being in a first stage and then proceeds to some alteration of that idea in a second stage.

Past developmental research indicates that children are capable of representing the human being from early on. At a graphic level, children as young as four years of age manage to draw a human figure that can be recognized as such, and from 5 through 6 years old they are generally able to draw the limbs with increasing details, including the extremities (Royer, 2011).

At a conceptual level, children start off drawing broad distinctions between a category of things and a sentient being category (Carey & Spelke, 1994). Ultimately, through conceptual, change they come to make finer distinctions within each category and to more accurately recognize what is human from what is not.

Secondly, it entails that some characteristics brought to a human figure contribute to an alteration of its humanness. In a second stage to grasping the idea of a human being, there is some alteration brought to that human figure, in such a way that it is no more recognizable as an entity that entirely fits the human category. Such alteration may take place outside the human category or within it. More specifically, elements associated with other categories of being (i.e., ontologies) may be brought into the representation. Similarly, typically human elements may, by their presence or their absence, alter the human nature of the figure. Examples are provided on the third point addressing assumptions to *de-anthropomorphization*.

Some similitude may be found outside the study of God representations. Research in developmental psychology has shown that when asked to draw the version of an entity that does not

exist (e.g., a person, a house or an animal that do not exist) children as young as 4 years old exhibit abilities to do so (Karmiloff-Smith, 1990), even though there is an increasing complexity following cognitive development.

Regarding potential sources of alteration, it was admitted within the frame of this research that the context in which the God figure would be depicted could potentially contribute to de-anthropomorphizing it. This may contradict Pnevmatikos (2002), up to some point, for he has contended that the background is not an indicator of 'conceptual change' about the God figure, but only a possible sign of 'belief revision'. Nonetheless, if the point of interest lies in whether the God figure is ontologically altered as a human being, the background should be relevant. Indeed, one may consider properties that happen to be called *superhuman*. In that respect, properties such as the ability to self-propel into the sky or to hover over the ground do convey non-human properties, making the figure somewhat veer off the human category, as they do not apply to any ordinary human being. Such qualities may not only be superhuman but more broadly *supernatural*, making the ontological nature of the God representation more complex and not only human.

Thirdly, such alteration may be communicated through the inclusion of elements taken from categories other than human or may as well be conveyed within the human category. In that regard, de-anthropomorphization was conceived of as combined sameness-otherness with the human being, following Guthrie's (Guthrie, 1993). Guthrie did not make any particular distinction between a human or non-human base to start off with, as a conceptual anchor, but the current study did. The main rationale for doing so was that the authors positioned anthropomorphic God figures and non-anthropomorphic ones on two extreme ends of a continuum. This combines a categorical approach with a dimensional one: anthropomorphic determines the human category and non-anthropomorphic stands for non-human categories, with, in-between, some forms that combine both with various proportions. Closer to the anthropomorphic end may be found figures that are not only human but are mostly so - i.e., human-based - therefore they are 'de-anthropomorphized'. For example, an angel will generally be drawn as a human figure with wings and a nimbus, but at a representational level, it is mostly human. Near the opposite (non-anthropomorphic) end, non-human figures (i.e., non-human-based) may include some human characteristics, hence be 'anthropomorphized'. With this third point being considered, the reader may now get a better sense of what is meant by *de-anthropomorphization* in the context of the current study and what the conceptual background was.

Additionally, it was also contended that de-anthropomorphization may be administered to a human figure in the absence of any reference to other categories of being, that is, while remaining within the human category. For example, a figure may be represented as lacking essential features such as a face, or with extra human features, such as supplementary pairs of arms. Conceptually, this

adds a dimension to de-anthropomorphization, besides the anthropomorphic-non-anthropomorphic axis.

On the whole, de-anthropomorphizing, *as an effect*, will be understood as the addition or removal of any element that conveys a sense of *otherness* from the human being, ontologically. As a process, de-anthropomorphizing will be contended to apply to a human-based anthropomorphic figure. More precisely, it requires an initial human model to which ontological alterations are brought. This is relevant at a conceptual level and does presume about the exact order of a series of steps taken in a drawing. In that sense, if a cloud has eye, it will be interpreted - in the context of this inquiry - as an anthropomorphized cloud, and not as a de-anthropomorphized face. For the latter to be observed, there must be a more substantial human base to the figure, such as a human body or human bodily parts that make most of the figure.

Eventually, the current research links de-anthropomorphizing with strategies and this might require clarifications as well. Utilizing the term “strategy” might be seen as carrying the underlying assumption that the approach to de-anthropomorphizing is necessarily fully conscious. However, following Bull & Scerif (Bull & Scerif, 2001), it will be contended that generating a strategy “may be spontaneous or may arise through some kind of problem-solving process” (p. 276). Therefore, strategies will hereby be understood as corresponding to a potentially broad variety of levels of consciousness (from fully automatic to highly effortful), proceeding from a series of actions leading to a goal (i.e., combined sameness-otherness with the human being). There is nevertheless some basic speculation in considering the strict existence of a goal to de-anthropomorphizing, in the present task to draw God. Postulating such initial motivation seems however sound when addressing human-based figures, for the implicit incentive to distinguish God from an ‘ordinary’ human being should reasonably be recognized by most participants.

What Developmental Course for *De-Anthropomorphization* of God Representations in Children?

Lying in-between two extremes of a binary conception of anthropomorphism, *de-anthropomorphization* supposes two main possible ontological arrangements. In both cases, the resulting human-like figure exhibits some decreased humanness. Firstly, it may imply a combination of humanness and non-humanness, based on some ontological mixture. Secondly, by lacking characteristics that are central to the human being (e.g., a face), a human-like figure may also be de-anthropomorphized, without necessarily involving ontological mixture.

The main assumption would be that de-anthropomorphizing God representations - following either of the two main ontological scenarios - increases with age among children. A possible consequence to this is that de-anthropomorphized God figures lie on a continuum between anthropomorphic and non-anthropomorphic representations of the divine. Another possibility is that this is not a mandatory course of development, and that de-anthropomorphization may be exacerbated without ever leading to completely non-anthropomorphic God representations.

But, why should de-anthropomorphization, in this context, be mostly age-incremental? As it has been shown in previous research, there are several hypothetical reasons for this. One such reason might be that testimonies that children are exposed to (see Harris et al.) orient them in the direction of combined humanness/non-humanness. Stories told to young children about God are likely to be made more simple than more complex, theologically led considerations that the older ones hear (or see). Suggesting such an impact of the surrounding discourse leaves open the possibility that some children among the youngest may also produce some forms of de-anthropomorphized God figures, depending on how exposed they have been to concurring descriptions of the divine. Another possible reason is that they grow to reach some progressive mastery of cultural codes regarding religious representations - which typically combine humanness and nonhumanness, in the Christian world as well as many, if not most, religions. This means that they might comply more and more with the analogical complexity of such representations provided within their cultural background. This supposes that they get to articulate symbols according to cultural analogies (see Kaufman & Clément, 2007) relating to the divine.

But how could this age tendency occur? It might be permitted by increased cognitive abilities, further development of concepts and ontologies, as well as analogical thinking. One may consider that the youngest do not systematically perceive the analogical nuances that build ontological peculiarities endorsed by de-anthropomorphized God figures they are exposed to. Hence, if not detected when seen, those are not likely to be reproduced. The presumed hybrid nature of God as a concept (for conceptual hybridism, see Vicente & Martinez Manrique, 2016) is likely to lead children to represent human-like God figures with elements belonging to other ontological categories due to co-activation of conceptual networks more or less salient in the working memory. An additional psychological requirement might be that children must have acquired a sufficient *theory of pictures* (see Freeman, 1998), allowing them to even pay attention to the fact that their drawing has to be decoded by another individual, using a common visual language supporting the communication of ideas about God.

It is important to acknowledge of the role potentially played by children's creativity and divergent thinking abilities in that regard, despite their absence from the current perspective.

Nevertheless, this is not predominant aspect that should be considered because the general rationale was to make sense of the 'mainstream' ontological peculiarities.

General Scientific Rationale

The main gain at stake is to understand better how God representations may develop on this issue throughout childhood. However, there is also an incentive to be able to explain those later, that is, in adulthood. Knowing more about their progress from early on will bring a better insight into what adult God representations are 'made of', what their core is and where they departed from. Their early forms are likely to bear strong subsequent influence on future ones for they constituted the basis to their changes. It is worthwhile that the term 'maturation' is purposefully avoided, as the notion of God cannot be reasonably expected to 'grow' or to 'bloom' from the perspective of the current concept- and analogy-based approach. Instead, it can be considered that it undergoes changes as a concept or a representation, without the idea of being 'better' developed. Greater differentiation from other concepts - such as the human being - may be visible. Similarity to cultural analogies available in one's background may appear more strongly. Focusing on this type of changes is radically different from assuming a 'favorable' or 'normal' course of development for God representations with regard to anthropomorphism.

While this all concerns individual development, more specifically ontogenesis, there is an interesting parallel that could be drawn with phylogenesis. By adopting a general evolutionary perspective, cognitive approaches in the study of religions postulate the existence of various cognitive devices, information processing biases and so on, endeavoring to explain how those may have developed across the species history. Such historical development would be useful to the survival of the species, and this includes the detection of agency (e.g., Barrett, 2000; 2004) or anthropomorphism (e.g., Guthrie, 1993). The current stance does not posit a survival need to the anthropomorphization of God, among many other intentional agents. The current chapter goes in the opposite direction: focusing on more reflected representations of God (contrary to in-the-moment hasty inferences), it is supposed that the starting point is anthropomorphism, which may then be altered, either by adding non-anthropomorphic properties or by removing central human ones. If God, as a concept, is hybrid, it may be hypothesized that it benefits from a great deal of exemplars and that such a state of affairs leaves individuals somewhat perplexed. Borrowing from different concepts, and primarily from the human being, to explain the divine, might have been a social work in progress that was never "finished" due to the lack of access to real-life referents (apart from cultural productions) and to its complex hybridism. Through the production of cultural forms, including pictures, generations of social

actors have been exposed to such conceptually hybrid representations/suppositions about God. They have learned to reproduce such forms, but also to grasp the conceptual signification of such hybridism: God can be conceived of a human somehow, but not exactly so either. Therefore, without postulating a survival function, as an evolutionary perspective would do, only a parallel between ontogenesis and phylogenesis is drawn. It is based mainly on two aspects. Firstly, there is exposure to cultural forms about a concept (in this case, God) and their reproduction. Secondly, those cultural forms reflect human cognition and the more that cognition developed (as children grow up) the more able one is to conceptually grasp nuances of those forms.

By reaching a better insight into developmental changes occurring in the way children represent God, there might be in turn some light shed on the development of God representations across history. Supposing a primary layer of humanness in God, followed by some de-anthropomorphization, the current perspective would suggest that God was initially conceived of as a form of human. Then, it underwent some differentiation through decreased humanness. This might have taken the form of ontologically mixed figures or figures lacking central characteristics displayed by human beings. Importantly, such assumptions are meant to bear explanatory power for the current issue, and by no means it is intended to harm the psychological integrity of real-life individuals who would exhibit unusual bodily appearance.

Conclusion

Past research on children's God representations - for example, using a drawing method - has relied much on exclusive binaries in the understanding of anthropomorphism in such representations. The current chapter has addressed anthropomorphism in children's God representations from a theoretical viewpoint. By employing mainly a cognitive approach, it has gone over central theories in the cognitive science of religion as well as over how children may develop concepts and ontologies. Drawing on this theoretical background, it was attempted to move beyond such binaries, and a revised developmental perspective was proposed. It offered two main inputs:

1. Based on Guthrie's (1993) notions of *sameness* and *otherness*, some emphasis was put on the possible co-occurrence of both humanness and non-humanness in anthropomorphic God figures depicted by children. This equates to a cross-category approach. An additional scenario was suggested, based on a within-category approach, which is: a lack of central human characteristics. The notion of *de-anthropomorphization* was then developed for the current chapter. It implies that children begin with some conceptual anchoring in the human category for conceiving of God. They

might then proceed to ontological peculiarities, according to the above, that indicate that God is not 'only' human.

2. It was advanced that de-anthropomorphization is likely to change across individual development. In particular, it should be more pronounced as children get older. Various factors were suggested in that regard, such as adult testimony and the progressive mastery of cultural analogies. Despite drawing much on socio-cultural points of influence, the current perspective also proposed that if this is so, it is with the caveat that children have gained sufficient cognitive abilities.

In the main, this sets the ground for furthering the issue of anthropomorphism in children's representations of God by proposing more complexity and acknowledging the possible multidimensionality of this phenomenon.

The next chapter will consist in testing empirically this theoretically revised developmental perspective. The data sample will be composed of children's drawings of God from French-speaking Switzerland. Nevertheless, there will also be an attempt to replicate past findings identifying a shift from anthropomorphic to non-anthropomorphic God figures and a concurring role of religious education. By doing so, it will permit the reader to observe how data 'behave' in comparison to data used in previous studies. Moreover, with the caveat that the outcome of the replication attempt is positive, it will give more strength to the testing of *de-anthropomorphization* in that sample of drawings. De-anthropomorphization will be addressed through the identification of different such strategies possibly used by children. In that sense, the inquiry will be partly data-driven. Finally, besides those strategies, drawings of God will be considered according to the status of the representations they display (e.g., figurative vs non-figurative).

Chapter 2 - Humanness and Non-Humanness in Children's Drawings of God: A Case Study from French-Speaking Switzerland

Abstract

Introduction. Past research on children's concept of God has suggested a developmental tendency moving from anthropomorphic to non-anthropomorphic representations. The current research has attempted to replicate such findings, but also to move beyond such a binary opposition. It has therefore put a particular focus on the co-occurrence of humanness and non-humanness in children's drawn God figures. In order to inquiry into this issue, it was decided to address de-anthropomorphization strategies applied to otherwise human God figures.

Methods. Drawings of God (N = 532) were collected from 5- to 17-year-old children in French-speaking Switzerland. A data-driven model of God representations was constructed to address anthropomorphism and particularly de-anthropomorphization strategies endorsed by single human-based God figures. Age, gender and religiosity (i.e., schooling) were utilized as predictor variables in logistic regression analyses.

Results. Consistent with past research, an anthropomorphic to non-anthropomorphic progression could be replicated, as well as a similar positive effect of religious schooling. Analyses on de-anthropomorphization have revealed that age had a positive effect on most strategies (but one), and that schooling did not play a significant role in that regard. As predicted, gender was never found to be a significant predictor.

Discussion. The current findings have mainly contributed to move beyond binary oppositions concerning anthropomorphic God figures, which appear to be conceptually much more complex than previously anticipated. A potential clarification of the respective roles of age and religious schooling has also been put forth. Practice implications are suggested for education (including religious teaching).

Introduction

The previous chapter “Children’s God representations: Are Anthropomorphic God Figures *Only* Human?” has proposed an overview of relevant past scientific literature in order to formulate a revised model of anthropomorphism in children’s God representations. Most importantly, it has argued in favor of the predominant existence of composite God figures. More specifically, children would generally conceive of God as both human and non-human, at the same time. This prolongs the idea that such representations can be multiple, which had been put forth through the notion of *god-schemas* (Gibson, 2008). In the present case, the conceptual mixture that is suggested takes place on a same conceptual instance (which corresponds, in that sense, to a specific god-schema). While it echoes the idea of minimal counter-intuitiveness found in religious entities (e.g., Boyer, 1994), it moves the debate further by hypothesizing that this composite quality of God concepts undergoes changes with regard to its occurrence and its degree of complexity, as a function of age and (religious) education.

The current chapter thus proposes to test this revised model on empirical data - i.e., children’s drawings of God collected in French-speaking Switzerland. Based on the previous chapter, the general rationale of this research will be set. Then, a first study will be presented. It aimed to replicate past findings on anthropomorphism in children’s drawings of God (Brandt, 2009; Hanisch, 1998). A second study will also be introduced in order to specifically address the possible mixture of humanness and non-humanness of God in such drawings. For both studies, a conceptual visualization (in the form of a tree) will be laid out. Eventually, a general discussion will conclude this empirical work as well as act as a conclusion to the previous chapter. Further lines of research will be suggested.

Current Research

In order to examine anthropomorphism of God representations, and particularly their development across years, the current study addressed children’s drawings of God. Drawings are relevant for such an inquiry for two main reasons. Firstly, looking into in-between anthropomorphic and non-anthropomorphic representations by verbal means might come against strong obstacles, especially among the younger children. Therefore, they also allow for comparisons across wide age ranges. Secondly, drawings can be used in a free-response format and may benefit from a less restricted breadth of answers than strict experimental tasks would. Drawings of God were collected from a predominantly Christian sample of children in French-speaking Switzerland. The choice of religious denomination was motivated by a need to be representative of the local religious and cultural context,

which is mostly characterized by Catholicism and Protestantism (Reformed). That country is also geographically organized by cantons, which are officially defined by either one or the other religious denomination.

General Rationale

In summary, a first aspect that has motivated the current research was the apparent necessity to move beyond the exclusive binaries that can be found in past research in respect of children's God representations. These concern oppositions such as figurative vs not (Dandarova, 2013), symbolic vs not (Pitts, 1976), or more importantly anthropomorphic vs non-anthropomorphic (Hanisch, 1996). More generally in the psychology of religion, anthropomorphic God representations have been opposed to abstract ones (Barrett & Richert, 2003; Gorsuch, 1988). Such crude distinctions seem to miss the great diversity that can be noticed in children's (e.g., graphic) representations of God. Using methods based on an open-answer format, such as drawings, is useful in that respect because they help move past the researchers' preconceived ideas and start from the data. Constructing a model conceptualized God representations from the lens of anthropomorphism may therefore be useful, especially to grasp terminological discrepancies in past research and then be able to compare likes and likes.

One central aspect to start with was the observation that anthropomorphic God figures seemed to not 'purely' be anthropomorphic, and to incorporate characteristics that indicated non-humaneness. It is fundamental to acknowledge this given the over-focus there has been on the emergence of non-anthropomorphic figures, presumably more 'evolved' than anthropomorphic ones. Instead, this research would explore further into the latter, seeking for nuances that would possibly indicate conceptual differentiation from the human category in otherwise human God figures. Such scenarios will be deemed to pertain to what has been called *de-anthropomorphizing* strategies utilized by children. This terminology will be defined in detail in Study 2. Moreover, anthropomorphic God figures seem to compose the majority of children's drawings of God in several studies that have reported this aspect (Brandt et al., 2009; Hanisch, 1996) as well as in the current data. An additional intention was to consider drawings as multi-dimensional and thus to seek for strategies that could potentially co-occur. This would help recognizing the deep richness of children's drawings of God, by not only putting them into 'boxes'. Also, adopting a developmental perspective such decision would lead to a more nuanced, strategy-specific account, and degrees of complexity might in fact be assessed through such co-occurrence.

A second aspect motivating this research was to verify whether ontological complexity in God representations depends on schooling or gender, and particularly whether it increases as a function

of age. The main idea behind this was to export Boyer's notion of *ontological violation* in religious entities (Boyer, 1994) to the Christian tradition and to adopt a developmental viewpoint, assessing children participants, in order to trace the progression of possible patterns. While Boyer's theory relies on the assumption that the subject perceives some minimal *counter-intuitiveness* in religious entities, one may doubt that children do necessarily present such adult-like kind of perception. In fact, it could be argued either that young children fail to recognize any oddity of counter-intuitive properties of a religious entity or that some of its characteristics are understood as actually very intuitive. An example of the latter might be illustrated by imagining a human-looking God with wings, flying in the sky. The adult will likely appraise this as somewhat odd, although the child, having heard that God is a man that lives in the sky, might find it normal to have wings if you live in the sky. Nevertheless, counter-intuitive or not, some characteristics may be perceived as extraordinary. In that sense, living in the sky and having wings for a human-looking individual is quite unusual, and that unusual quality is thus all the more relevant for demarcating God from an 'ordinary' human. Now the main question is whether there is empirical evidence indicating that children do perceive the extraordinary in events or characters.

There are developmental differences in the types of causal explanations children might put forth when facing a variety of phenomena. It has been shown that 4-year-olds tend to provide 'magical' explanations more than 'physical' ones, unlike 5-year-olds, who are more inclined to the latter (Rosengren & Hickling, 1994). Similar work with preschool children has been carried out by Harris et al. While 4- to 6-year-olds are capable of distinguishing between fantasy and reality when presented different types of items, it is not systematically clear to them whether an imagined creature could become real or not (Harris et al., 1991). Similarly, children aged 3, 5 and 7 years consistently distinguish between reality and fantasy ('magic') without necessarily discarding fantasy from potentially becoming real (Johnson & Harris, 1994). On that basis, it has been suggested that children may classify events not only as real or not. Instead, events might be judged as unexpected, impossible or magical (Harris, 1994).

From that body of research, it can be gathered that although there are fine nuances in the way children interpret unusual events, even preschool children do perceive the extraordinary aspects of certain entities or situations. Firstly, from a developmental viewpoint, it is sufficient to assume that the participants from the current study present such ability. Secondly, the essence of the current inquiry deals, not the interpretation of a situation happening but, with the active expression of an idea, and the graphic representation of that idea might draw upon extraordinary qualities. To illustrate this point, when investigating ways of de-anthropomorphizing in children's drawings of God, the interest lies not in whether they believe it might be true or not, but mainly in how unusual it is. That

unusualness is exactly what may be brought on the table to mark a central difference between God and an ordinary human being. As children, early on, are able to make distinctions between a variety of sub-categories within the sentient beings category (Carey & Spelke, 1994), expressing some form of non-humanness in co-occurrence with humanness in the God figure is all but trivial. Using one's knowledge about different categories, including the human being, is likely to reveal some of the conceptual underpinnings of the God figure as children understand it.

The current research therefore aimed to test this. The main hypothesis that was formulated for Study 2 posits that non-humanness would become more acute (as a matter of frequency and complexity) with age due to conceptual refinement - rather than diminish as a result of more accurate perception. A particular case may be found in de-anthropomorphizing human God figures, which might conveniently be tested in children's drawings, based on the strategies reported in a theoretical model ensuing from Study 1.

Going beyond the idea of ontological violations (Boyer, 1994), the current research would draw upon conceptual change occurring when categories undergo major refinements (Carey & Spelke, 1994) as well as the possibility that the concept of God might be a hybrid one (Vicente & Martínez Manrique, 2016). Based on the latter, one would assume that mixing humanness with non-humanness in a same God figure would reflect an underlying mix of conceptual networks. The assumption for such a mix to be age-incremental borrows from Piaget's notion of *distantiation* (Piaget, 1929, 1951), allowing one to progressively understand the world from a less egocentric (including anthropomorphic) perspective.

Finally, despite willing to provide a much more nuanced account of anthropomorphism in children's God figures, the current research should, for the sake of credibility, attempt to reproduce previous findings relying on anthropomorphic vs non-anthropomorphic representations, that is, Hanisch (1996) and, up to some point, Brandt et al. (2009). Similar to those studies, the current inquiry used a rather large age range for the sample.

Purpose of this Research

The purpose of the current research was to draw upon past research on anthropomorphism in children's drawings of God and to move the inquiry further. Two studies were conducted. The first study consisted in an attempt to replicate past findings showing a shift from anthropomorphic God figures to non-anthropomorphic ones. It was also intended to bring more clarity in the hierarchical system underlying such types of drawings. The second study was meant to move beyond exclusive binaries, and a specific issue was explored: human-based God figures were assessed for the de-

anthropomorphization strategies they exhibited. This is a way of acknowledging the co-occurrence of humanness and non-humanness in God figures drawn by children.

General Method

This section will present the data collection process and measures utilized for the current inquiry. The data used for Study 1 and Study 2 are equivalent and specifics to each study will be outlined in those respective sections.

Data Collection

Participants

A total of 532 participants aged 5 to 17 years old (*Min* = 5.64 years, *Max* = 17.24 years, *Mean* = 11.05 years, *SD* = 2.46 years, 51.3 % girls) have provided a drawing of God that was included in analyses for the current study. Children were met in French-speaking Switzerland either during regular state teaching (43.2%) or in a religious teaching context. The latter was divided into either confessional religious class at school (like it was the case in the canton of Fribourg) or as an after-school activity. It consisted in either Protestant or Catholic catechism, roughly equally divided in the group of participants met in a religious teaching context.

Consent was obtained through opt-out for approximately half of the sample, and through opt-in (involving written parental consent) for the other half.

Materials

Participants were all given the same materials in order to respond to the drawing task, that is: an A4 sheet of white drawing paper, an HB pencil, a ten-color set of wax pastels (yellow, orange, red, pink, purple, blue, green, brown, black, white) and an eraser. Participants were also given a questionnaire (after the drawing task) covering religiosity measures.

Procedure

Participants were met in small groups (about 10 children at a time) in a same room and in the presence of their teacher. All were sat in such a way that would discourage copying from one another, and ideally had one table each. In order to preserve spontaneity, they did not know in advance what the task consisted in exactly. The task was fourfold and involved: a drawing task (i.e., a drawing of God), a written task recall, a written description of one's own drawing and a questionnaire. The entire task was covered in one session, that would generally last 30-50 minutes, although children were told that they could take as much time as they needed.

Concerning the drawing task, more precisely, children were asked if they had ever heard the word “God” and were told they could close their eyes to imagine. They were then asked to draw God as they had just imagined. More details about the wording can be found in Dandarova Robert et al. (2016). It is worthwhile that all reference to gender articles were avoided, in order not to influence the type of representation (e.g., feminine or masculine, anthropomorphic or not). This task may be deemed a free-drawing task in the sense that children were not required to perform according to some predetermined criteria, but following an open answer logic instead.

Children moved on through the task quietly and individually, and would raise their hand to call a researcher over at each step or if they had any question. The next sections would not be known in advance, which was particularly important to maintain a complete answer to the drawing task (e.g., children would thus not be tempted to spread their ideas about God throughout the different segments of the task). After the drawing instructions had been given to the group, all subsequent one-on-one interactions would be performed by whispering.

The task recall was used to ensure a good understanding of the task. The written description of one’s own drawing was then helpful to alleviate possible ambiguities in the drawing and facilitate the identification of all elements. It was used in the current study only to the extent that the text would relate to what the viewer can actually see in the drawing. Later elaborations would not be taken into account, but only the drawing itself. Some of the younger children (in-between 5 and 9) would sometimes need some help from a researcher regarding the writing, who would then transcribe into text what the child was explaining. Eventually, participants would answer a few written questions about their own religiosity and religious socialization. To conclude, they were all thanked and congratulated on their drawings.

Religiosity Measures

The main religiosity measure of interest was *religious schooling*, which is described above in this section, and is based on the context in which the data were collected.

From the questionnaire, *religious affiliation* and *prayer practice at home* were reported. The sample was predominantly religious in the sense that 69.4% have reported identifying themselves according to at least one religious denomination, versus ‘does not know’ (16.7%), ‘no religion’ (2.3%) or both (0.2%). The majority of participants identified according to a denomination from the Christian tradition (64.7%), in descending order: Catholic (38.9%), Protestant (24.2%), Orthodox (0.4%), Evangelical (0.4%) or unspecified (0.8%). Other religious traditions included: Islam (3%), Buddhism (0.9%), Judaism (0.6%). It is worthwhile that there is some overlap between religious traditions:

Catholic-Muslim (0.2%). There are missing data for 9.8% of the sample on this question. Finally, 1.7% have reported being both religiously affiliated and 'does not know'/'no religion'.

Concerning their prayer practice, 51.9% of this sample have reported praying at home, versus not. There are missing data for 10.1% of the sample on that question.

With regard to possible between-group differences for schooling on affiliation and prayer practice, it could be observed that: 76.2% of the religious schooling group reported being religiously affiliated in contrast with 64.8% of the regular teaching group. Similarly, concerning prayer practice, 54% reported that they prayed at home in the former group and 49.1% in the latter. Despite the group met during religious schooling exhibiting slightly greater religiosity, both groups may be considered relatively religious.

Religious affiliation and prayer practice were useful to get a better grasp of some religiosity aspects of this sample. However, religious schooling is the only religiosity measure that would later on be used for the core of the current inquiry. One main reason is that there is not particular incentive to consider affiliation or prayer practice when examining anthropomorphism, based on previous research. Another main reason is that due to missing data on those measures and the nature of the statistical analyses that would be conducted, including those two measures as independent variables would have a detrimental effect on the sample size, which one would already be made smaller after narrowing down through the anthropomorphism model (which will be presented below).

Predictor Variables

Three predictor variables were used for statistical analyses: age, gender and schooling. Measures are reported for the total N = 532 sample. Firstly, age was recorded as a continuous variable (using the child's exact date of birth and the date of testing): *Min* = 5.64 years, *Max* = 17.24 years, *Mean* = 11.05 years, *SD* = 2.46 years. More details about the age distribution are provided in Table 1.

Secondly, gender was recorded as whether the child was a girl (273, 51.3%) or a boy (259, 48.7%). Thirdly, schooling was recorded as whether the child was receiving non-confessional schooling (230, 43.2%) or religious schooling (302, 56.8%).

Table 1. Age distribution

Age (years)	Frequency	Percent
5	1	.2
6	14	2.6
7	43	8.1
8	84	15.8
9	57	10.7

10	62	11.7
11	53	10.0
12	72	13.5
13	71	13.3
14	62	11.7
15	10	1.9
16	2	.4
17	1	.2
<i>Total</i>	532	100.0

Religious Affiliation and Prayer Practice

Children answered questions addressing their own religious affiliation and whether or not they prayed at home. Among the initial N = 532 sample 379 (71.2%) children identified as religiously affiliated, 101 (19.0%) did not do so or did not know, and for 52 (9.8%) this piece of information was missing. Regarding prayer practice, 276 (51.9%) reported praying at home, 202 (38.0%) reported not doing so, and for 54 (10.2%) this piece of information was missing. It could be observed that, overall, participants from this sample were rather religious, and especially Christian: Catholic Christian (38.9%), Protestant/Reformed (24.2%), Does not know (16.7%), Muslim (3.0%), Atheist (2.3%), Affiliation and Atheist/does not know, (1.7%) Buddhist (.9%), Christian/not specified (.8%), Jewish (.6%), Orthodox Christian (.4%), Evangelical Christian (.4%), Several affiliations (.2%), Atheist and does not know (.2%). It is worthwhile that the proportion of children identifying as Muslims or Jewish was low (3.6% altogether), therefore the larger proportion of non-figurative representations of God found in the current sample could not strictly be put down to religious denominations that discourage representations of the divine. Moreover, only one child identifying as Muslim was found to produce such an indirect representation of God (others were Christians or uncertain about their religious affiliation).

It was decided that religious affiliation and prayer practice would not be used as predictor variables for a series of reasons. Firstly, there was a relatively high proportion of missing data in that respect (60 cases, 11.3%), and this could become problematic taking into consideration that sub-samples would progressively be used while reaching down to more specific strategies on the theoretical model tree. Secondly, a logistic regression analysis was conducted on anthropomorphic vs non-anthropomorphic figures (outcome variable) for explorative reasons - which corresponds to the crudest anthropomorphism-related distinction in the current inquiry. The statistical model included age, gender, schooling, religious affiliation and prayer practice as predictor variables (missing cases were filtered out). While schooling had a statistically significant effect ($p = .025$), neither religious

affiliation ($p = .100$) nor prayer practice ($p = .566$) did get close to significance. In regard to the potential loss of participants for missing cases and the poor contribution of those two variables, they were not included in further logistic regression analyses.

Statistical Analyses

This concerns both Study 1 and Study 2. Given the binary nature of the outcome variables examined it was decided to systematically conduct binomial regression analyses with the following predictor variables: age (continuous), gender (female coded as 0, male coded as 1) and schooling (non-confessional coded as 0, religious coded as 1). Alpha was set at 0.05. Based on statistical analyses from both studies, in order to balance risk for type 1 and type 2 errors, an adjusted p value was computed with Benjamini-Hochberg's (Benjamini & Hochberg, 1995) false discovery rate method for multiple testing.

Study 1 - Anthropomorphic vs Non-Anthropomorphic God Figures: A Replication Study

Aim, Objective and Research Question

The aim of this study was to replicate past findings on anthropomorphic vs non-anthropomorphic God figures in children's drawings of God.

The objective was twofold. Firstly, there was an interest in tracing roots of anthropomorphic and non-anthropomorphic God figures in relation to the whole data set. This first step would bring more clarity to anthropomorphism in relation to children's drawings of God. It is particularly useful in regard to discrepancies in the past literature. Secondly, it was meant to replicate past findings on this issue in a sample from French-speaking Switzerland.

The research question was twofold. Firstly, how may the sample be organized according to a hierarchical system that relates to anthropomorphism? Secondly, could past findings using an anthropomorphic vs non-anthropomorphic opposition be replicated in this sample of drawings?

Hypotheses

Based mainly on Hanisch (1996), as well as Brandt et al. (2009), it was expected that both age and religious schooling would have a positive effect on the occurrence of non-anthropomorphic God figures, but gender would have no effect.

Construction of a Model of Anthropomorphism in God Representations

A basic model was proposed to capture discriminate between anthropomorphic vs non-anthropomorphic God representations. General considerations about the construction of that model will be provided, followed by the ensuing classification system employed to categorize the data.

Classification Procedure

The data were examined by the first author, who was particularly familiar with the data. The classification system that has ensued then is based on both expectations (top-down) and observations in the data (bottom-up). Indeed, it was considered that an anthropomorphic vs non-anthropomorphic distinction within the data was not reasonable if carried out without caution. For that reason, differentiations anterior to this were made and will be presented below.

The object of study was the drawings of God themselves, and while there was access to children's written descriptions of their own drawing, this was used only to potentially clarify their understanding ambiguous aspects. The condition was that only what is visible in a drawing should be assessed, and if the text added extra information that was not in the drawing then it was not considered. This was meant to limit over-interpretation. Similarly, despite their obvious religious connotation, drawings were inspected for the point in time that was represented in the depiction. Therefore, the impact of the rater's theological knowledge was minimized in order to avoid potential biases due to speculations about the child's own knowledge or intentions.

Classification System in the Model

A data-driven classification of drawings was achieved by putting a main focus on anthropomorphic representations of God which took the form of a model. The model is reported in Figure 1. It starts with the N = 532 sample of children's drawings of God from the French-speaking Swiss sample. Until getting to that final number, some drawings that were not useable for research were discarded: ten drawings did not respond to the task (unrelated to the topic) or lacked interpretability.

Drawings were first categorized based on whether God representations of God are direct (figurative) or indirect (non-figurative). It appeared important to take this aspect into account at the very start of the model given that the anthropomorphic qualities of a God figure could only be appreciated if such a figure had been depicted. Typical examples of drawings with indirect God representations would be blank sheets of paper (actually meant in response to the task) or depictions of nature underlining God's creation. A similar differentiation can be found in Dandarova (2013) under the same labels, and in Brandt et al. (2009) with *relation/narration*, which is similar up to some degree.

This step already brings clarity into classification systems used in past research, and helps situate this in relation to anthropomorphism, that is, as a greater hierarchical differentiation in drawings of God.

Another major classification lay in whether the God figure was single or multiple. This seemed to be important for both conceptual and methodological reasons to discern drawings with one God from drawings with several ones because anthropomorphic and non-anthropomorphic figures may be mixed together. Moreover, anthropomorphic figures may be de-anthropomorphized to various extents, which may lead to much noise when attempting to systematically compare drawings between each other on the basis of one particular dimension - as it will be the case in Study 2. One may argue that such decision may bias the data towards a monotheistic understanding of God representations. Only 7 such drawings were found in this sample. This aspect (i.e., single vs. multiple) has not been addressed in past research, although familiarity with data from Brandt et al. (2009) and Dandarova (2013) allows us to affirm that this exists not only in the current sample, and not solely within a predominantly Christian environment.

Based on single-God drawings, a final distinction was made between 'Anthropomorphic representation' and 'Non-anthropomorphic representation'. This differentiation is the one that was used as an outcome variable for empirical testing in this study. To be non-anthropomorphic, a figure had to not exhibit any human feature (e.g., eyes in the sky) or even recall the spatial organization of human characteristics (e.g., three clouds organized as though the form a pair of eyes and a mouth).

At this stage, before even conducting statistical analyses, it can be noticed that non-anthropomorphic cannot account for much of the data, and it is obviously necessary to examine further (in Study 2) the predominant type of God figures, that is, anthropomorphic ones.

Results

Alpha was set at 0.02 (Benjamini–Hochberg correction).

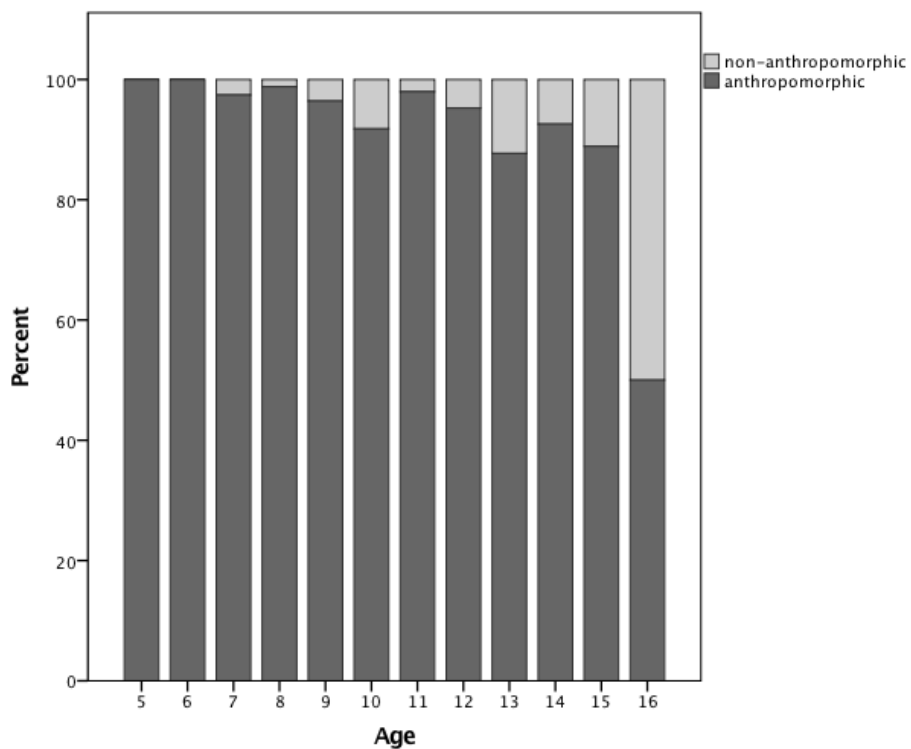
The outcome variable was binary and based on the distinction between anthropomorphic and non-anthropomorphic (single) God figures. The N = 493 sample was split into these two groups: Non-anthropomorphic God representation: 27 (5.5%); Anthropomorphic God representation: 466 (94.5%). The logistic regression model was statistically significant, $\chi^2(3) = 17.129$, $p = .001$. The model explained 9.9% (Nagelkerke R^2) of the variance in anthropomorphism of representation and correctly classified 94.6% of cases. Only schooling remained a statistically significant predictor ($p = .012$, respectively) after alpha correction. Nonetheless, age reached near-significance and was a statistically significant predictor before alpha correction ($p = .027$). Religious schooling and increasing age were both associated with increased likelihood to produce a non-anthropomorphic God representation.

Some observations can be made about developmental patterns. There is a progressive increase across age years for the emergence of non-anthropomorphic God figures overall. There is never a sudden 'bump' which would indicate an actual shift. This progression already starts at 7 years and is more marked from 10 years on. In the group seen during regular schooling, the use of non-anthropomorphic figures to represent God begins only at 10. Although the developmental tendency appears to move towards more non-anthropomorphic figures with age, it is not straightforward, and there are a few leaps around 10, 13, 15 and 16 years. However, the last one might be misleading if one did not consider that children that age belong to the group seen during religious teaching only.

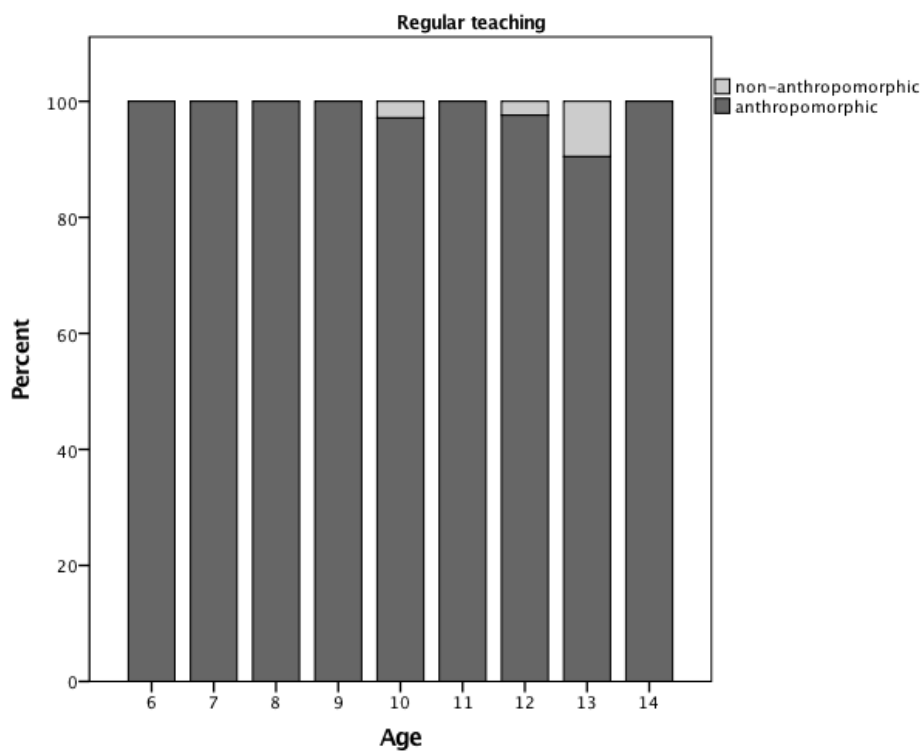
In order to further the analyses of developmental patterns, inferential statistics were conducted between five age groups: 5-6, 7-8, 9-11, 12-14, 15-16 years. The use of age groups helped avoid multiplying analyses, and the consequential alpha correction was maintained to acceptable severity. The sample was also split into two groups based on the type of schooling - i.e., religious or regular. Age groups were compared by pairs, in an incremental fashion. More specifically, only groups that were adjacent to one another were compared. No significant difference could be found. It is worthwhile that 5-6 years vs 7-8 years comparison could not be computed in the regular teaching group due to an absence of non-anthropomorphic figures. Similar to this, the 12-14 years vs 15-16 years comparison could not be computed in the regular teaching group due to a lack of drawings in the last age range for that group. The general absence of statistical significance may result from the fact that age was a significant contributor overall only. However, it was no longer significant after alpha correction. Observations about developmental patterns must therefore be taken with much caution. They might represent trends more than actual differences. It is worthwhile that for most crosstab comparisons, analyses relied on fewer than 5 cases in about 50% of scenarios, which is due to the lower amount of non-anthropomorphic God figures.

Graphs 1 a-c. Anthropomorphic vs non-anthropomorphic God representations

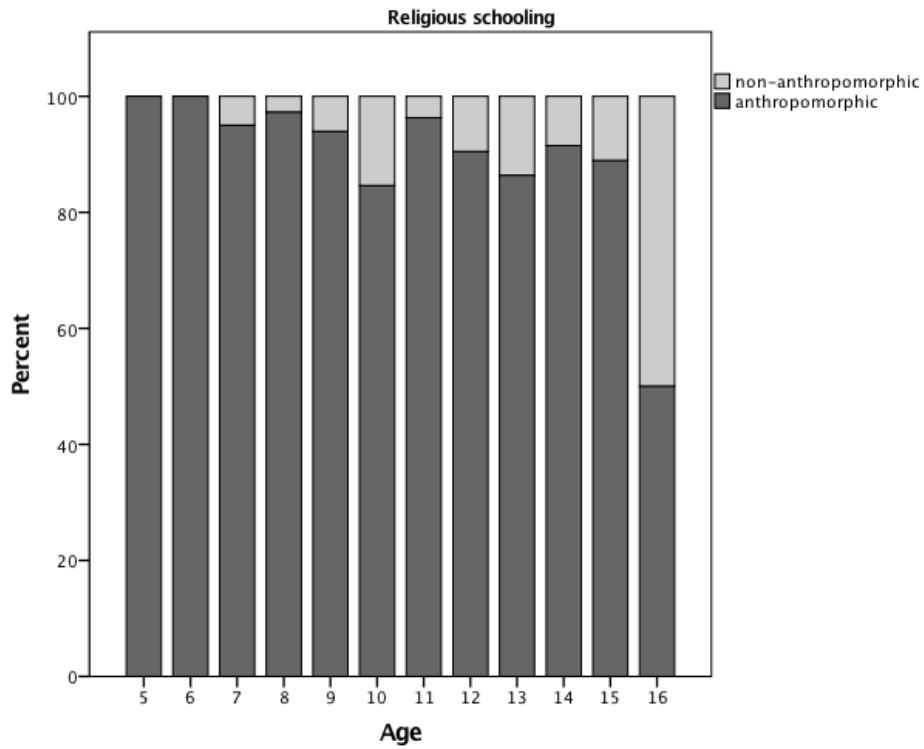
a.



b.



c.

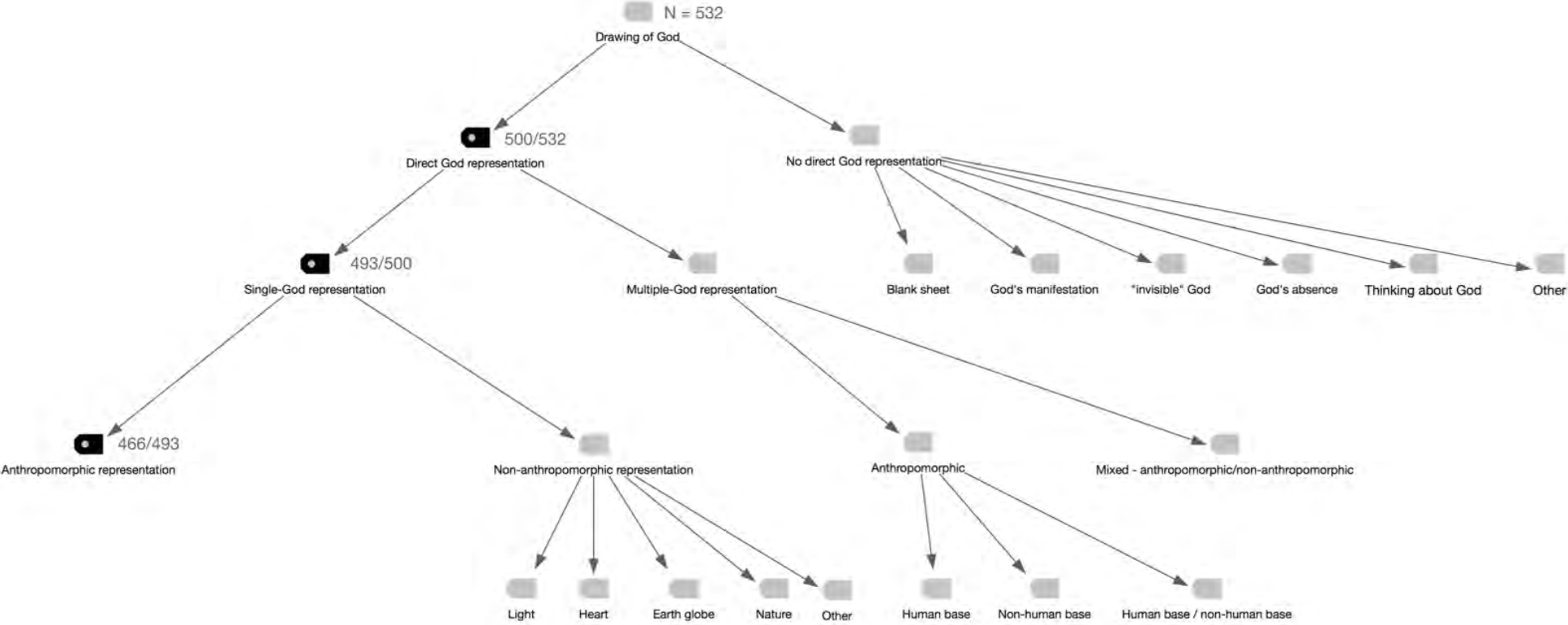


For each graph, percentages are reported by age year in order to visualize the actual proportion of anthropomorphic and non-anthropomorphic God figures.

Graph 1.a indicates such a proportion on the whole $N = 493$ sample. From the initial $N = 532$, 39 cases were not concerned with this anthropomorphic vs non-anthropomorphic distinction because of lying on higher hierarchical levels. *Graphs 1.b* and *1.c* show such a proportion in the following groups, respectively: children seen during regular schooling ($N = 221$, with 9 cases not concerned), children seen during religious teaching ($N = 272$, with 30 cases not concerned).

The separate report for two groups based on schooling follows from schooling being a significant predictor variable and from a similar approach to previous studies - Hanisch (1996) and Brandt et al. (2009).

Figure 1. A Data-Driven Model of Anthropomorphic God Representations Tracing Hierarchical Ramifications



Discussion

This study aimed to replicate past findings on anthropomorphic vs non-anthropomorphic God figures in children's drawings of God (Brandt et al. 2009; Hanisch, 1996) in a French-speaking Swiss sample. This replication was supported to some degree: participants being older and receiving religious schooling were more likely to draw a non-anthropomorphic God figure. However, age was no more significant after alpha correction for multiple testing. It could be assumed that the model proposed in this study departs from Hanisch (1996) by not considering among non-anthropomorphic God figures those that were not direct representations of God. Those non-figurative depiction of God, lying higher in the tree of the model, should nevertheless be more likely produced by older participants, as observed in Dandarova (2013). Grouping them together with direct representations of God that were identified as non-anthropomorphic in the current research may have led to a stronger effect of age. On the whole, and taking into account developmental patterns on the basis of schooling, those findings are similar to the trends found in Hanisch (1996) and Brandt et al. (2009), that is, non-anthropomorphic God figures occur earlier among children receiving religious schooling and progress in a more sustained manner across development. This replication will be discussed across two steps: firstly, age and cognitive development, and secondly, through schooling. However, before this concern about data 'behavior' in relation to independent variables, it might be necessary to have a quick look at the representativity of anthropomorphic God figures in several studies.

The proportion of non-anthropomorphic God figures in this sample is quite small: 5.5%. Of course, as the classification system starts prior to the anthropomorphic vs non-anthropomorphic distinction, this number might be misleading. Anthropomorphic God figures represent in total 87.6 % of the N = 532 sample. This equates almost perfectly with the proportion reported by Hanisch (1996) in his non-religious group, which was 87.5%. However, it is much more than the proportion of anthropomorphic God figures in his religiously socialized group: 57.8%. When examining the different types identified in Brandt et al. (2009) in a Japanese sample, about 86.62% of the drawings could be judged to be anthropomorphic. They have not used a dichotomous distinction, so for this estimation the following types have been considered non-anthropomorphic: *non-anthropomorphic entity, relation/narration, light*. Once again, this gets close to the percentage found in the non-religious group in Hanisch (1996). This points to two types of considerations. Firstly, there are historical differences between his study and more recent ones. In an increasingly secularized society, the religious group from the current study somehow behaves like the non-religious group in Hanisch's study. It is also possible that children from his religious group (Heidenheim, West Germany) were receiving a more intensive teaching. Secondly, it might nevertheless be necessary to consider his results in the religious

group with caution, concluding to a particularly low proportion of anthropomorphic God figures. When considering both his groups together (i.e., religious and non-religious) anthropomorphic God figures compose 74.14% of the entire sample (N = 1889). It is worthwhile that age ranges were roughly similar: 5-17 years in the current study, 7-16 years in Hanisch (1996) and 8-14 years in Brandt et al. (2009). It is now possible to move on to general considerations about the role of the independent variables.

Generally, cognitive development may enable children to grasp the potentially complex notion of God through non-anthropomorphic forms as a result of increased ability to *distantiate* oneself from an anthropomorphic understanding of the world (Piaget, 1929, 1951). This understanding differs from an explanation that has recurrently been put forth in several studies, which opposes anthropomorphic God representations in children to 'abstract' (Barrett et al., 2001; Pitts, 1976) or 'symbolic' (Ladd et al., 1998; Pitts, 1976) ones as though they were more matured. Within a Piagetian framework, a graphic God representation cannot be considered formal but only concrete because it does not deal with an abstract language. Therefore, non-anthropomorphic figures should not be accounted for as abstract - but more distant from oneself instead. Following this line of thought, they should actually deal with a progressively decreasing *egocentrism* (Piaget, 1951). As for so-called 'symbolic' God representations, it appears misleading to consider symbolic what is not anthropomorphic. Indeed, a human figure can as well stand for to represent particular qualities perceived in God. For example, it has come to the attention of the authors, through reading the participants' written descriptions, that the presence of sense organs can sometimes underline extrasensory perception. Additionally, a child has acknowledged during an exploratory qualitative interview (belonging to another part of the current project) that although she had drawn God as a male individual she knew it was not the case, but it was easier to mark God's presence that way. Consequently, characterizing God as 'symbolic' pertains more to the use of metaphorical thinking rather than anything opposite to anthropomorphism. Unfortunately, such a type of inquiry appears to be difficult without having access to the subject's intentions.

Interestingly, Hanisch's (1996) study was conducted in Germany, and exposure to religion was predominantly Christian, while Brandt et al.'s (2009) study was carried out in Japan and used a Buddhist schooling to account for religious inputs. Taken together, the findings from those two studies may speak for a universalist explanation of the production of non-anthropomorphic God figures. More specifically, it could be assumed that if religious schooling has a similar effect as age and facilitates the emergence of such types of representations, it should influence those representations in a way that makes them more 'mature', aligned with a developmental shift observed to move from anthropomorphic figures to non-anthropomorphic ones. In that sense, the effect produced would be

for religious schooling to lead to a more 'worked-on' God concept, presumably by means of intensive and repeated thinking about that concept. Nevertheless, this broad anthropomorphic vs non-anthropomorphic distinction may be somewhat basic and lack precision. For that reason, finer de-anthropomorphization strategies were examined. After considering those strategies, it will be possible to come back to the presumed role of religious schooling and to provide another interpretation.

It was also intended through this study to situate anthropomorphic and non-anthropomorphic God figures among the sample. The initial idea was that sorting drawings of God into those two camps was not so straightforward, and that classification may operate prior to this distinction. The construction of a hierarchical system has brought more clarity about ramifications from drawings of God overall down to a central distinction between whether a God figure is anthropomorphic or not. Through that objective to trace the categorization process it was possible to apprehend some of the discrepancies found in past research and to situate them in the model. For example, Dandarova (2013) uses a figurative vs non-figurative distinction, but not an anthropomorphic vs non-anthropomorphic one. Since this study, it can now be assumed that those categorizations were in fact compatible, and that this author addressed an issue that lies higher in a hierarchical system. This was not the case however of *symbolic/abstract*. The use of those terms in past research on drawings of God (Ladd et al., 1998; Pitts, 1976) has applied not only to the God figure, but to any elements in the drawings. This may have led to some methodological incompatibility between them and studies focusing on the God figure, like this one. Study 2 will show that this nuance is more complex than just a point of focus, as the background will then also be taken into consideration, but only insofar as it brings information about the God figure. This point is in fact the one that makes the difference between methodological approaches and their related rationales. Ladd et al. and Pitts have shown a broader interest in addressing the development of a certain type of 'language' in drawings of God. While it may have been called 'symbolic' or 'abstract', it conceivably pertains to an acute use of metaphorical language overall, before it even concerns God representations that should be labeled as such.

Overall, the anthropomorphic vs non-anthropomorphic distinction can be useful up to a certain point, passed which more nuance is required in order to move beyond the sole use of dichotomous categorization. One possibility is to step away from pursuing further the adoption of exclusive categories, and instead, to identify various graphic scenarios that exhibit a combination of humanness and non-humanness in God. This will be addressed in Study 2.

Study 2 - Beyond Binaries: Empirically Testing Children's Utilization of De-Anthropomorphization Strategies

Aim, Objective and Research Question

This study relates directly to Study 1 as a follow-up on anthropomorphic God figures in children's drawings of God.

The main aim was to explore how human-based God figures may endorse characteristics that make them 'not only human', that is, how some *otherness* may be brought to *sameness* with the human being. This corresponds to exploring the anthropomorphic issue in children's drawings of God much more thoroughly than what has been done in past research, by moving beyond an exclusive dichotomous anthropomorphic vs non-anthropomorphic opposition. One may be willing to consider this simple example: an angel is not exactly only anthropomorphic, due to its wings as well as to the celestial background upon which it is typically shown. This illustrates how God figures that are predominantly human (i.e., human-based) may endorse de-anthropomorphization through various graphic aspects that make them not only human. Arguably, despite such great ontological nuances (i.e., combined sameness-otherness with the human being), 'human-based' God figures may have been sorted into the 'anthropomorphic' category in past research. Likewise, in Study 1, the vast majority of those figures were labeled 'Anthropomorphic representation', in addition to the minority of 'Non-human base' God representations.

The objective was twofold. Firstly, this study was meant to explore beyond exclusive binaries and propose a model of strategies that make human God figures 'not only human'. The underlying idea was that such strategies could potentially co-occur in drawings, unlike the previous strict categorical system (see Study 1). Secondly, a special focus would be put on de-anthropomorphization strategies, which would be tested empirically.

The research question was twofold. Firstly, what specific strategies may children apply to human-based God figures to convey a sense of otherness from the human being? Secondly, what are the respective contributions of age, gender and religious schooling to the utilization of de-anthropomorphizing strategies?

Hypotheses

Concerning the second part of the research question, in the light of previous research, it was hypothesized that de-anthropomorphization strategies should be positively associated with age (see Brandt et al., 2009; Ladd et al., 1998; Pitts, 1976) and religious schooling (see Brandt et al., 2009) but

not gender. Similarly, the complexity of utilization (understood as co-occurrence of strategies) would depend on age and religious schooling.

Method

Assessment and Analyses

The inventory resulting from Study 1 was used in order to conduct group comparisons based either on types of God representations or on de-anthropomorphizing strategies. Drawing upon the notion of *de-anthropomorphization*, defined in the previous chapter, different forms of *de-anthropomorphizing* strategies were identified and would later be tested on the data.

Familiarization with the Data, Inventorying and Sampling Down

In order to conduct this study, it was necessary for the researchers to get deeply familiar with the data to start identifying different case scenarios revolving around anthropomorphism. The aim being to move beyond binaries it was decided to look at all God figures that were somewhat anthropomorphic, that is, that has human features in them. However, before moving on, an important decision was made about whether drawings showing several gods (e.g., several anthropomorphic God figures, or a mix of anthropomorphic and non-anthropomorphic God figures) should be considered. Willing to follow a quantitative approach and taking into account the fact that those represent rare cases, it was decided to only consider single-God drawings.

From those single-God drawings, some depicted a God figure that was anthropomorphic and others showed a God figure that was not anthropomorphic at all (e.g., a light, a cloud). Scrutinizing those anthropomorphic figures, it was observed that the majority of them was based on the representation of an ordinary human being (they may be called *human-based*) whereas a few drawings exhibited a figure that seemed to proceed from the opposite direction, that is, a non-anthropomorphic figure (e.g., a cloud) exhibited some human features (e.g., eyes and mouth). At this stage, another important decision had to be made, dealing with whether both types of figures should be taken together or distinguished from one another. In order to compare likes and likes, and given that de-anthropomorphizing should rely on an initial human model, only the former was thoroughly examined for de-anthropomorphizing strategies.

It is essential to understand the essence of those previous choices. They mainly led to consider and compare similar data for a specific type of strategies that may help move beyond binaries. By no means does it deny the richness and complexity of other types of drawings that were (for the purpose of the current study) left behind, so to speak.

From those anthropomorphic *human-based* God figures, it could immediately be noticed that a striking majority of them ‘had’ something that made them look different from an ordinary human. The first author started to explore the sample and to seek for possible variations in the way those God figures were also displayed as not only human.

The inventory of strategies began with a broader perspective and a more ambitious goal. It targeted recurring scenarios involving anthropomorphism in general. What was involved that is no more deals with how non-human elements (e.g., a cloud) were anthropomorphized, or how inanimate elements usually associated with the human being (e.g., clothes) may be depicted in the absence of a human figure. The level of complexity of human God figures was also considered, but was later judged to depend too strongly on graphic skills than potentially reflecting God representations characteristic per se. Nevertheless, for the sake of feasibility the focus had to be narrowed down to de-anthropomorphization. The strategies that were retained will now be presented in detail.

De-Anthropomorphizing Strategies

Past this familiarization phase that was characterized by exploring the data and confronting ideas between the first two authors, a limited set of central strategies has been determined. They are representative of the current sample and can be conceptualized in a way that is relevant beyond the strict area of drawings. It was important to keep in mind the possibility to examine them by other methods in future research.

As explained earlier in this article, de-anthropomorphization may be found through the God figure or through the background. While each relevant strategy will be described, relevant illustrations are reported in the Appendices I section.

In respect of the former (i.e., Through the God figure), three main strategies were found:

Cross-category

- *Structural*. Non-human features are affixed directly to the God figure’s human body (e.g., a pair of wings, or a tail replacing the legs), in a way that conveys the idea that they compose that figure. It may also happen that non-human element(s) occur as though they are inextricable from the human ones. For example, the color yellow happens to be filling the body may also appear to be ‘made of light’ through an ostensible use of yellow composing that figure.

- *Associated*. Non-human features are associated with the God figure but are not strictly part of its body (or its structure, in other words). Such examples are: a halo, an aura or

colored rays 'coming off' the God figure. It can be observed in the data that rays of color drawn near the figure or touching it may be power-connoted.

The main difference between *structural* and *associated* lies in whether the non-human features are attached (i.e., *structural*) to the figure or are more loosely related to it (i.e., *associated*). The latter would characterize the figure without, unlike the former, composing it.

Within the human category - Features

- *Incomplete (Head/face)*. The God figure may appear ordinarily human all the while it has a face or a head missing (i.e., incomplete). As mentioned before, given that the current focus was put on God representations and not fine esthetics (relying more strongly on drawing skills) only face or head were considered because missing fingers or even hands, for example, could be misleading as they are likely to be missing in children's drawings in general - unlike a head or a face. A possible scenario (found in the current data) deals with the God figure presenting both halfway - i.e., with only the bottom of the head and a nose. This strategy may tap into some aspect similar to what was measured by Pitts (1976) through the use of an *A-score*, accounting for the anthropomorphic completeness of figures on the basis of human features being present or not. The current measure was however more cautious about graphic skills for the obvious only.

- *Surcomplete*. The God figure is basically human but the child has added extra human features to the basic ones. For example, it has two additional pairs of arms. This was however not inventoried due to its very low occurrence in the current data. It was nevertheless reported for its conceptual pertinence and to leave it as a potentially relevant option for other types of samples (e.g., among Buddhist or Hinduist children).

Scission-combination

- *Duality*. By 'duality' of the God figure it is understood that the figure is conceptually divided into two different beings. Most typically, it is made up of two halves coming from two different human beings. Often, gender will be evoked, and the figure will basically represent half a man and half a woman. However, this strategy was not tested in Study 2. There are two main reasons for this. As a de-anthropomorphizing strategy, it is arguably less straightforward than other strategies

having recourse to cross-category. Moreover, it strongly relates to gender-typing issues and would be more suitably addressed in such a context.

In respect of the latter (i.e., Through the background):

Through the background.

- *Non-terrestrial.* The human God figure is put in a relationship with a context that is uncommon for an ontologically typical human being (e.g., on a cloud, in the sky, in the outer space). This may also concern finer spatial arrangements (e.g., floating).

- *Relative to other human figures.* The presence of other human figures in the background happens to communicate a nature to the God figure that is not strictly human. In this respect, the God figure might appear way bigger than them (i.e., *Abnormally bigger*).

These strategies ensue from part of the sample that falls under the label 'De-anthropomorphized'. That branch stems from '*Human base*' and the reader may notice the following parallel branch '*Not de-anthropomorphized human figure*' that breaks into two sub-branches: '*Ordinary human figure*' and '*Non-ordinary human figure*'. Although it was not directly addressed in the current study, it seemed important to supply the reader with some clarification about this area of the model. The former (i.e., ordinary human figure) consists in God figures that could not be told apart from a drawn regular human being. That is, nothing permits the viewer to distinguish it from another type of human figure. Concerning the latter (i.e., non-ordinary human figure), it may be considered a drawn figure that does not simply display generic characteristics of a human being, like it would be mostly the case of children's drawings of a person. Instead, there is something, either on the figure or in the background, that endows that figure with special characteristics as a human being. Those characteristics may pertain to identity and social status (e.g., priest, king, surrounded by other figures), which does not depend on the presence of de-anthropomorphizing features. It may be contended that this particular aspect gets similar to the strategy '*Abnormally bigger*' for they may both convey an idea of power over other human characters. This is a shared metaphorical meaning. Nevertheless, combining such meaning with a more literal perception of what was depicted in the drawing, '*Abnormally bigger*' may be regarded as relaying some particularity that is more ontologically significant and could not be found as such in real-life - while power-attribute are witnessed by children in their social environment daily.

This will be reflected upon in the Discussion section. The reason why it did not receive more attention in the current study is that it deals with a finer and arguably less basic approach to characterizing a human God figure as not ordinary, compared to frank de-anthropomorphization.

Overall, it is worth noticing that for each branch of the tree in the model, a label “other” has been added. It is so in order to leave space for further refinements of the model as well as for a possible generalization to other samples of drawings of God.

Constructing a Model of De-Anthropomorphization

This model - which reports and articulates together de-anthropomorphization strategies - takes directly after the model constructed in Study 1 (see Figure 1), and presents as a second half of it, at its bottom. It follows the logic of the preliminary sorting of drawings from the sample into exclusive categories and begins with the ‘Anthropomorphic representation’ node. It does not, however, propose exclusive categories, but dimensions instead, apart from ‘Human base’ and ‘Non-human base’. Those dimensions can theoretically occur simultaneously in a same drawing.

Inventorizing de-anthropomorphization strategies started from the last subdivision between ‘Human base’ and ‘Non-human base’. The reasons why such a distinction was made are laid out below, when defining *de-anthropomorphization*. Until then, an illustration of this point may be found in a drawing from the current sample, which depicts God as a rabbit ‘behaving’ as though it was human (in a form close to comic strips). Considering this type of drawing for how de-anthropomorphized God is might therefore be problematic and this adds a practical explanation to such a methodological choice. It is worthwhile that altogether, those two categories equate to 399 drawings although there are 466 anthropomorphic representations. The difference lies in the drawings that were utilized for training the two judges, within the framework of inter-rater reliability.

The most important part of this model deals therefore deals with the ‘Human base’ node downwards. A series of possible strategies to de-anthropomorphizing the God figure are reported. Several strategies may theoretically overlap. This conceptual difference within the model is indicated by the presence of an axis on its the right side showing where one part begins or ends. Each strategy of interest, because it would be tested in Study 2, has been described right above. Nevertheless, the model provides a richer breadth of strategies than the ones that were actually tested in Study 2. The reason for this is that the construction of the model has been an ongoing process throughout the assessment of the drawings based on the specific strategies that they exhibit. Some components of the model hence emerged in-between process and the interconnections in the model were reconstructed afterwards rather than a priori. A conceptually substantial addition pertains to God figures that could not exactly be judged as de-anthropomorphized, at an ontological level, but which still endorse characteristics that make the (single, anthropomorphic, human base) God figure somewhat non-ordinary - such as when it is shown with clerical clothing. While this was not inventoried in this study, it can be expected that there is a substantial proportion of figures with such

characteristics. Rather than seeing it as a weakness in the current research, it should be understood as the early emergence of fine graphic nuances that will be accounted for in future research in this area.

Figure 2 shows the different categories of drawings as well as de-anthropomorphization strategies. Components from this model that were actually tested are in bold and their respective frequencies are reported aside.

Samples

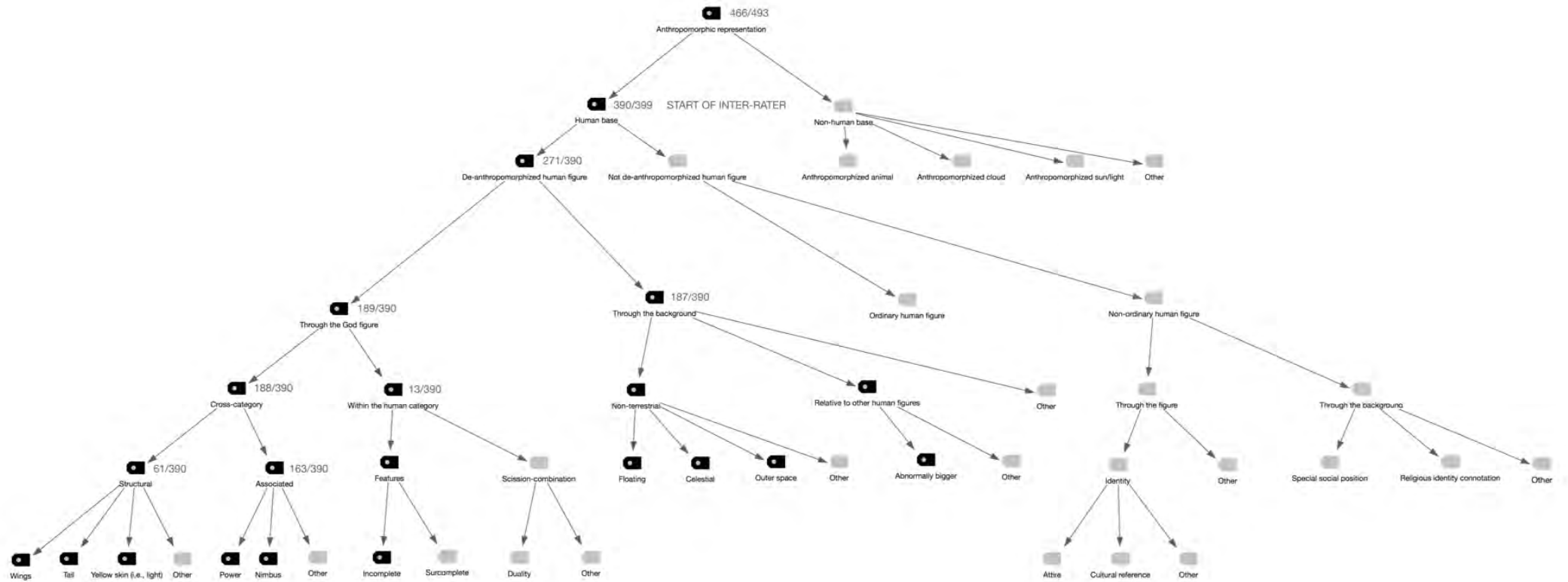
Different parts of the initial N = 532 sample of drawings were used for statistical analyses depending on the specific purpose, guided by which branches of the theoretical model tree were concerned. The theoretical model under consideration is presented in the next subsection. Starting with the initial sample, there were different types of drawings/God representations: 'Direct God representation' (N = 500), 'Single-God representation' (N = 493), 'Anthropomorphic representation' (N = 466). From within the 'Anthropomorphic representation' drawings were independently assessed by the two raters, leading to a decrease of sample due to inter-rater training-testing differences (N = 399). The most essential part of the current study, dealing with de-anthropomorphization used 'Human base' God representations (N = 390). Among those, the complexity of de-anthropomorphization was measured on the sub-sample of drawings that were all identified as display at least one de-anthropomorphizing strategy previously considered (N = 271). Those sub-divisions are based on the outcome from Study 1 and sub-samples are shown in the model on Figure 1.

Scoring Procedure

Drawings were scored independently by two raters having a background in psychology. They consisted of the first author and a graduate psychology student, who was blind to the hypotheses of this research. The following strategies were assessed (see theoretical model): *Human base*, *Cross-category structural*, *Cross-category associated*, *Within the human category - Features - Incomplete*, and *Through the background*. Drawings that were considered from the initial N = 532 sample were all drawings connected to the node *Anthropomorphic* (N = 466) from the model tree shown in Study 1. A sample of 67 drawings was randomly selected and used for the training phase of the raters in order to ascertain that the scoring procedure was clear and that they could correctly identify those strategies in the drawings. Similar to Study 1, drawings were the object of study, and written descriptions were only used when necessary to resolve ambiguities about what is actually depicted in drawings.

Following this, a testing sample of N = 399 drawings was independently assessed for those strategies of interest, and it was then used in the related statistical analyses. Inter-rater reliability was

Figure 2. Model of Human-Based God Representations Exhibiting Otherness from the Human Being, with a Particular Focus on De-Anthropomorphization Strategies.



estimated by using Cohen’s kappa coefficients for each of those strategies. The average kappa was 0.78 (the lowest was .70 for *Human base*, and the highest was .88 for *Cross-category associated*), and reliability ranged from substantial agreement to almost perfect agreement (Hallgren, 2012). Disagreements were resolved through discussion. The reason why the assessment of de-anthropomorphization strategies went through inter-rater examination - unlike categories in Study 1 - is that they are more prone to ambiguity. This is due to the conceptual precision of de-anthropomorphization strategies compared to the exclusive classification system used in Study 1, whose categories are more mixed.

Sample Characteristics

Due to the sub-sampling operated in order to analyze de-anthropomorphization strategies, it was deemed necessary to verify that the participants’ age, schooling and gender were similar in this N = 390 sub-sample to the larger N = 532 sample in order to discard the possible presence of biases when interpreting the results. In this sub-sample, participants were aged: Min = 5.65 years, Max = 16.07 years, Mean 10.83 years, SD = 2.35 years. More details are reported in Table 2. Female participants made up 52.3%, which is equivalent the larger sample (51.3%). Children seen during religious schooling composed 52.6% of this sub-sample, next to 56.8% in the larger sample.

On the whole, there is no reason to suspect any differences regarding age, schooling or gender between those two samples. Consequently, no selection bias should be expected from sampling down from N = 532 to N = 390, and the latter may be considered representative of the larger sample.

Table 2. Age distribution

<i>Age (years)</i>	<i>Frequency</i>	<i>Percent</i>
5	1	.3
6	9	2.3
7	31	7.9
8	69	17.7
9	47	12.1
10	51	13.1
11	41	10.5
12	49	12.6
13	50	12.8
14	36	9.2
15	5	1.3
16	1	.3
<i>Total</i>	390	100.0

Results

Hypotheses Testing

Similar to Study 1, alpha was set at 0.02 (Benjamini–Hochberg correction). Results were organized according to each hypothesis.

In order to verify Hypothesis 1:

A series of de-anthropomorphization strategies were used as binary outcome variables and a logistic regression analysis was carried out for each, testing for the possible effects of age, gender and religious schooling. The sample assessed was composed of $N = 390$ drawings. As previously mentioned, those strategies consist in scenarios that may co-occur in a drawing to various degrees, and they do not serve to categorize a drawing in a single ‘box’. In order to test this hypothesis, de-anthropomorphization will first be addressed overall, then specific strategies.

– *De-anthropomorphization*

A first outcome variable consisted in addressing whether there was any de-anthropomorphization displayed by the (human-based) God figure. It included all possible strategies accounted for from the model in presented in this study. The $N = 390$ sample was split into: No de-anthropomorphization: 119 (30.5%); De-anthropomorphization: 271 (69.5%). The logistic regression model was statistically significant, $\chi^2(3) = 27.178$, $p < .001$. The model explained 9.5% (Nagelkerke R^2) of the variance in anthropomorphism of representation and correctly classified 69.5% of cases. Only age was a statistically significant predictor ($p < .001$). Increasing age was associated with increased likelihood to draw a de-anthropomorphized (human-based) God figure.

– *Structural*

Following this broad approach, a more specific analysis of de-anthropomorphizing strategies was carried out. As a first step, a series of de-anthropomorphizing strategies operating ‘Through the God figure’ were examined. A second outcome variable measured whether the God figure was de-anthropomorphized using a ‘Structural’ strategy (stemming from the ‘Cross-category’ strategies). The $N = 390$ sample was split into: No *structural* de-anthropomorphization: 329 (84.4%); *Structural* de-anthropomorphization: 61 (15.6%). The logistic regression model was not statistically significant and no predictor variable was found to have a statistically significant effect.

– *Cross-category*

A third outcome variable was used to measure whether the God figure was de-anthropomorphized using an ‘Associated’ strategy (stemming from the ‘Cross-category’ strategies). The $N = 390$ sample was split into: No *associated* de-anthropomorphization: 227 (58.2%); *Associated*

de-anthropomorphization: 163 (41.8%). The logistic regression model was statistically significant, $\chi^2(3) = 43.845$, $p < .001$. The model explained 14.3% (Nagelkerke R^2) of the variance in anthropomorphism of representation and correctly classified 65.9% of cases. Only age was a statistically significant predictor ($p < .001$). Increasing age was associated with increased likelihood to draw a human-based God representation with associated characteristics that de-anthropomorphize it.

– *Within the human category - Incomplete (face/head)*

A fourth outcome variable addressed whether the God figure was de-anthropomorphized using an 'Incomplete' strategy, stemming from 'Features' itself branching out from 'Within the human category'. As underlined in the model, only the absence of a face or a head had been reported. The $N = 399$ sample was split into: Not incomplete (face/head): 377 (96.7%); Incomplete (face/head): 13 (3.3%). The logistic regression model was statistically significant, $\chi^2(3) = 19.716$, $p < .001$. The model explained 19.5% (Nagelkerke R^2) of the variance in anthropomorphism of representation and correctly classified 96.7% of cases. Only age was a statistically significant predictor ($p = .007$). Gender of participants reached near significance (.057). Increasing age was associated with increased likelihood to draw a human-based God representation without a head and/or a face, so was it the case for being a female individual.

– *Through the background*

As a second step, de-anthropomorphizing strategies action 'Through the background' were examined altogether. The reason why they were not discriminated between each other and were tested as a whole is that their differentiation was conceptualized past the inter-rater scoring process. Consequently, the best level of precision lies at the level of whether or not the God figure is de-anthropomorphized 'Through the background'. The $N = 390$ sample was split into: No *background* de-anthropomorphization: 203 (52.1%); *Background* de-anthropomorphization: 187 (47.9%). The logistic regression model was statistically significant, $\chi^2(3) = 12.078$, $p = .007$. The model explained 4.1% (Nagelkerke R^2) of the variance in anthropomorphism of representation and correctly classified 56.9% of cases. Only age was a statistically significant predictor ($p = .001$). Increasing age was associated with increased likelihood to draw a background that had a de-anthropomorphizing effect on the human-based God figure. Similar to the aforementioned reflection, this strategy produces an effect leading to a "non-ordinary" human figure, but it is not straightforward in respect of de-anthropomorphizing.

In order to verify Hypothesis 2:

An additional outcome variable was created with the purpose to assess complexity in the utilization of de-anthropomorphizing strategies. as a matter of co-occurring strategies. Two types of strategies were retained: 'Through the God figure' or 'Through the background'. The outcome variable criteria were: 'simple' (only one type of strategy) and 'combined' (both being used simultaneously), accounting for low vs high degree of complexity, respectively.

The sample used for comparisons was composed of N = 271 drawings, all exhibiting some de-anthropomorphization, from the N = 390 sample. The logistic regression model was statistically significant before alpha correction: $\chi^2(3) = 7.837, p = .049$. The model explained 3.9% (Nagelkerke R^2) of the variance in anthropomorphism of representation and correctly classified 62.4% of cases. Only age was a statistically significant predictor ($p = .007$). Increasing age was associated with increased likelihood to use greater complexity (i.e., figure and background) to de-anthropomorphize the God figure.

Hypothesis 1 was supported for most de-anthropomorphizing strategies - except for 'Structural' - but only for age, not for schooling. Hypothesis 2 was supported only for age, not for schooling. Importantly, gender was not found to play any significant role in either of the analyses, as predicted.

Developmental Patterns

Graphs 2 a-e provide some visualization of de-anthropomorphization strategies based on age years. Percentages refer to proportion within a same year. These will be commented below.

It has to be noted that the 'Structural' strategy was not reported here because age did not have a statistically significant effect, even before alpha correction. A few observations can be made on the basis of those graphs:

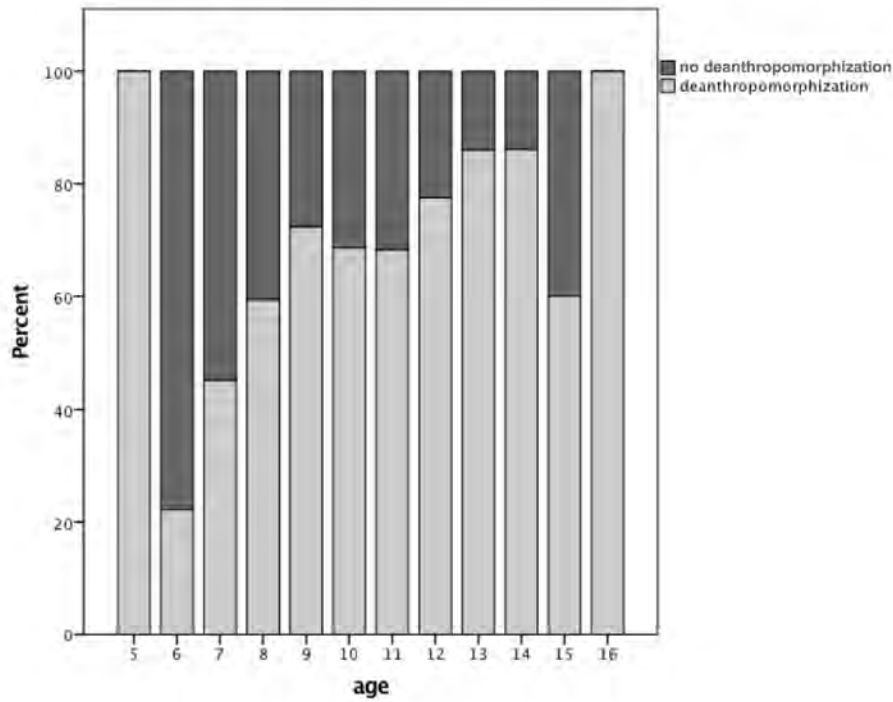
De-anthropomorphization overall undergoes a progressive increase across age years. It rises until the age of 9 years to reach a plateau that goes on until 11 years. It then increases again from 12 to 13 years to freeze then drop at 15 years and go up again at 16 years. On the whole, there seems to be two plateau phases in development: the first one being at 9-11 and the second one at 13-14.

Concerning specific de-anthropomorphization strategies:

'Associated' approaches an age-incremental pattern, and starts from as early as the youngest from this sample. 'Incomplete' tends to be used very scarcely although there is some evident climb from 12 to 15 years. 'Through the background' appear to undergo three major peaks: at 9 years, at 12-14 years then again at 16 years.

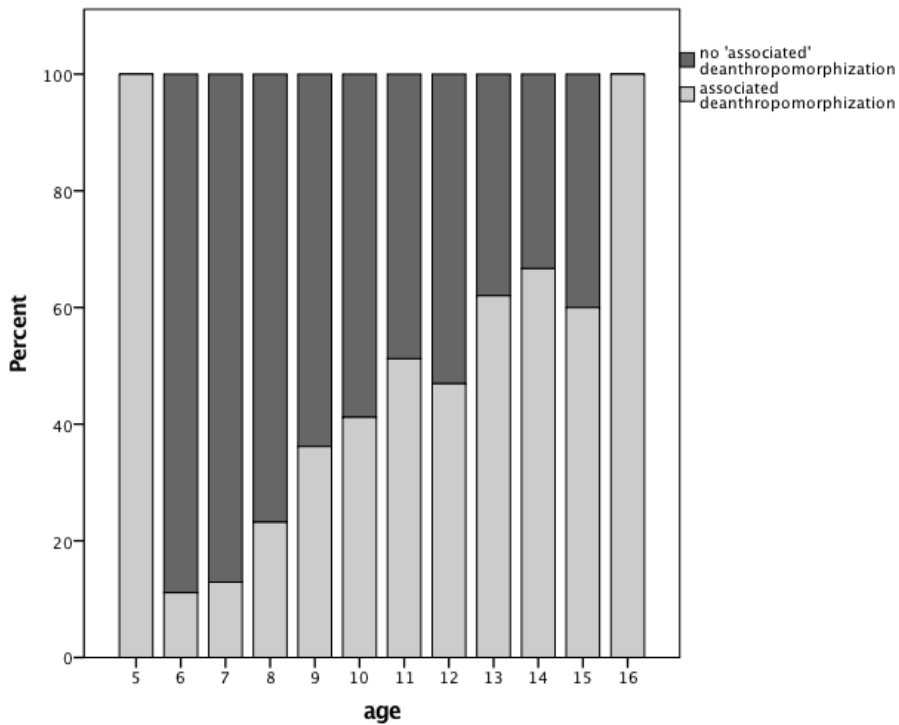
Graphs 2 (a-e). De-anthropomorphization strategies.

a. De-anthropomorphization.



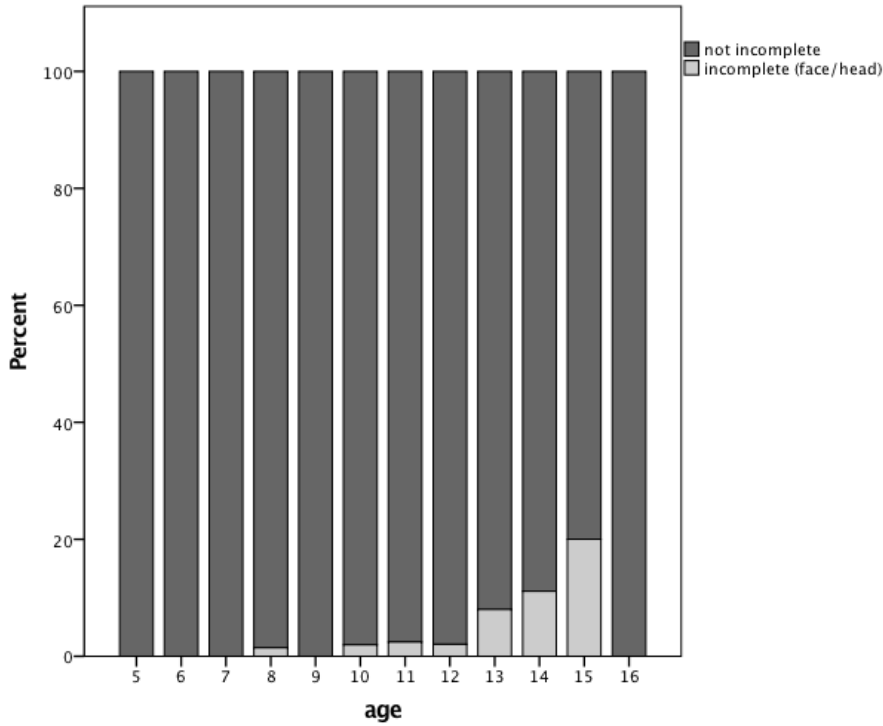
Graph 2.a shows the developmental pattern for the utilization of any de-anthropomorphization strategy on the N = 390 sample.

b. 'Associated' de-anthropomorphization strategy.



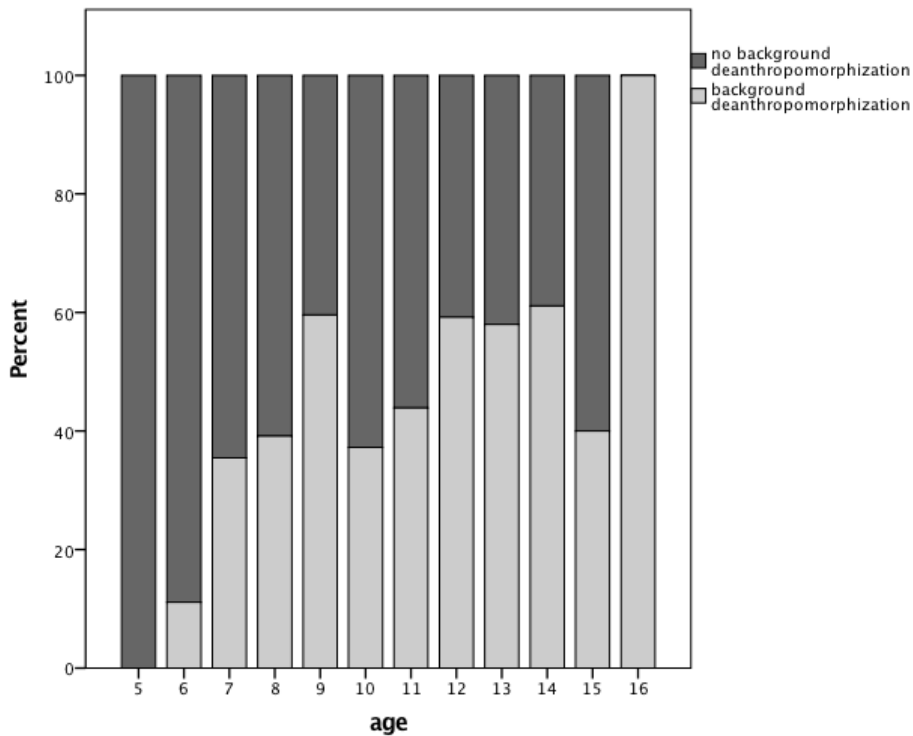
Graph 2.b shows the developmental pattern for the utilization of the 'Associated' de-anthropomorphization strategy on the N = 390 sample.

c. 'Within the human category - Incomplete' de-anthropomorphization strategy.



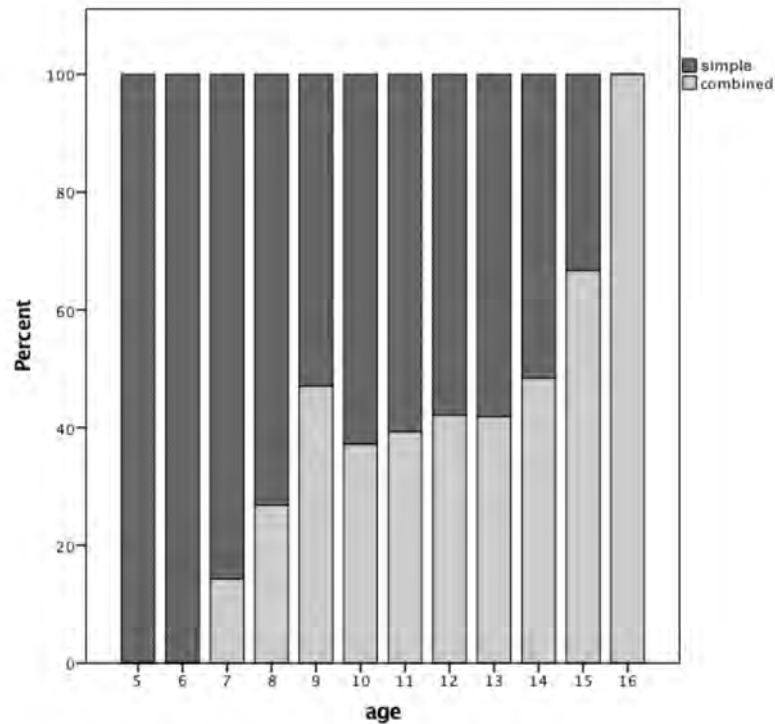
Graph 2.c shows the developmental pattern for the utilization of 'Within the human category - Incomplete' (through the face/head of the God figure) anthropomorphization strategy on the N = 390 sample.

d. 'Through the background' de-anthropomorphization strategy.



Graph 2.d shows the developmental pattern for the utilization of 'No background' anthropomorphization strategy on the N = 390 sample.

e. Simple or combined de-anthropomorphization.



Graph 2.e shows the developmental pattern for the degree of complexity as assessed through the utilization of ‘Through the God figure’ or/and ‘Through the background’ de-anthropomorphization strategies (N = 271). ‘Simple’ deals with the use of only one type of such strategy, and ‘combined’ concerns the simultaneous use of both.

As for complexity, utilizing de-anthropomorphization strategies to a higher degree (‘combined’) almost follows an age-incremental pattern, although there seems to be a frank increase from 7 to 9 years then from 13 up to 16 years.

On the whole, de-anthropomorphizing a human-based God figure occurs early in development (between 5 and 8 years of age). Age tendencies differ depending on the specific strategy, but there seems to be key developmental points around 9 and 13 years overall.

Inferential statistics were conducted to further the analyses of developmental patterns and figure out whether there existed significant differences between age groups. Similar to Study 1, five age groups: 5-6, 7-8, 9-11, 12-14, 15-16 years. Groups were compared when they were adjacent, that is, in an incremental fashion, from the youngest to the oldest. In order to avoid too severe alpha correction, comparisons were only carried out on the presence or absence of de-anthropomorphization. Two group differences were significant: 7-8 vs 9-11: significant ($\chi^2(1) = 5.491$, $p = .019$), 9-11 vs 12-14: significant ($\chi^2(1) = 6.573$, $p = .10$).

Additional Considerations: Fundamental Graphic Techniques

While involved in the construction of the model, there has been an interest in fundamental graphic techniques that children may resort to in order to communicate non-anthropomorphic properties to a human figure. The main focus was put on the content of composition, and it was found that children seem to rely mainly on two central techniques that may be called, respectively: *addition* and *removal*. The former consists in adding elements that are extraneous to the human category, either on the figure itself as part of its structure (e.g., wings) or as directly associated with it (e.g., nimbus), on the one hand, or in the background (e.g., clouds, planets, relatively tiny human figures). The latter consists in removing elements that constitute an ordinary human figure, such as drawing it faceless or headless.

Next to those two 'basic' graphic techniques, two additional techniques could also be identified: *replacing* and *fusing*. Replacing means that a human body feature has been replaced by a non-human one (e.g., a tail instead of a pair of legs), and fusing implies that a human body feature has been combined with a non-human one in a way that they are inextricable as though completely overlapping (e.g., a round and plain yellow light in place of the head). The main difference between the former and the latter pertains to the latter maintaining a double semantic belonging for one same graphic object.

Although such graphic aspects were not directly assessed in this study, it was important to provide a list of them in order to get a better insight into the main graphic foundations of drawings of God, based on the content of composition, in the current sample of data. Such observations are made nevertheless with the caveat that they translate some assumed corresponding mental procedures.

Discussion

This study aimed to draw upon Study 1 all the while moving beyond an exclusive categorical system based on binaries (i.e., anthropomorphic vs non-anthropomorphic). A main focus was put on human-based God figures and how such figures may display non-humanness alongside their humanness. In order to do so, a model was constructed from the data to conceptualized strategies possibly used by children. The advantage of that model over previous, more basic, binary differentiations is twofold. Firstly, it offers much more diversity and incorporates those previous systems (e.g., figurative vs not, anthropomorphic vs not) within a net of inter-relations. Secondly, and most importantly, it conceptualizes *de-anthropomorphizing* strategies that may co-occur in a given drawing. In that sense, this model has moved not only beyond previous basic binaries, but also beyond an entirely exclusive categorical system by taking into account the possibility for strategies to be simultaneously present.

The possible influence of age, religious schooling and gender was statistically tested. Hypothesis 1, supposing that de-anthropomorphization strategies would be positively associated with

age and religious schooling, was mostly supported for age, but not for religious schooling. Then, hypothesis 2 predicted that complexity of de-anthropomorphization - as a matter of combination of strategies - would be more likely with increasing age and religious schooling. It was confirmed for age but not for religious schooling. Hypothesis 3 assumed that gender would not play a significant role in any regard. This was statistically confirmed.

A few scientific implications ensue from those results. Firstly, the expression of combined sameness-otherness (Guthrie, 1993) in human-based God figures appears to be eminently cognitive and those figures may undergo conceptual changes across development mainly following one's cognitive abilities progression. Contrary to Study 1, examining anthropomorphic vs non-anthropomorphic God representations, Study 2 was more convincing in showing that underlying God's non-humanness (in this case, through de-anthropomorphization) is age-bound.

Secondly, such conceptual 'blending' points to the possibility that God is a *hybrid concept*, according to the notion discussed by Vicente and Martinez Manrique (2016), it is possible the human category bears less salience with increasing age, next to other conceptual elements that become more dominant. It is likely that for those non-anthropomorphic elements to enter the working memory, sufficient cognitive inhibition (of anthropomorphic figures) and flexibility (helping the selection of alternatives) are required - which develops with age. Similarly, through conceptual change (Carey & Spelke, 1994) the God figure may embrace other categories than the human being, and those categories may be more prominent as this concept evolves at an individual level, progressively drawing away from the human being.

Thirdly, from observing developmental patterns for de-anthropomorphization, there seemed to be key developmental points for conceptual change in human-based God figures around 8-9 years and 11-12, 13 years. Those points in development indicate phases of increased de-anthropomorphization. This observation was supported by inferential statistics. De-anthropomorphizing such God figures emerged overall rather early, and did not indicate shifts happening late in development. This sets the ground for future research in this area to investigate into the contribution of specific cognitive abilities in that regard. The second phase of significant change may correspond to reaching the Piagetian formal operational stage. This would be consistent with the more complex use of elements from different ontological categories to represent an entity that children have not seen. By doing so, they may reach out to a larger set of potential solutions to a complex problem, compared to younger children. However, the increase observed between 8 and 9 years of age does not lend itself to that stage theory.

Fourthly, the absence of effect of religious schooling does entail that no environmental input should be expected in the way children may represent God in their drawings. Indeed, children do not live in a vacuum. Nevertheless, these findings suppose that it is not through formal teaching that this

concept endorses ontological nuances drawing away from the human being. Characterizing God through both its humanness and its non-humanness can be expected to be communicated widely across the cultural environment of children from the current sample. It is thus not surprising, in the end, that participants attend to it by means of de-anthropomorphization regardless of the type of schooling they receive. Additionally, distinguishing participants based on the religious vs regular teaching they were receiving might, in the case of this sample, not be so clear-cut. Indeed, children receiving religious schooling were not attending boarding school, for example. Therefore, it can reasonably be said that they shared a general socio-cultural background with other children from the sample. This comes in contrast to the observations previously made by Hanisch (1996), whose sample was more clearly divided based on religious education, which reflected the geographical and social separation between West and East Germany that had been enforced by the Berlin Wall.

On the whole, those observations may point to differential roles of cognitive development and religious schooling. For the child to choose a non-anthropomorphic God figure instead of an anthropomorphic one may mostly proceed from the ability to reach out to alternatives to standard models. In that respect, better cognitive abilities (acquired with age) may help switch between representations. Religious schooling may help, instead, with the actual content of those alternatives. For example, a child may often hear that “God is our light”, and start integrating this representation into her/his growing repertoire of possible God figures. In summary, this means that while religious schooling would be a facilitator to alternative forms (i.e., non-human ones), only sufficient cognitive abilities seem to permit combined humanness-non-humanness. Seemingly, the latter requires that children are aware of separate components composing the mixture they mobilize.

This explanation is particularly appealing when taking into account results in connection with de-anthropomorphizing strategies. Schooling was never close to playing a significant role in the utilization of such strategies in the current research, although it did influence the anthropomorphic vs non-anthropomorphic opposition. One possible manner to make sense of this is that looking into combined sameness-otherness with the human being through de-anthropomorphization taps more precisely into the conceptual underpinnings of a God figure and fine changes. Those strategies revolve around what makes a God figure human or not-only human rather than focusing on a strict differentiation from the human being. Those strategies require some conceptual complexity because they mix together different ontological categories while non-anthropomorphic figures do not necessarily present such blending. For example, a non-anthropomorphic God, as often observed in the current data, may ‘just’ be a light, which is not particularly complex at a conceptual level. On the contrary, adding wings or a nimbus to a human figure, or to place it in a non-typically human context is presumably more cognitively demanding. Nevertheless, both non-anthropomorphic God figures and de-anthropomorphization were observed to have peaks roughly around 8-9 years of age and 11-13

years. This similarity may indicate that major conceptual changes take place in those two particular points in development. Regarding non-anthropomorphic figures, those peaks are more visible among children receiving non-confessional schooling. Developmental patterns observed in Study 1 have, however, to be regarded with much caution, given the significance of age group comparisons.

In addition to theoretical considerations about children's representations of God, it might be insightful to relate a few qualitative observations made during the current research to graphic techniques employed by children in other types of tasks. Some techniques that were utilized by children to convey some de-anthropomorphization of God involved: a feature-based system (i.e., either added, removed, replaced or fused) as well as more esthetically determined gestures, such as aspects based on figure-background relationships (e.g., effect of the size of the figure). In that regard, some techniques are reminiscent of Karmiloff-Smith's (1990) task asking children to draw of a known entity (e.g., house, man, animal) in an instance that does not exist. In that study, she could observe that employing a "cross-category" strategy was used already by very young children (five-year-olds). It was thus easily accessible to children. Based on her theory of *Representational Redescription* (Karmiloff-Smith, 1990, 1992, 1999), it would be fruitful for psychological research on concept development to carry out comparisons between topics that children have never perceived directly (e.g., God). For example, structural changes were rare in the current study, and did not depend on age, although they are usual and found to depend on age in the Karmiloff-Smith task. In a similar fashion, the types of analogies used by children could be examined in connection with past scientific literature on different matters. For example, Spiro (1988) has described eight types of analogies, from which the following appear to be applicable to de-anthropomorphized God figures: supplementation, correction, alteration and enhancement. Other types - i.e., perspective shift, competition and sequential collocation - may instead explain the apparition of merely nonhuman figures in children's drawings of God. Identifying the presence of multiple analogies within a same drawing could be promising for a better understanding of symbolic development in relation to depicting God by visual means. It would also be valuable to tease apart the different possible meanings children attach to similar analogies.

General discussion

The main objective of the current study was to develop further the issue of anthropomorphism in God representations. The approach was developmental and involved a large age range (5- to 17-year-olds) of young participants (N = 532) from French-speaking Switzerland (N = 532). The object of study was participants' drawings of God produced for this research. Two studies were conducted. In Study 1, a replication of past findings (Brandt et al., 2009; Hanisch, 1996) was conducted. Study 2 helped look into children's finer strategies with regard to anthropomorphism. Both studies proposed a visual

conceptualization of either types of drawings of God (Study 1) or specific de-anthropomorphization strategies (Study 2).

This empirical inquiry was based on a revised model, explained in the previous chapter: “Children’s God representations: Are Anthropomorphic God Figures Only Human?”. It was contended that God representations may be based on other domain-specific concepts, such as the human being. While broad categorical delineations - such as sentient being, human being, artifact, animal - may occur early (e.g., Carey & Spelke, 1994), the conceptual specifications of God may undergo a long period of conceptual refinements. Such refinements may involve an increasing distance from the human being, either through the fusion of several categories of beings or by means of decreased human characteristics - as shown in the current study through children’s strategy use. Despite such progressive distance, God representations retain some strong dependency on other concepts. This is in line with Sperber and Hirschfeld’s (Sperber & Hirschfeld, 1999) claim that religious beliefs exploit on domain-specific cognitive abilities, that are either evolved adaptations or “painstakingly acquired expertise”. Depending on other concepts may be mostly due to the absence of real-life encounter with that concept, that is, the lack of firsthand observations. This goes against Barrett et al.’s claim that children would be naturally wired for conceiving of God (Barrett, 2000; Barrett & Richert, 2003). Instead, it requires sufficient acculturation and sufficient cognitive abilities, in particular. Certain early differentiation between God and other concepts has led researchers to call children “intuitive theists” (Kelemen, 2004). Again, the current research speaks in favor of a major role of age in fine conceptual differentiation from the initially predominant humanness. Those aspects will be discussed as part of the (second and third) main contributions of this research in this General discussion section.

The current research made three main contributions to the scientific understanding of God representations in children. Firstly, it has helped move beyond the anthropomorphic vs non-anthropomorphic opposition by proposing to explore within the majority of anthropomorphic God figures. In that regard, the notion of de-anthropomorphization was particularly useful. For the most part, by looking more precisely into figures that past research had labeled as ‘anthropomorphic’ some notable nuances have been unveiled. In light of discrepancies in past research regarding methodologies and terminologies, the current inquiry may have helped situate previous studies better compared to each other. By constructing a model emphasizing de-anthropomorphization strategies, this inquiry has shown that combined sameness-otherness with the human being is pervasive in (anthropomorphic) human-based God figures in children’s drawings of God. This supports the ideas exposed by Guthrie (1993) that such ontological blend should be found in God representations in many religious traditions, including Christianity. In that respect, this research has shown that children tend to communicate their God representations in the same way - but not only - and that they do so by employing a broad variety of graphic scenarios (specifically, strategies). Furthermore, and most

importantly, it has been found that attending to such combinations is profoundly developmental and changes across age years. The model was constructed on both a categorical system accounting broadly for anthropomorphism - as shown in Study 1 - and a dimensional logic covering strategies of combined sameness-otherness (especially de-anthropomorphization). The whole model is reported in the Appendices II section.

Secondly, age played a major role in the utilization of de-anthropomorphization strategies although schooling (as well as gender) did not at all. The fact that using such strategies was positively associated with age indicates the eminently developmental foundations of God representations and that conceptual change is likely to take place while drawing on several ontological categories, including the human being. The absence of effect of religious schooling in that regard likely shows that when it comes to mixing categories together education cannot lead to more 'advanced' God representations. In fact, such representations should presumably not be considered more worked-on, but simply as reflecting more advanced cognitive abilities and conceptual construction. Those findings are all the more powerful given the supposedly more accurate perception of ontological variations and categorical belonging with age. This therefore underlines the intentional alteration of God's humanness by ascribing non-humanness to it as well. Such type of ontological alteration consists in conceptually *un-doing* the human base that had been set. That *un-doing* follows one's cognitive development, and appears to be more endogenous than based on socialization. Stating this does not discard that children may resort to culture-specific symbols to do so, but it means that what drives them to it most likely reflects their own cognition.

Thirdly, by digging deeper into specificities related to non-humanness, and in particular with de-anthropomorphization, the current research has challenged the *universalist* assumptions that could be brought to the forth based on the combined observation of Hanisch (1996) and Brand et al. (2009). If age appears to play a role in the occurrence of such types of representations, religious schooling is not likely to contribute to them by supplying a more 'worked-on' concept. Instead, it is more plausible that religious schooling, given its non-significant effect on specific de-anthropomorphization strategies, plays a part as a provider of alternatives to the human being. It may operate through exposure to a variety of representations of God that may be more acute during religious schooling. This is essential for understanding the conceptual underpinnings of God representations and how they may develop across childhood through to adulthood. The idea that non-anthropomorphic God representations are somewhat more 'mature' or 'advanced', and that this can be proven through similar contributions of religious teaching and cognitive development must be dropped. This only made sense until anthropomorphic figures were scrutinized more carefully through this scientific work. A logic consequence is that de-anthropomorphization occurring on human-based God figures throughout childhood does not represent a gradual change towards completely non-

anthropomorphic figures. The phenomenon at stake is more intricate than that. Both de-anthropomorphization and non-anthropomorphic figures are found more frequently as children get older. On top of this, the former gets more complex with age and does not depend on religious schooling. Furthermore, both occur early on (around 7 years of age), and follow a somewhat similar developmental course, which discards the possibility that one of them would lie at a later stage in development. De-anthropomorphization may be qualified as an indicator of conceptual complexity, and the absence of resort to anthropomorphism (i.e., using non-anthropomorphic representations) may be better referred to as a measure of divergence or distantiation from the central concept of the human being on which the divine seems to be based.

This contrast between the effect of age and religious education across the two studies carried out for this research deserves closer attention. Although it could be argued that children's representations of God may *naturally* evolve with age - or even that they are naturally equipped in that regard (Barrett & Richert, 2003; Kelemen, 2004) the socio-cultural background surrounding a child has not to be neglected. This may go further than religious education as a provider of alternatives to traditional representations. The way children come to conceive of certain notions may be greatly influenced by different testimonies that are claimed around them (Harris and Koenig, 2000; Harris, Pasquini, Duke, Asscher, and Pons, 2006). Past research has shown that such an influence is likely to be visible on religious ideas from as early as 6 years (Evans, 2001). For example, during religious class, children are likely to hear claims such as: "God is the light", "God is our guide". Indeed, children receiving religious schooling were found in Study 1 to provide non-anthropomorphic forms of God in their drawings. However, such forms did not imply any conceptual mixture. Instead, they necessitated children to choose forms that are alternative to the more central human reference. Study 2 addressed specifically anthropomorphic God figures that are composite (not only human) or lack basic human characteristics. For this, they had to combine different ontological categories, one of them including human. If it could be expected that children would also be guided by testimonies about a human-like God carrying wings, having a halo, living in the sky, and so on, it also supposes sufficient cognitive abilities. More specifically, children need to have developed advanced domain-specific knowledge. It could then be argued that basic conceptual domains are grasped rather early in development, before the starting age of the current sample (Carey & Spelke, 2004). Nevertheless, depicting God in a way that is conceptually composite or that lacks basic properties may require more than having acquired basic domain-specific knowledge. With an exclusive age-dependency, results from Study 2 suggest that it is the joint attention on the part of children regarding conceptual mixture - or lack of basic features - that is at stake. The older the more likely they are to insert such oddity in their drawings. However, developmental patterns were generally not strictly age-incremental.

There are theoretical implications to this schooling-age contrast. Firstly, testimonies told by adults to children are very likely to have an influence on forms of the divine that are non-anthropomorphic, and to facilitate earlier endorsement by children in the context of religious schooling (8 years of age in the group receiving religious schooling instead of 10 years of age in the regular schooling group). This underlines the potentially important role of communities and proximal socio-cultural backgrounds. Why putting some emphasis on “proximal”? Because it can be assumed that apart from religious schooling, children were all acculturated to similar socio-cultural backgrounds in French-speaking Switzerland. Therefore, the more distal background must have certainly played a part in the religious orientation of the data: through predominantly Christian references, common most of the sample. That acculturation to non-anthropomorphic forms was not exclusive to the religious schooling group, but just occurred later in the other group. This suggests that religious ideas anyways pervade culture and that older children may be somewhat more sensitive to them. Secondly, cultural representations are often taken for granted ideas whose origin can be forgotten at times, to the extent that they are processed as a whole, through analogical thinking (Kaufman & Clément, 2007). If this may be true of individuals having reached adulthood, it might not be true of children. Indeed, the exclusive effect of age on conceptual mixture or lack of central characteristics point in another direction: children need to be cognitively capable of understanding such oddity to reproduce it in their drawings. Such reproduction proved - in Study 2 - to be expressed both more often and with more complexity in older children. Without undermining the role played by analogical thinking in the integration and repetition of cultural and religious ideas, the current research suggests that God representations cannot be simply replicated without first being understood from a domain-specific perspective.

The current stance serves to put into perspective God representations as both concerned with domain-specific knowledge, on the one hand, and analogical thinking, on the other hand. With regard to the former, it has been proposed that religious entities necessarily display minimally counterintuitive properties, which makes them ‘efficient’, attention-grabbing, socially transmittable representations (e.g., Boyer, 1994). Such ontological violations (Boyer, 1994; Boyer & Walker, 2000) are mostly meant to be evocative, as they are semi-propositional (Sperber, 1996), being understood in the form of “seeing as” rather than “seeing that” (Kaufman & Clément, 2007). They imply an analytical, domain-specific understanding. The latter underlies the taken-for-granted and in fact intuitive nature of such representations (Kaufman & Clément, 2007). Both viewpoints might be true. Following the current findings, it could be suggested that, similar to how cultural representations have been historically developed and socially transmitted, children must focus on their domain-specific mixture producing that attention-grabbing effect. Concurrently, at the time being, and for older (e.g., adult) individuals, representations of God from one’s socio-cultural environment might have become intuitive and are processed by analogy to other concepts.

Eventually, an important point at issue deals with whether God representations as they are drawn by children actually correspond to those children's very idea of God. There are several aspects to take into account. Firstly, it could be misleading to consider drawings of God in a literal sense without having access to the *emic* discourses made by their authors about them (Günther-Heimbrock, 1999). Instead, they stand as visual productions reflecting both the symbolic articulation carried by their authors and the surrounding socio-cultural context.

Secondly, as cultural representations may be semi-propositional (Sperber, 1996), it might be meaningless to claim any direct relation between the child's mind and the graphic composition that formed on the page. Some drawings might have to be taken literally while others bear more metaphorical qualities. Their commonality should be the social significance they have gained within a given background. Their conventionalization having progressively led to the omission of their original analogical meaning, they end up being taken for granted (Johnson, 1981; Miller, 1979). If the nature of the drawing task proposed to the participants does not permit, in itself, to define the exact individual status of a drawn God representation, it seems sufficient to call forth certain symbolic arrangements that have been learned and worked on by acculturation. These may testify to some form of *positional belief* (Tuomela, 1995), which reflects a collective belief taken on by the participant, depending on the specific situation. Insofar as drawings resulting from a themed task are meant to communicate to 'someone' an idea about a specific topic, the mobilization of a common language is supposed to be at work. The drawing production process taking place is thus likely based on an accurate *theory of picture* (Freeman, 1998) that supposes that the child will take into consideration not only their own intentions, but also the potential beholder, the place of the picture and the world (or in this case, the socio-cultural background) as interconnected parts of a net of intentions (Freeman & Sanger, 1995).

Thirdly, given their highly complex nature, God representations expressed by an individual at a specific time are likely to correspond to one *god-schema* called forth in the moment (Gibson, 2008). What can be supposed, however, is that children's drawings of God still reflect the symbolic abilities of their authors. Having all this in mind, it can be argued that the current analysis of children's drawings of God is relevant for it shows a certain level of articulation between children's cognitive abilities, concept development, mastery of culturally learned symbols and testimonies provided in their socio-cultural environment.

Limitations and Future Research

The current study however presents a few limitations. A principal limitation concerns its cross-sectional design, and thus the impossibility to conclude to causal relationships between variables. Another one follows from the very strength the method itself: although a free-drawing type of task

addressing God representations keeps most doors open and is bound to produce very rich data, it also lacks the experimental qualities that other research designs may have. Most participants came from a Christian background, and while this is representative of the Swiss context where the data were collected, there is also a need to conduct a similar study on a broader variety of religious denominations. More comprehensive measures of religiosity, also encompassing spirituality could have been used - e.g., Brief Multidimensional Measurement of Religiousness/Spirituality (Holder, Coleman, & Wallace, 2010). However, it is often costly on quantitative studies and weighs heavy on the teaching staff given access to the participants to allow for much extra time.

Future research should certainly address the child's own reflection about the end-product that is the drawing, which is in that sense a sort of 'phenotype' guided by mostly unseen motivations (Günther-Heimbrock, 1999). In-depth qualitative assessments of children's drawn God representations in respect of de-anthropomorphization is likely to move our current understanding even further. Interviews with the participants may reveal intricate connections between mental representations and drawings. Particularly, it would be beneficial to map how children make meaning of resorting to anthropomorphic traits when drawing God, considering literal and metaphorical levels. Indeed, at this stage, findings do not permit to decide whether the ontological variations observed faithfully reflect underlying conceptual alterations or increased abilities for using a metaphorical language.

Moreover, other branches of the theoretical model proposed in this study should be examined. One such possibility lies in unpacking anthropomorphism even further, and 'Non-ordinary human figures' in particular. Another possible path to follow pertains to examining more closely non-anthropomorphic God figures and types of drawings situated higher in the model constructed in this research.

Eventually, within-subject comparisons should be conducted, investigating possible relationships between drawn God figures and other topics (e.g., superheroes) or other types of tasks (e.g., Karmiloff-Smith kind of task).

Practice Implications

Religious Education

As suggested by Pitts (1977) educators of religion need to adapt teaching to the child's cognitive development and not use language or metaphors they cannot grasp yet. Borrowing more specifically from insightful research on analogical reasoning, confusion could be limited and the learning process improved by working on different types of analogies, in a way similar to applications in medical studies (Spiro, 1988). This is suggested by the substantial references to other ontological categories than the human being observed in the current study. Therefore, it might come spontaneously to children that

while the human being represents a solid support for understanding an intentional agent such a God, conceptual clarification is also increased by symbolic ways of ontological differentiation from it. This perspective goes far beyond depicting God as a light, for example, to evoke guidance in one's life. Instead, it posits that the educator's interest should lie in children's *emic* construal of the divine and should attempt to rebound on the metaphoric language they use themselves, as shown in their drawings of God.

General Teaching





More than providing a mere humanized perception of the world, anthropomorphism may act as a very useful scaffolding to understanding a variety of notions, besides God. Stimulating anthropomorphic explanations of different phenomena may assist the acquisition of new concepts, with the caveat these need to be understood as metaphors only, and that under certain (unfortunate) conditions these may cause difficulties in the novice's mind, in science (Kallery & Psillos, 2004) or programming (Robins, Rountree, & Rountree, 2003). Zohar & Ginossar (1998) have provided evidence that while it might be easier for children to apprehend novel notions in an anthropomorphic language, as a "prop", it does not mean that they will be misled to reason in an anthropomorphic way. Developing this idea further, based on Spiro (1988), we could use anthropomorphism as a base and encourage the addition of other ontological categories when deemed fit to better map the underlying structure of a complex notion to be learned, be it God or another concept. Based on the observation in the current data that children do mix ontologies more often and in more complex ways with age, it could be suggested that conceptual refinements would eventually happen even when a notion is taught by employing anthropomorphic metaphors.

Conclusion

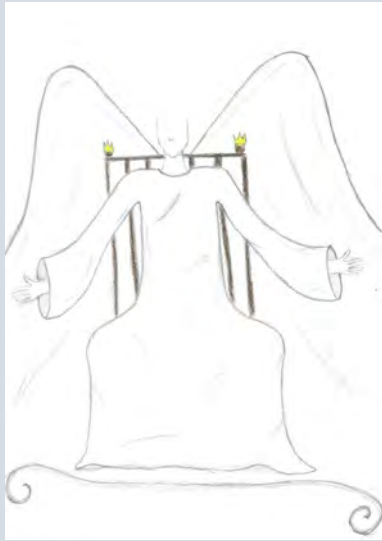
The current research has proposed a data-driven model attempting to conceptualize various graphic scenarios concerning anthropomorphism in children's drawings of God in French-speaking Switzerland. As previously observed, a developmental tendency towards non-anthropomorphic God figures and a similar effect of religious schooling could be replicated. However, a particular focus has been put on de-anthropomorphization strategies, following an incentive to move past a binary anthropomorphic vs non-anthropomorphic opposition. A substantial part of the data was found to endorse de-anthropomorphization, and a positive effect of age could be observed almost systematically. On the whole, the current findings point to much more complexity in connection to anthropomorphism. Additionally, they support the idea the God concept undergoes fine conceptual changes, progressively drawing away from the human being, rather than following a sudden non-anthropomorphic shift.

Appendices I

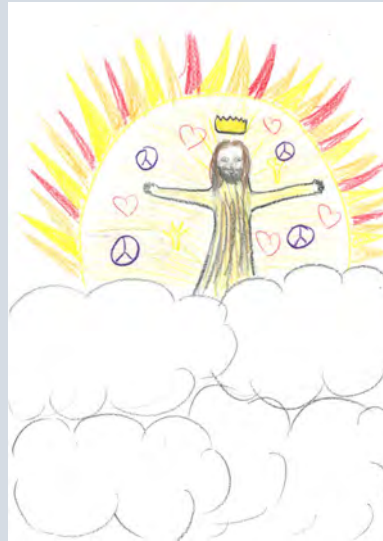
A few drawings are presented here to illustrate relevant de-anthropomorphization strategies as well as the non-anthropomorphic type of drawing in order to provide the viewer with a better sense of what was entailed in the current article. Even though it was not part of the analyses in Study 2, for the sake of clarity, illustrations for 'Non-human base' have been provided as well.

<i>Associated</i>	<i>Associated-Through the background (non-terrestrial)</i>
	
<i>Structural</i>	<i>Structural-Incomplete</i>
	

Incomplete-Structural



Through the background (non-terrestrial)



Through the background (non-terrestrial)

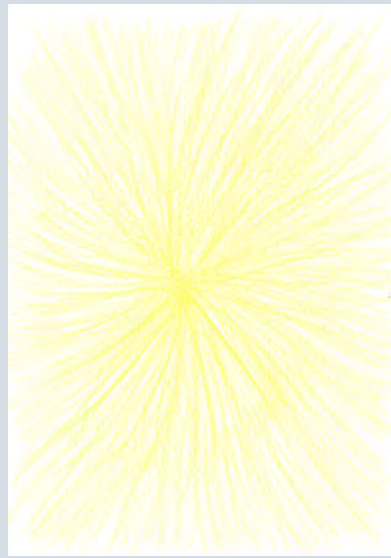


Through the background (relative to others-non-terrestrial)



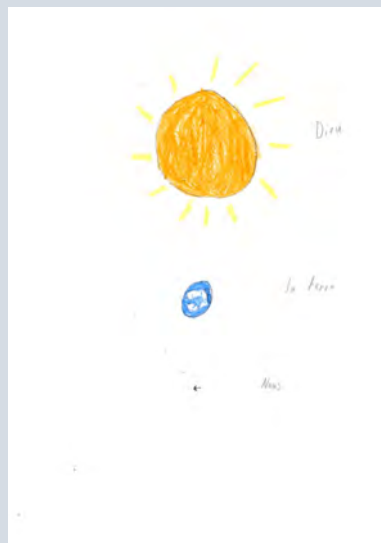
Through the background (relative to others)

Non-anthropomorphic

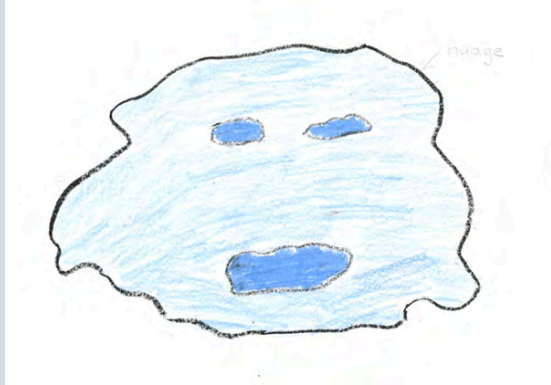


Non-anthropomorphic

Non-anthropomorphic



Non-human base

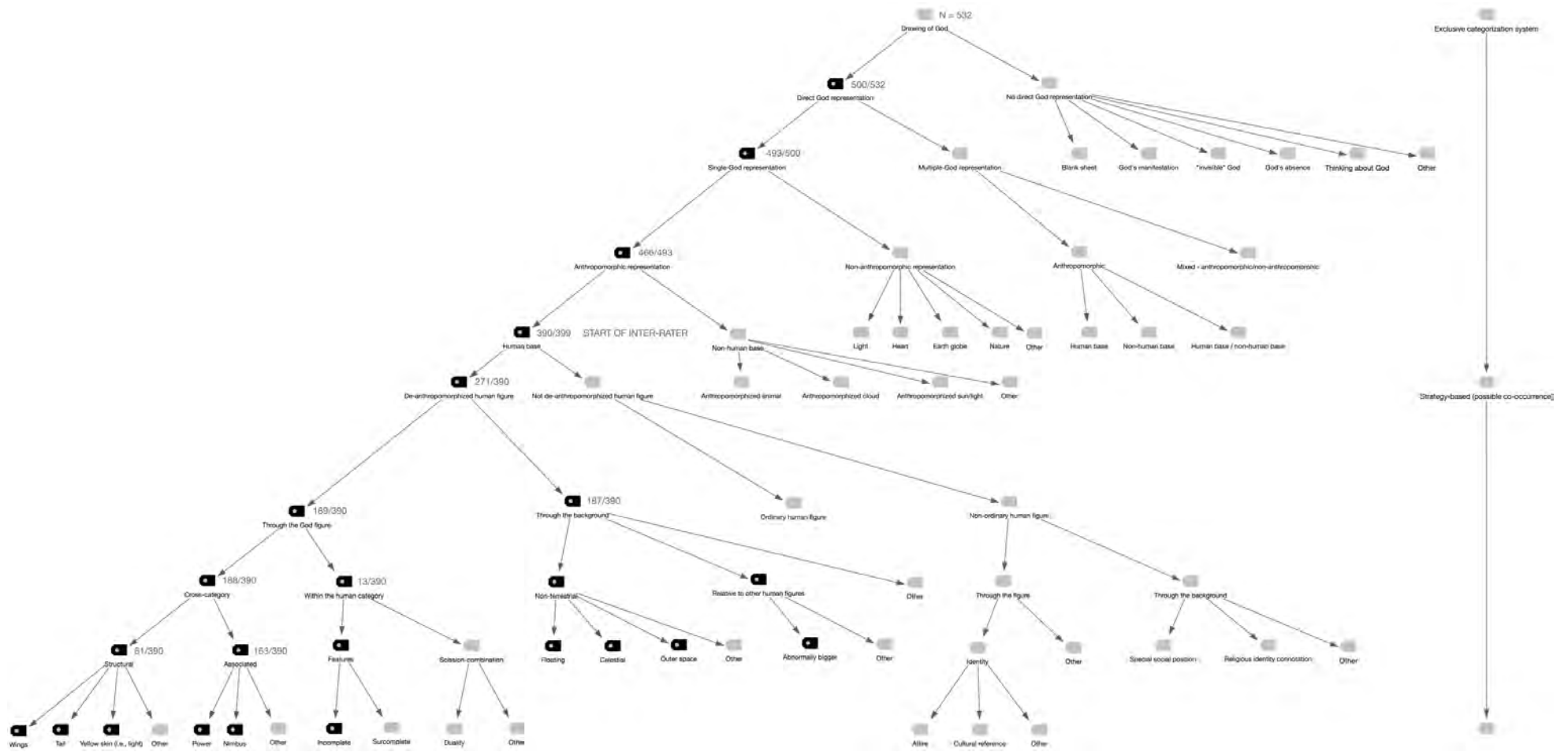


Non-human base



Appendices II

On the basis of Study 1 and Study 2, a comprehensive model was reported. It combines a strictly categorical system (until 'Anthropomorphic representation') with a dimensional one (designed to identify sameness-otherness with the human being on human-based God figures - especially de-anthropomorphization).



Chapter 3 - From Fine Esthetic Techniques to a Sense of Combined Sameness-Otherness: A Qualitative Analysis of Children's Drawings of God

Abstract

Introduction. Past research has shown that throughout their development children tend to represent God (i.e., in their drawings) in forms that are less often anthropomorphic (Brandt et al., 2009; Hanisch, 1996), include more symbols (Ladd et al., 1998; Pitts, 1976) or that are less figurative (Dandarova, 2013). Beyond exclusive binaries, there has been a lack of exploration into characteristics attributed to God representations that bring out both humanness and non-humanness. The current study consists in a follow-up of a larger quantitative inquiry (Dessart & Brandt, submitted) into such aspects. Its main rationale was to draw upon previous findings and assess further the contribution of a series of esthetic techniques.

Methods. Children's drawings of God were analyzed by carrying out a qualitative framework analysis on a small data set (N = 46) taken from a larger sample (N = 532). Those drawings had in common: having the God figure being shown from close-up and being partially represented within the framework of the drawing sheet. The reason they were chosen for an in-depth examination is their apparent proclivity to display fine esthetic nuances that convey combined sameness and otherness from the human being.

Results. The main results were threefold. Firstly, six core themes could be identified based on interactions between content and formal/abstract properties employed in the drawings, and secondly, a model could be constructed in order to conceptualize the relationship between themes and techniques. Thirdly, the utilization of specific themes was not found to depend individual differences - i.e., age, gender and prayer practice.

Discussion. Children, at different points in development, appear to be able to convey a combination of humanness and non-humanness in God representations by using subtle esthetic techniques other than merely content-dependent. At a methodological level, this points to the necessity to evaluate such techniques (e.g., formal/abstract properties) on different issues. At a conceptual level, there seems to be several ways by which children may perceive God as 'not only' human. This underlines the great potential of visual methods with children. Future research will have to address a possible generalization of the current findings to larger samples of drawings of God as well as their applicability to other topics. Practice implications are proposed for religious education and inter-religious communication, clinical practice and arts education.

Introduction

Past research on children's representations of God has often drawn a clear distinction between anthropomorphic figures and other types of figures (Brandt et al., 2009; Dandarova, 2013; Hanisch, 1996). Anthropomorphic gods, such as depicted in drawings produced by children, have sometimes been judged less advanced forms of representations that should be outgrown with increasing age (Hanisch, 1996), and 'symbols' have received much attention as indicators of cognitive development (Pitts 1976; Ladd, McIntosh, & Spilka, 1998). While this may not be exact, there remains that the predominant proportion of human-like God representations found across samples is worthy of more attention. Indeed, in-between process, humanness seems to have been neglected as a central ontological category around which a wide breadth of variations is possible. Guthrie (1993) has observed that gods in most religions - including Christianity - bear both human (i.e., *sameness*) and non-human (i.e., *otherness*) properties.

A quantitative study has been conducted by the same authors of this article prior to the current one. It has led to the identification of *de-anthropomorphization* strategies that children may apply to God figures that are otherwise human. They deal with the communication of non-humanness in connection with humanness. Results have shown that mixing those two characteristics increases with age, and supposedly reflects underlying conceptual changes in relation to the human-divine association.

What that study has failed to consider however is how the combination of humanness and non-humanness can be conveyed through esthetic means that exceed the content of composition. For example, formal/abstract properties (e.g., fading lines, colors, how elements are laid out over the composition) may contribute to expressing such an idea in children's drawings of God. As exploratory work may be facilitated by examining a small sample from the larger data set, it was decided to do so on drawings that seemed particularly prone to exhibiting this type of idea (i.e., combined sameness and otherness from the human being). Owing to familiarity with the data set, it was possible to identify such a group of drawings. Their common qualities were that the God representation was depicted as human or human-like, was shown from a close-up perspective and was incompletely represented within the framework of the page. For example, being shown as a bust would fit those criteria. The intuition of the researchers was that if the space allowed for the background behind the God figure was limited communicating nonhumanness on a human figure may take place otherwise - for example, through fading or non-closing outlines or through some special setup in relation to the medium (i.e., the page) itself. The use of a limited amount of drawings does not imply that the outcome of analyses will exclusively apply to that specific type of drawings. Nonetheless, it is assumed

that for the reasons outlined above, such drawings represent a particularly fruitful ground to begin with as the use of alternative approaches to the content of composition is supposedly more acute.

One difference with type of data considered for this study and the previous quantitative study is that the latter only inspected God representations that are human-base. This means that were examined only figures that are predominantly human. This was due to the conceptual approach to *de-anthropomorphization*, which required that in order to pinpoint some *un-doing* there needs to be a base of some sort - in this case: a human figure. Figures that were anthropomorphic without having merely a human base represented a minority of the larger sample (i.e., 9 drawings, compared to 390 human-based ones). The current study was slightly more lenient in that regard, given that de-anthropomorphization was not at stake, but mostly the combination of *sameness-otherness*, which may take place on a God figure that is anthropomorphic while having a non-human base (e.g., a sun or a cloud with eyes on it). This has led to some data selection from the N = 399 'Anthropomorphic' God representations from the previous study (which can be easily visualized in the comprehensive model reported in that study).

On the whole, two points mainly stand out in this research area. Firstly, humanness in God figures should be considered for elements that could make them 'not only' human. Secondly, besides the content of composition, formal/abstract properties should be analyzed for they may convey additional information on this issue.

Anthropomorphism, Agency and Religions

When faced with ambiguous phenomena human beings tend to seek interpretation according to pre-existing models that may provide most relevant information to them, that is, other human beings, which then entails analogical processes on that basis (Guthrie et al., 1980). Anthropomorphism may be defined as the: "systematic application of human-like models to nonhuman in addition to human phenomena" (Guthrie et al., 1980). This might lead to false positives, that is, interpreting non-human phenomena in human terms (Guthrie, 1993). Nevertheless, this might still be beneficial, and more generally, the detection of agency may be of the utmost importance to one's survival (Gombrich, 1972).

At a psychological level, specific cognitive functions have been put forth, such as: a Hypersensitive Agency Detection Device (Barrett, 2000, 2004) or an Existential Theory of Mind (Bering, 2002). In that respect, if detecting intentional agents might most often than not equate with interpreting in human terms (rather than according to other agents) it might be because the human being is the *most outstanding exemplar* of intentional agency (Barrett & Keil, 1996). God, being

generally perceived as an intentional agent (Barrett, Richert, & Driesenga, 2001), may therefore be understood in human terms. It might be consequential to external contingencies, such as time limitation for processing information, leading to cognitive pressure and the use of heuristics - such as being more inclined to anthropomorphize God, even in adulthood (Barrett & Keil, 1996). Another reason might be that the phenomenon an individual is seeking an explanation for is ambiguous (Guthrie et al., 1980). This concerns information processing that may be deemed synchronic for it happens in the present time.

From a more strictly developmental (therefore diachronic, as opposed to synchronic) viewpoint, there is an early and broad distinction between concepts such as *things* and *sentient beings* as a basis to interpreting the world (Carey & Spelke, 1994), which may drive young children to perceive numerous entities as anthropomorphic (e.g., animals or plants) based on a primary categorization as animate (vs. inanimate). Ultimately, superficial or more drastic changes occur in the way children comprehend certain concepts, leading to belief revision or conceptual change, respectively (Thagard, 1988). Conceptual change might be particularly challenging if the concept at stake is difficult to grapple with. This is presumably the case of the concept of God, which is, from a psychological viewpoint, a culturally constructed entity that the subject has never perceived directly. For various entities, including God, to have some (partial or complete) anchor into the *sentient beings* category may therefore characterize their conceptual core, entailing for example anthropomorphic explanations.

In a similar fashion, although addressing more fundamental cognitive processes, a Piagetian framework would posit that cognitive equilibrium can be reached only by an appropriate dosage of assimilation schemas and accommodation (Piaget & Inhelder, 1969). Individuals may tend to produce anthropomorphic false positives when there is an imbalance in favor of assimilation. In a complementary manner, some distantiation from a human model may be progressively achieved across one's cognitive development (Piaget, 1951, 1929). In that respect, non-anthropomorphic God representations may require more distantiation and for that reason only occur past a certain point in development.

On the whole, there are a series of possible reasons that may lead individuals to anthropomorphize phenomena that may not be human but require explanation, all the while challenging one's access to alternative understandings. Such access might be impeded for different reasons that may be synchronic and contingent (e.g., time limit) or diachronic and deeply conceptual (i.e., developmental).

Conceptual Mixture: Sameness and Otherness with the Human Being

Ontological categories have classically been explained as combinations of predicates and terms depending on predicability relations concerning basic categories of existence (Sommers, 1959). There are two central distinct aspects of concept development, either through the emergence of a new category (implying conceptual insight) or through refinements (then not necessarily ontologically based) between two close categories (Keil, 1983). Research in the cognitive science of religion has suggested that individuals tend to perceive religious entities as spreading over several ontological categories. Boyer has put forth the notion of ontological violations, which assumes religious entities usually rely on a main conceptual backdrop (e.g., the human being) all the while some minimally counterintuitive elements are associated with them (e.g., non-physicality) (Boyer, 1994; Boyer & Walker, 2000). By being sufficiently attention-grabbing, they may be better socially transmitted and remembered. Guthrie (1993) has proposed a somewhat similar conceptual hybridism of God representations in certain religious traditions (including Christianity). More precisely, he has underlined a recurring combination of *sameness* and *otherness* with the human being in representations of God in a variety of cultural environments. This was a main focus for the current study to highlight how individuals may depict God as human - therefore, applying a human model to a non-human entity - while they would also alter the primary human representation in such a way that it would be entrusted with non-human qualities. Combined sameness-otherness with the human being in the God figure is likely the result of this two-step process, that is, humanizing then altering.

Children's Drawings of God

Advantages of Using Drawings in Research

An appropriate method to seek for *sameness* and *otherness* in God representations is to inquire into visual depictions. Drawings may be one example. They might have an advantage over words, especially for children, who could be struggling to articulate complex ideas through language (Brooks, 2005). This may help avoid erroneous verbal answers (Kagan et al., 1982). They also consist in an activity that is usually familiar to them, and they offer the possibility to compare participants' answers across a large age range. In addition, *free-drawing* (in the sense of open-response) tasks may come across as less intimidating to young participants (Kirova, 2006). Eventually, using visual methods (e.g., pictures) might be specifically convenient for examining God representations, at any age (Bassett et al., 1990).

Children's Drawings of God and Anthropomorphism

Past research in this area has consistently reported a developmental shift from anthropomorphic God representations to non-anthropomorphic (sometimes identified as abstract, symbolic or non-figurative) ones. This has been observed in the vast majority of quantitative studies examining this issue: in Western Judeo-Christian samples (Hanisch, 1996; Kay & Ray, 2004; Ladd, McIntosh, & Spilka, 1998; Pitts, 1976; Tamm, 1996), in Eastern samples more influenced by Buddhism (Brandt, Kagata Spitteler, & Gillièreson Paléologue, 2009; Dandarova, 2013), and in more secular samples (Hanisch, 1996; Tamm, 1996). It had already been suggested in a pioneering study conducted in the US (Harms, 1944).

There are, however, three main limitations to such an approach. Firstly, the opposition anthropomorphic/abstract supposes that the human being is more concrete than non-anthropomorphic representations. However, one could not reasonably contend that depicting a bird, a cloud or a light is more abstract per se. It might instead show greater *distantiation* from oneself, adopting the notion of *egocentrism* proposed by Piaget (1951), or that - up to some point - it might arise from a merely metaphorical approach. Secondly, it underlines an overall binary understanding of God representations, opposing anthropomorphism to other types of depictions. Nevertheless, this second critique may necessitate to be taken with a grain of salt for the reason that some studies have offered somewhat more nuanced methods. Pitts (1976) has created separate measures of anthropomorphism and religious symbols and Ladd et al. (Ladd, McIntosh, & Spilka 1998) have utilized scores of "*symbolism*". Using a categorical approach, Brandt et al. (Brandt, Kagata Spitteler, & Gillièreson Paléologue, 2009) have employed a system with finer distinctions between types of beings (distinguishing between an ordinary human being and an angel for example). Thirdly, in spite of the developmental tendencies previously observed, the vast majority of God figures remains anthropomorphic and would therefore require finer analyses of that category of figures. A possible proposition is to examine the co-occurrence of anthropomorphic and non-anthropomorphic traits in God figures drawn by children, which has never been directly addressed by those studies.

Besides traits attributed to the God figure as being constitutive of it (e.g., face, arms, wings) or strongly associated with it (e.g., nimbus), the surrounding background (e.g., clouds, sky) might also be relevant in conveying a sense of alterity with the human being. As a matter of position in space, young children tend to describe God as living in "a golden house far above the clouds or in a house made of clouds" (Harms, 1944) (p. 115), or as an angel hovering in the air or up on a cloud (Brandt, Kagata Spitteler, & Gillièreson Paléologue, 2009). Pitts (1976) has observed that a main contextual difference between drawings of God and of a human being was that the former showed a "non-earthly

context". To the best of our knowledge, only one study on children's drawings of God has specifically focused on spatial properties associated with God through an examination of how children conceive of God's house. Pnevmatikos (2002) has noticed four main types of places where God lives: a material house on Earth, a material house in heaven, ethereal-spiritual and idealistic (displaying moral qualities). Some developmental differences have been found, especially regarding the higher complexity of conceptual hierarchies in older children.

In the main, research may need to move beyond the use of exclusive binaries when addressing children's God representations (e.g., anthropomorphic vs. not), and seek for the co-occurrence of human-like and non-human-like properties in God instead. God figures previously judged to be anthropomorphic may cover up a great variety of traits pointing to their non-humanness alongside their humanness. In that regard, the current article will contend that the context (e.g., celestial) into which the God figure is depicted may contribute to such non-humanness, contrary to Pnevmatikos's (Pnevmatikos, 2002) approach to ontologies. Eventually, a main focus has been put on the content of composition when analyzing those drawings, but there might be much more to anthropomorphic (and non-anthropomorphic) qualities, such as formal/abstract properties. Those aspects of drawings are described in more detail in the next section.

Children's Use of Esthetic Techniques in their Drawings

There is a whole area of research investigating on the development of children's ability to draw expressively, and to draw emotions in particular. Studies situated in that area (Bonoti & Misailidi, 2006; Jolley, 2010; Jolley et al., 2016; Picard & Gauthier, 2012) have consistently examined three main types of esthetic techniques in that respect: content of composition (i.e., what is actually depicted, what is happening in the scene), formal/abstract properties (e.g., lines, colors, balance of composition) and literal expression (i.e., facial expression or gestures). Those techniques are typically what professional artists would be likely to rely on to communicate emotionality in their visual artworks. Content of composition and formal/abstract properties may also be referred to as metaphorical devices (Picard & Gauthier, 2012), and are of great importance for the current study. The last one (i.e., literal expression) is less relevant for this particular inquiry. While those techniques have mainly received attention in psychological research for their capacity to convey emotions, it is contended in this article that they may play a central role in conveying sameness-otherness with the human being in anthropomorphic God figure. The distinction between content of composition and abstract/formal properties will thus be made throughout this study in order to account for their respective contributions.

Developing a Representation of the Human Being to be Able to Alter it

From a developmental perspective, altering a human figure in such a way would require that children are capable of drawing a human figure, on the one hand, and that they manage to bring into the composition elements that convey a sense of not being entirely human. Regarding the former, previous research has shown that 4-year-olds generally draw human figures that are recognizable, present with limbs and extremities that are accurate by the age of 5 and are even detailed by the age of 6 (Royer, 2011). In respect of the latter, children as young as 4 years old display some abilities to represent an entity in a form that does not exist while maintaining its core concept, e.g., a person, a house or an animal (Karmiloff-Smith, 1990). At a basic level, it can therefore be expected that children from 7 years on (the starting age of the sample of participants used in the current study) are able to convey sameness-otherness with the human being in their depiction of God.

From a theoretical viewpoint, in order to trigger such effects through a visual artwork one needs to have sufficiently astute social cognition - and theory of mind in particular - allowing to put oneself into the beholder's shoes, especially when bringing into play fine esthetic aspects (potentially involving spatiality, communication and/or materiality). Precisely, an artist (which may be a child) needs to have developed a *theory of picture* to grasp the interconnections existing between oneself, the artwork, the beholder and the world (Freeman, 1998, 2008). In relation to the materiality of images, DeLoache's (1987) notion of *dual representation* as the ability to recognize the double function of a picture (or generally an object) as the representation of a thing as well as a thing itself, is useful. In addition, *decentering* lies in the ability to consider an object from different (perceptual and conceptual) perspectives (Piaget & Inhelder, 1969) and *decoupling* consists in "putting on hold" the primary meaning of an object (Leslie, 1987).

Visual Realism

In order for the reader to get a better grasp of further discussions outlined in the present article, it might be useful to describe some findings from past research on children's drawings in general and how they develop. Luquet (1913) has certainly been influential with his stage theory of drawings, where children go through the following stages: scribbling, fortuitous realism, failed realism, intellectual realism and eventually visual realism. What is important for the current issue is that reaching the final stage of Luquet's theory implies that children draw as they see and no more as they know, like it was the case during intellectual realism. It results in representations that are more

realistic and are closer to how beings and objects are perceived by the eyes. Age years attached to those different stages correspond roughly to: 2-, 3-, 4-, 4- to 8- and 9- to 12-years old.

Interestingly, when children proceed to drawing God they often use the human being as a basic model. upon which they build and insert elements that make it appear non-human or not ordinarily human. More specifically, although they might depict it in a realistic fashion, they move away from a representation that they might know from real-life situation, that is, from an encounter with an 'ordinary' human being. Similar to this are children's drawings of a man (or other beings or objects) that does not exist (e.g., Karmiloff-Smith, 1990). Here again, a central notion is set and its representation is initiated while endorsing alterations to some of its properties that define it as being part of an ontological category. In that respect, culture and general knowledge (e.g., popular culture) may influence children in their decisions on how to symbolize and exemplify a given notion.

Current Study

The current study consists in an in-depth qualitative analysis of children's drawings of God. Before delving into more specific aspects, it is important to see it as ensuing from a larger (quantitative) research project investigating children's drawings of God (Dandarova Robert et al., 2016). A quantitative approach to anthropomorphism has been conducted within that framework (Dessart & Brandt, submitted) on a large sample of drawings (N total = 532). Data were collected in French-speaking Switzerland, among girls and boys, coming mostly from a Christian background, and met either during regular teaching or during religious class (Christian Catholic or Protestant Reformed teaching). Religious class was either held in the school or outside, as an extra activity. Children were asked to draw God as they imagined (more details are provided in the Methods section). That initial quantitative study tapped into conceptual change in relation to co-occurring humanness (i.e., sameness) and non-humanness (i.e., otherness) in God figures that have a human base. In that respect, the main purpose was to seek *de-anthropomorphization* strategies that children may use to conceptually alter humanness in such figures by evoking 'something' else in the divine than 'just' being human. It had the advantage to move beyond the binary anthropomorphic/non-anthropomorphic view observed in past research (see Brandt et al., 2009 for a discussion). Analyses were carried out on 399 drawings that depicted an anthropomorphic God figure - taken from the total N = 532 sample. A central finding was that expressing *otherness* in anthropomorphic God figures increased with age, which suggested the existence of a developmentally determined growing complexification of anthropomorphic God representations on the basis of their ontological categories.

The strategies that were examined merely relied on the content of composition. For example: are there elements extraneous to the human category, and are they part of the figure's structure (e.g., wings) or are they associated with it (e.g., nimbus), or is the figure put in a context that indicates some non-humanness to it (e.g., unusual context for a human figure)? Therefore, *otherness* may be expressed through the God figure itself (e.g., wings, nimbus) or through the background around it (e.g., celestial). In respect of the latter, one may humorously oppose the case of astronauts, because it may exhibit a similar background. However, the underlying and maybe most important idea is that the figure should be depicted in a way that intimates that the unusual (or impossible) properties displayed (e.g., flying) are not being produced by external machinery like in real life. Moreover, no drawing from the current sample has shown any representation such as an astronaut.

Despite the improvement in understanding ontological nuances around anthropomorphism in children's drawings of God, that previous study failed to apprehend one particular aspect of drawings: it mainly accounted for the content of composition and hardly looked for finer esthetic means of expression in that regard. From analyzing their data set the authors have noticed that there might be more to anthropomorphism and *otherness* than content, such as formal/abstract properties in general. This may concern how evanescent or transcendent a God figure appears through faded delineation or how it plays on the materiality of the page by coming off it at head level. Such examples may have been used by the participants to point to some perceived ubiquity of God - which does not correspond to properties that define a human being, thus concern its non-humanness. These possibilities illustrate how content of composition is presumably not the only esthetic means by which children may express *otherness* in anthropomorphic God figures.

Such subtlety was particularly noticeable in a sub-sample of drawings from the N = 399 sample, without being a priori exclusive to it. Those drawings shared the following characteristics: an anthropomorphic God figure was shown from close-up and was incompletely represented. Such incompleteness was due to the particular 'framing' used to depict that figure within the space provided by the page (contrary to being incomplete because of an obstructing object, for example). The most common type of depiction to qualify those drawings would be a $\frac{3}{4}$ shot, a bust or a mugshot, depending on the specific proportions of the figure left visible. They all differ from the predominant full-length type of depiction found in the larger Swiss sample, where anthropomorphic God figures are usually shown entirely and often with a background. As mentioned in the introduction of this article, one reason for those drawings to be more prone to displaying other-than-content-based *otherness* may lie in their initial 'framing' (e.g., portrait-like), already emphasizing esthetic refinements, then leaving a door open to their utilization for conveying particular ideas, such as *otherness*, for example. Another possible reason could also be that with the display of only a limited

amount of - upper - body parts (e.g., head, bust) the resulting space for working on the background would be limited, thus potentially restricting possibilities for expressing nonhumanness (e.g., through a celestial environment).

A striking observation could be made in relation to the broader literature on children's drawings. When considering such drawings, one may come to notice their very realistic qualities, seemingly corresponding to what Luquet (1913) has described as typical of drawings made by older children (around 9-12 years old) having come into the stage of *visual realism*. This is characterized by drawing 'as one sees' (and no more 'as one knows'), as realistically as possible, employing the perspective of a situation as it would be perceived in real-life. Such realism, however, does not a priori align with findings from the previous quantitative study, which have shown that non-humanness (i.e., *otherness*) in anthropomorphic God figures increases with age. Facing the realism of anthropomorphic God figures from this sub-sample, one may assume that the participant would have been all the more compelled to sort of 'compensate' by introducing non-humanness by additional esthetic means, other than content. This may thus be yet another reason for such drawings to exhibit *otherness* by alternative esthetic means.

In summary, this study set out to explore esthetic alternatives to content in regard to *otherness*, and using a sub-sample of drawings that share certain characteristics may help facilitate the identification of related techniques. Drawings sharing those characteristics may not represent the only type of depiction capable of revealing a play on esthetics other than content in that regard, but they surely present a favorable data sample to tinker with and explore such possibilities as a start.

Aim, Objectives and Research Questions

The main aim of the current study was to explore further the expression of sameness-otherness with the human being in God figures.

More specifically, the objective was threefold. Firstly, it should be concluded, based on the methods used in the previous (quantitative) study, whether the current small group of drawings is peculiar compared to the larger sample. Secondly, it was intended to explore how esthetic means other than the content of composition may evoke otherness from the human being in anthropomorphic God figures drawn by children. A sub-sample of drawings was used because they endorse certain characteristics that are believed to facilitate such a search for esthetic alternatives: i.e., an anthropomorphic God figure being shown from a close-up perspective and being incompletely represented due to its framing on the page - for example, in a bust type of depiction - and this incompleteness is not due to an obstructing object). Thirdly, it was meant to inquire into possible individual differences in that regard.

It is worthwhile to mention that only single God figures would be considered, that is, social scenes would be taken into account but not (a minority of) drawings where God is drawn across several entities. In any case, multiple-god drawings do not share the central characteristics shared by the drawings that compose the current sub-sample.

The research question was fourfold. Firstly, does the current sample of 46 drawings show any difference with the larger sample of (human-based) anthropomorphic God representations that it is taken from regarding the use of de-anthropomorphization strategies? Secondly, when both content and formal/abstract esthetic techniques are taken into account in this sample, what are the main thematic frameworks associated with sameness-otherness from the human being in God representations? Thirdly, do those frameworks depend on age, gender and religiosity? Fourthly, how could possible interactions between formal/abstract esthetic techniques and the content of composition be conceptualized in a model in that regard?

Methods

Initial Research Project and Data Collection

As part of a larger quantitative research project, 532 drawings of God were collected in French-speaking Switzerland among children aged 5 to 17 years old, girls and boys. Participants came predominantly from a Christian background, which is representative of the current Swiss society. In order to assess the impact of schooling, half of the sample was met during religious teaching and the other half during regular schooling. They were met in small groups (about 10 children on average) although they worked individually, in presence of their usual teacher. They all received the following materials: an A4 stiff sheet of paper, a gray pencil, an eraser and a 10-color set of wax pastels. Importantly, they did not know exactly what the task consisted in prior to the meeting. They were sat in a way that copying from each other would be discouraged.

They were asked to draw God as they imagined (it may be worthwhile that all gender articles were avoided in order to minimize potential biases). In order to make sure that each child had actually responded to the task, they were individually asked to recall what the task was after they had finished their drawing and to describe what they had drawn. Eventually, participants were also asked to answer written questions about their own religiosity (including religious affiliation and prayer practice at home). Participants were told that they could take as much time as they wanted, although sessions usually lasted 30-50 minutes. This point is important with regard to cognitive resources, given that the absence of a strenuous time restriction should reduce possible cognitive pressure.

All children were thanked for their participation and congratulated on their drawing.

Re-Sampling for the Current Study

As exposed above, from the initial N = 532 sample, 399 drawings displaying an anthropomorphic God figure could be analyzed for how they combined sameness-otherness from the human being. It is worthwhile that a small additional amount of anthropomorphic drawings was found in that initial sample, but they either showed several God figures or were used during the training phase leading up to the actual rating.

The sample of drawings actually used for the current study consists of a data set taken from those 399 drawings. The main reason, also exposed in the first part of this article, is the necessity to examine strategies employed by children to evoke sameness-otherness from the human figure in God representations, that is, by accounting for esthetic techniques that do not mainly pertain to the content of composition. One path that may be suggested deals more specifically with formal/abstract properties, which may help elaborate on spatiality and materiality of the God figure (this will be addressed in detail further on in this section). Although there should naturally be interactions between content and arrangements in a drawing, exploring more deeply into the latter may require the careful study of a limited amount of drawings that are more likely to be worked-on in that regard.

The drawings that were selected for the current study presented the following characteristics: a single anthropomorphic God figure had been partially represented within the framework of the page (that is, not being incomplete in itself) and was shown from a close-up perspective. This was understood as purposefully deployed by the child, as an esthetic gesture. It could be achieved in the absence of sufficient space, with parts of the figure being virtually drawn outside the page - such as with a bust depiction. It was not necessary however for the figure to come off the page, and for example, only the head of the figure may be depicted - such as in a mugshot depiction. Additionally, the figure would not be partially represented because of being partly concealed by other elements. It was also important for the figure to be represented from close-up. The rationale behind this was that if partly hidden by other objects or shown from afar, there might be too much noise for the current investigation.

Applying such criteria has led the researchers to focus on anthropomorphic God figures that would a priori bear less *otherness* than others through the content of composition, due to the limited space allowed by the framing technique employed (e.g., portrait). Some statistical analyses were then conducted to challenge this intuition. This has led to the selection of 46 drawings, which would compose the data set used for in-depth qualitative analysis in the current article.

Participants

A total of 46 drawings composed the sub-sample under scrutiny in the current paper. Children participants having produced them were 7- to 15-year-olds, 27 girls (58.7%) for 19 boys, and 32 (69.6%) were met during formal religious teaching (the rest being met during regular schooling). The distribution of participants by age year is displayed in table 1.

Table 1. Age distribution in the current N = 46 sample

<i>Age (year)</i>	<i>Frequency</i>	<i>Percent</i>
7	2	4.3
8	5	10.9
9	2	4.3
10	6	13.0
11	5	10.9
12	6	13.0
13	10	21.7
14	8	17.4
15	2	4.3
<i>Total</i>	<i>46</i>	<i>100.0</i>

A binomial logistic regression was conducted to test for the possible effects of age, gender and schooling on the likelihood that a drawing would be selected from the larger N = 399 for the current N = 46 study sample. The sample was N = 399, and split into: part of the qualitative study sample (N = 46); not part of the qualitative study sample (N = 353). The logistic regression model was statistically significant, $\chi^2(3) = 17.102$, $p = .001$. The model explained 8.2% (Nagelkerke R^2) of the variance and correctly classified 88.5% of cases. Age was the only statistically significant predictor ($p = .003$), and the older the participants the more likely they were to draw their God representation with the specified esthetic characteristics.

Depicting an anthropomorphic figure in such a realistic (face-to-face) fashion is very similar to the way children from Luquet's (1913) visual realism (latest) stage tend to draw (i.e., as they see). Age-wise, this is also roughly consistent with Luquet's theory of drawing development.

Analysis of Drawings

The object of study was composed of children's drawings of God. Although a written description had been provided by the participants about their own drawing it was not added to the object of study.

Texts were only considered to potentially resolve unclear aspects in the drawings. Those equate to discourse about the drawings, and research has shown that such discourse can be virtually a different world from a drawing itself (Ivashkevich, 2009; Pearson, 2001). Moreover, they most often were very ‘mechanical’ about how another child should proceed to achieve a similar drawing (the larger project being rooted in quantitative research, the purpose of those texts was to provide such descriptive information). It was therefore decided to keep the object of study restricted to the actual drawings, focusing on visual esthetics. Consequently, drawings constitute the data *set* actually analyzed and their appended texts are part of the broader data *corpus* having been collected (Braun and Clarke 2006).

In order to analyze the data qualitatively, a framework analysis was conducted. Three main functions described by Ritchie and Spencer (1994) are central to this study: “defining concepts”, “mapping the range, nature and dynamics of phenomena”; “creating typologies”. Those authors also identified key features of framework analysis, among which the most relevant for now are: generative (driven by initial observations), dynamic (prone to change), systematic (methodic), comprehensive (applied across the data) and accessible to others (transparency of coding). From the different purposes that such an analysis may fulfill, the current inquiry appears to fit the following categories: contextual and strategic. On the one hand, it is meant to describe what is, and on the other hand, it proposes theoretical improvements.

According to Ritchie and Spencer (1994), five key stages are involved: familiarization; identifying a thematic framework; indexing; charting; mapping and interpretation. Familiarization with the data requires from the researcher to get immersed in (all or part of) the data. In the present case, all data could be reviewed already at that stage. Identifying a thematic framework involves that the researcher makes notes and starts working out the main concepts or themes. Indexing consists in systematically coding the data according to previously identified frameworks. After indexing, the next stage lies in creating charts, with headings and sub-headings, and this should help present the range of the phenomenon observed. Eventually, mapping and interpretation entails that the key features of framework analysis described at the beginning will be realized - in this case: “defining concepts”, “mapping the range, nature and dynamics of phenomena”; “creating typologies. This is when the main results and the main scientific contribution of the study will become evident. It is important to keep in mind that the whole analysis involves much of a back-and-forth dynamic process and that the researcher often goes back to earlier stages in-between process.

As systematized by Ritchie and Spencer (1994), framework analysis might correspond to qualitative thematic analysis as it has been described by Vaismoradi et al. in psychological research (Vaismoradi, Turunen, & Bondas, 2013). In that sense, its purpose is more to qualify the phenomenon

under scrutiny rather than to quantify it. This slight distinction may result in putting more emphasis on the diversity of what is in the data (qualifying) rather than giving benefit to most frequent occurrences (quantifying) at the risk of depending too much on contingencies (Joffe & Yardley, 2004). Within the context of this inquiry, a qualitative content analysis might have led to a lack of consideration for the context (Morgan, 1993), and too poor refinement of analysis for the subtle formal/abstract properties that would be investigated into. Nonetheless, this preference for description does not entail that quantification be not conducted at all, but only as a secondary and non-orienting focus.

Before moving on to the actual analysis, it seems important to clarify the epistemological stance adopted by the researchers. Even though methods such as thematic analysis, unlike grounded theory or discourse analyses, are not bound to any particular theory, transparency about the construed nature of data needs to be acknowledged (Braun & Clarke, 2006). Drawings of God, composing the data set, were understood by the researchers as ensuing from children's subjectivity and being part of a process of articulating symbols (Günther-Heimbrock, 1999). Accordingly, they were not believed to necessarily closely reflect a fixed God representation (Dandarova Robert et al., 2016). While drawings may be the receptacle of a broad variety of meanings, the current research question guided the analysis always in relation to sameness-otherness from the human being (Guthrie, 1993). For that reason, it was mostly deductive although the analyst relied on what could be identified in the data with openness and in a way that could orient how themes were conceptualized in return - this may fit a 'hybrid' deductive-inductive approach (Fereday & Muir-Cochrane, 2006). Visual representations may be analyzed for the very personal meaning the artist has put into them, or what they make the viewer feel like, or again for themselves as standing at the crossroads between *emic* and *etic* perspectives. All the while acknowledging the relevance of each unit of that *network of intentions* (Freeman & Sanger, 1995), emphasizing the importance of the depiction itself was adopted, similar to Goodman (Goodman 1968). Such an approach, standing in between essentialism and constructionism may be characterized as *contextualist* (Willig, 2013) for it accounts for the relativity of the viewpoint adopted in regard to the data and how it is made sense of.

Searching for themes, the researcher may decide to focus mostly on the semantic (explicit) or the latent (implicit) aspects of the data (Boyatzis, 1998). This study merely relied on an implicit level of analysis, looking for latent themes in relation to the specific research question.

The analysis was primarily conducted by the first author, who was involved in about half of the data collection of the larger project from which the current sample was extracted.

Results

For the sake of coherence with the analytical process, findings will be presented in an order similar to how each research question was laid out.

Firstly, the research question dealing with whether the current sample is any different from the larger one it is from regarding de-anthropomorphization will be addressed. Secondly, the construction of thematic frameworks from the current sample will be described and each framework will be explained. Thirdly, the effects of age, gender and religiosity on those frameworks will be examined. Fourthly, possible interactions between formal/abstract properties and content will be conceptualized in the form of an esthetic model that includes those themes.

Specificity of the Current N = 46 Sample Regarding De-Anthropomorphization

For the sake of consistency with the initial quantitative study, human-based God figures were analyzed only, keeping aside the minority of non-human-based anthropomorphic figures. Indeed, the essence of the previous (quantitative) study was to tap into de-anthropomorphization strategies, that is, *otherness* brought to a human figure (i.e., *sameness*), and not the opposite. Therefore, this leaves 9 drawings out from the initial N = 399 sample, leading to consider N = 390 drawings for group comparisons here. After those 9 drawings had been taken out, the two following groups were formed: an N = 42 sample specific of the current inquiry (initially N = 46, less non-human-based God drawings), and an N = 348 drawings (from the initial N = 399 sample, less the sample from this study and less non-human-based God drawings).

The two groups were compared through Chi-square analyses for the presence or absence of de-anthropomorphization strategies: any de-anthropomorphization at all, 'Through the God figure', and 'Through the background' (see the quantitative study for more details - Dessart & Brandt, submitted). Results however did not reveal any significant differences between those groups. This goes against the hypothesis positing that the current sample should be any peculiar with regard to the use of de-anthropomorphization strategies compared to the larger sample it is from. Especially, it was expected that such strategies would have been used less often in the former.

Yet, there persisted the qualitative perception that such drawings carried (if not a limited area of composition for bringing out *otherness*) extra qualities that most drawings from the larger sample did not. Indeed, they seemed to force the viewer to consider both the physicality and the materiality exhibited by the God figure. Beyond a sense of communication with the viewer, this fact was observed

to possibly convey *otherness* in ways not notified in past research. For example, the God figure shown as transcending several realities became visible because of those special characteristics pertaining to the perspective/framing and because these also implied that the reality/space where the viewer is positioned when looking at the drawing is taken into account for possible esthetic nuances. The resulting motivation was thus to seek for drawing properties other than just content-based, and the current sample still appeared favorable to such inquiry.

In fact, it was important that the basic approach used by the child in a drawing would maximize the opportunity for a play on the spatiality and materiality of the medium in conveying *otherness*. It was not posited that the selected sub-sample would have the monopoly of otherness conveyed through formal/abstract properties, but only that if special properties there were to be found in that regard, it would be more easily achieved by focusing steadily on data that are more likely to exhibit such features. The observation that drawings from the current study would mostly display the God figure from a perspective that corresponds to a bust or a mugshot naturally involved the physical reality of the page (due to its limiting effect on the compositional area). It could also be noticed that a heightened sense of communication with the viewer was implied, due both to a face-to-face and a strongly felt proximity, compared to figure shown in more content-elaborate (and potential social) scenes.

Eventually, after having applied all criteria, only a small sample of 46 drawings was left for analysis. The common traits of those remaining drawings, in regard to *sameness-otherness*, were fourfold: single anthropomorphic God figure; partially represented within the framework of the page due the point of view adopted; not hidden by objects in the foreground; shown from close-up. This allowed for setting a rather convenient ground to explore alternative esthetic techniques to content. In total, this lead to 46 drawings, which were thus used as the dataset of the current study.

Thematic frameworks

Besides content, formal/abstract properties were assumed to play a role in the expression of *sameness-otherness*, and to some extent in interaction with it. Nevertheless, after considering the absence of group difference in the above section, it should be assumed that a content-based approach would likely have been adopted by child as well. Both content and formal/abstract esthetic techniques would thus receive close attention.

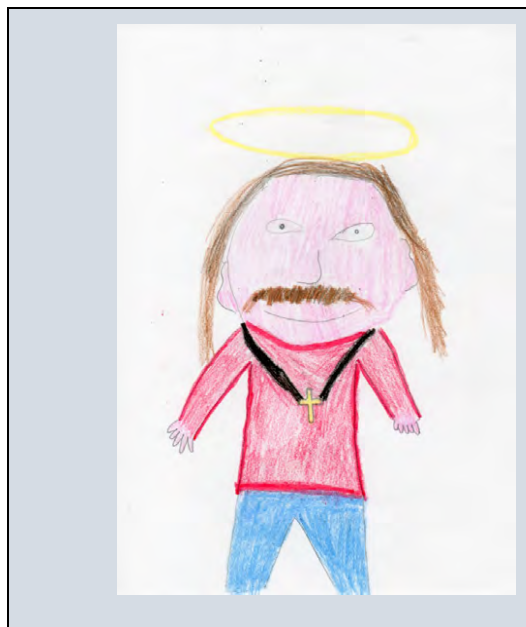
After immersing himself deeper into the data, the first author has begun to identify core themes. Based on preliminary observations of the data, the first author kept a close eye on faded lines delineating the figure, its size relative to the page and the type of framing used to depict the God figure (often from a bust-like perspective). It can be noticed that those aspects refer to lines,

composition and relationships between the figure and the medium itself. A main focus was put on how otherness could be expressed and even emphasized through such formal/abstract properties. Nevertheless, it was important that the approach remain open to what could be gathered from the data. On the one hand, the more usual content-based technique used for marking otherness also needed to be examined, both for itself and in possible interaction with alternative esthetic devices. For example, based on the previous quantitative study, *otherness* might or might not be expressed with as much diversity as in full-length drawings. On the other hand, combined sameness-otherness was under scrutiny, therefore if special scenarios relevant to sameness were to be observed then they should be reported. For example, *sameness* could also be emphasized, just like *otherness*.

After some back-and-forth process and adjustments between the steps described by Ritchie and Spencer (1994), six core themes were identified in the data: constitutively different; contextually different; limitless; trans-realities; exceeding the medium; connecting the compositional space with the viewer's. Each theme can relate to content, formal/abstract properties or both. Some themes are also related to each other in the form of a hierarchical system comprising supra-themes, themes and sub-themes. Similar to the more classic text transcription-based data found in the scientific literature, drawings may bear different thematic frameworks at once. This means that some overlapping is possible and that one theme is not a priori exclusive of a specific drawing. The themes identified in this study are consequently not mutually exclusive. A description has been provided for each core theme below (hierarchical levels are indicated by the indent in the text and core themes are in bold). A drawing has been used to illustrate each of them, keeping in mind that their function here is only exemplary and that themes were not mutually exclusive, which implies that from the drawings shown some might display several of the core themes.

Core themes:

- *Ontologically different from human*: the ontologically non-human qualities of the God figure are conveyed mainly through the content of composition. This may concern the God figure specifically ('constitutively different') or its relations to the background content ('contextually different'). It is worthwhile that such a distinction had already been made in the previous quantitative study on de-anthropomorphization. The former condenses here aspects that might have been identified as *structural* or *associated* in that study, but finer nuances were not deemed necessary here. The latter, involves not only content but also much of the composition and how it is organized to convey *otherness* in the God figure.
 - **Constitutively different:**



The God figure is partly ontologically different from human because it presents some non-human elements (e.g., a halo, an aura, wings) that compose it. This is conveyed through the content of composition and concerns exclusively the God figure, no matter what the background might be.

- **Contextually different:**

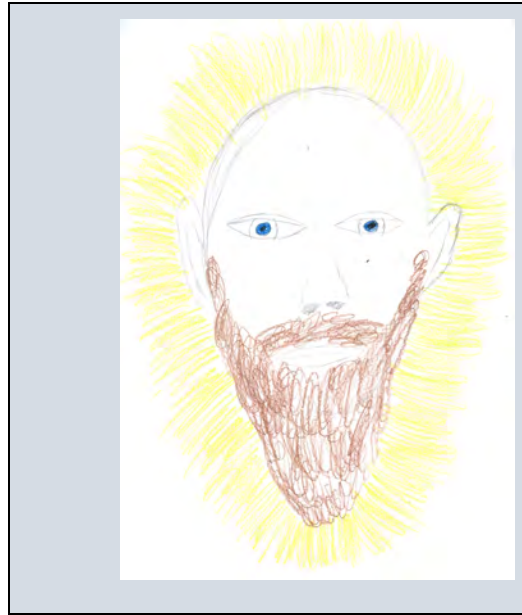


The background upon which the God figure is depicted (possibly including other characters) suggests otherness from the human being. For example, the figure may be shown in a celestial context. This is conveyed mainly through the content of composition but it also depends on formal/abstract properties, up to some point, because the God figure's otherness is expressed through its relationship with the background and not directly 'on' it - as it is the case of the previous theme. It is important to note that the context in which the anthropomorphic God figure is inserted brings forth non-human qualities for example when it is implied that the figure can fly or hover over the ground.

- *Trans-spatial*: this requires that the God figure is drawn in a way suggesting that it can be situated in several places at a time. Such spaces may pertain to the mere compositional space or to the physical space of the medium as well. In the former case, at least another reality may be implied even if it is not graspable. With the latter, the space alternative to the one of the composition, which is symbolic, may relate to the page and the physical space around it, potentially involving the viewer as a physical entity.

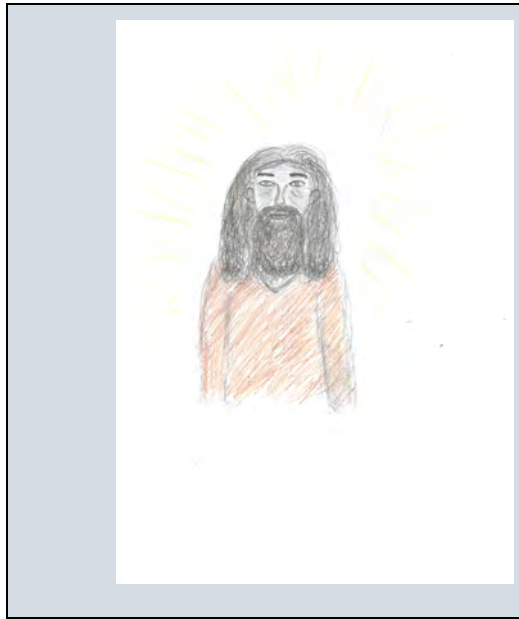
○ *Transcendent:*

▪ *Trans-realities:*



The way the God figure is represented makes it look as though it deals with several realities at a time within the composition. It may be due to depth in the drawing and a sense of multiple realities as though the God figure is 'popping out' from elsewhere. This may be achieved through the God figure being shown from a very close perspective, with a nimbus surrounding it in the absence of a drawn background. Additionally, the God figure is less likely to evoke this theme if it ends at the bottom of the page, because it would prevent it from standing out as though appearing from another place.

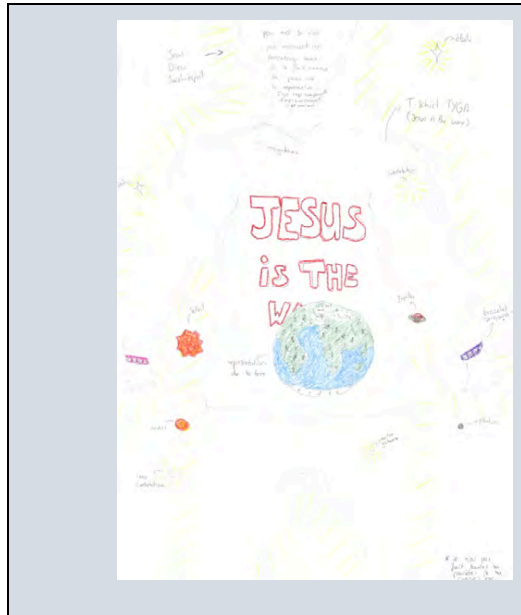
- **Limitless:**



The God figure is represented in a way that suggests that it is not bound to physical limits, based on what is depicted in the drawing. This may be achieved by using incomplete delineation (i.e., non-enclosing outline) or fading the outline of the God figure, which may appear as virtually fading into the page. It is important for being relevant to this theme that those nuances are conveyed within the compositional space and not off the page at its bottom, as it would be the case with a standard portrait (e.g., a bust). The reason is that the former tends to produce some otherworldly effect, although the latter is merely the result of a common portrait-based framing using the ends of the page.

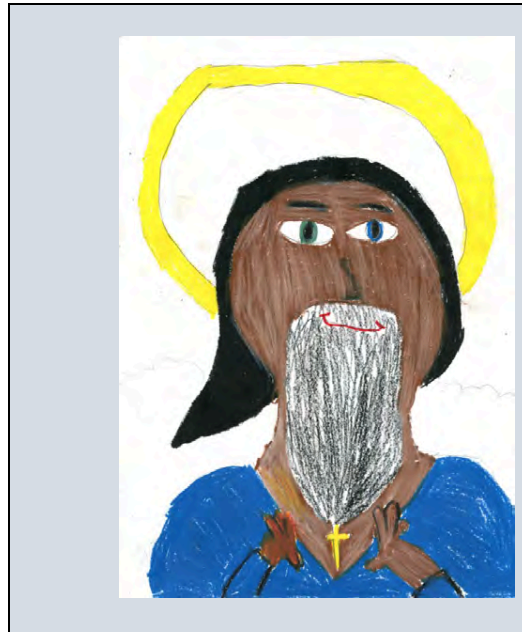
- *Material:* with those two themes the notion of space is as essential as with the two previous ones. However, spatiality is manifested by a special 'play' on materiality. In that sense, the medium - that is, the page - acts as a vector of specific spatial qualities evoked in the God figure by becoming explicitly used as a property of the composition. Although the first one ('exceeding the medium') contributes to *otherness* the second one ('connecting the compositional space with the viewer's') plays a part in *sameness* - and is the only one to do specifically so.

- **Exceeding the medium:**



This theme is expressed through the God figure virtually extending beyond the compositional space, that is, it appears to exceed the page (i.e., the medium) by its size. Specifically, it has to come off the page through the sides (e.g., arms, shoulders) or through the top (i.e., head). The reason why for the figure to come off the page on its lower side is not particularly relevant here is due to the usual conventions associated with portraits and determining that the lower part of the figure would not be entirely visible. Moreover, most of the drawings from the current sub-sample display a portrait type of depiction, which pertains to the general basic framing of the figure, without necessarily conveying any information about its *otherness* or even its *sameness*. In the present case, the composition is organized in a way that is not only conventional but that expresses ‘bigness’ in the God figure, underlying its unusual size for an anthropomorphic character. Typically, the space offered by the page appears not to be ‘enough’.

- **Connecting the compositional space with the viewer's:**



This theme was found throughout the data set and expresses some proximity between the God figure and the viewer. It is achieved through a combination of the figure facing and gazing at the viewer and a close perspective of depiction. Additionally, some gestures executed by the figure may emphasize the communicational proximity with the viewer. This should lead to some symbolic tension emerging from the compositional space of God figure and the viewer's physical space merging together. It may imply a movement starting from the figure to the viewer, the opposite or an encounter at midpoint.

This theme typically emphasizes *sameness*, but does by no mean contribute to expressing *otherness*. While it appears to be the most consistent theme across this data set it is also the least explanatory, as a consequence of poor discriminatory qualities and only touching on *sameness*.

It might happen that a God figure presents all characteristics necessary to display this theme but one central aspect, which is the gaze exchange with the viewer. It is worthwhile to mention that some drawings from the current data set seem to ostentatiously block such visual communication by inserting obvious elements, such as opaque glasses. While this does not contribute to the theme it could deserve further attention in future research.

It is important to remind the reader that themes may be overlapping in a drawing, and may be even more likely than not. As a matter of fact, the drawing exemplifying “limitless” also exhibits “trans-realities” (see the play between the blank background and the aura behind the figure), “constitutively different” (the aura endorsed by the figure points to its non-humanness) and “connecting the compositional space with the viewer’s” (the face-to-face and bust-like depiction seems to enhance visual communication with the viewer). It is worthwhile that several graphic elements (e.g., aura) can potentially act as vector to expressing different themes, in particular if they are taken for various aspects of their properties. For example, aura may evoke an ontologically non-human content, alongside accentuating depth when taking into account its position between the core of the figure and the blank background.

Finally, all drawings from the current N = 46 sample are reported in the Appendices section.

Occurrence of Each Theme

After having identified core themes in the current sample of drawings it is now instructive to have a look at their occurrence. The most frequent theme was “connecting the compositional space with the viewer’s” (71.7% overall). It is then followed by “constitutively different” (52.2% overall) and “contextually different” (41.3% overall). Finally, the last occurring themes are, by order of prominence: “limitless” (15.2% overall); “trans-realities” (21.7% overall), “exceeding the medium” (15.2% overall).

The most relevant observation from those proportions is that there is a non-trivial amount of techniques conveying *otherness* that do pertain more to the compositional arrangement than the proper content of composition - i.e., limitless, trans-realities and exceeding the medium. This is in line with the assumed necessity to seek for alternative techniques than those that are primarily content-based - i.e., constitutively different and contextually different - and which had been considered in past research. As for “connecting the compositional space with the viewer’s”, it seems to be quite characteristic of the current sample of drawings, with their realistic way of depicting a staged face-to-face encounter between the God figure and the viewer. However, it does not by itself express otherness from the human being, and for this reason appears to be more of a byproduct to the current inquiry than a central contributor. Those aspects concerning sameness-otherness as expressed through esthetic techniques are modeled in Figure 1.

Combinations of Themes

Types of combinations between core themes and their occurrence in the data are reported in Table 2. Most of the time drawings endorsed several themes (69.6%), and in a minority of cases only

displayed one theme (30.4%). An even smaller proportion of drawings (19.6%) was concerned by a single theme, and that theme (i.e., “connecting the compositional space with the viewer’s”) did not convey otherness from the human being. This also means that for about a fifth of the current sample the God figure could not be set aside from drawings of an ordinary human being.

Now it is important to consider only the other themes, for they conveyed a sense of *otherness*. Themes that relate mostly to the content of composition (i.e., constitutively different and contextually different) were present - alone or in combination with another theme - in over two thirds of the data (71.7%). Next to this, only 8.7% of the current sample exclusively exhibited a theme that draws more consequently on formal/abstract properties. At this stage, the contribution of the latter in respect of otherness may appear meager. However, content of composition did contribute to otherness alone - that is, without co-occurring with a theme based on formal/abstract properties that expresses *otherness* - in only 23.9% of the current sample.

This may be interpreted an indicator that in the presence of a fairly realistic face-to-face depiction of an anthropomorphic figure, children added esthetic techniques other than content-based ones to emphasize otherness from the human being. Without being yet able to conclude here whether this is typical of the current sample, compared to the N = 399 drawings of a single anthropomorphic God figure, investigating this dataset has certainly shown that there is more to *otherness* than content.

Table 2. Theme combinations

<i>Types of combinations</i>	<i>Frequency</i>	<i>Percent</i>
<i>connection</i>	9	19.6
<i>constitutively</i>	2	4.3
<i>contextually</i>	1	2.2
<i>limitless</i>	2	4.3
<i>constitutively-connection</i>	4	8.7
<i>constitutively-contextually</i>	3	6.5
<i>contextually-connection</i>	4	8.7
<i>contextually-exceeding</i>	1	2.2
<i>exceeding-connection</i>	1	2.2
<i>constitutively-contextually-connection</i>	4	8.7
<i>constitutively-contextually-exceeding</i>	1	2.2
<i>constitutively-contextually-transrealities</i>	1	2.2
<i>constitutively-exceeding-connection</i>	3	6.5

<i>constitutively-transrealities-connection</i>	3	6.5
<i>contextually-limitless-transrealities</i>	1	2.2
<i>contextually-transrealities-connection</i>	2	4.3
<i>limitless-transrealities-connection</i>	1	2.2
<i>constitutively-limitless-transrealities-connection</i>	2	4.3
<i>constitutively-contextually-limitless-exceeding</i>	1	2.2
<i>Total</i>	46	100.0

Otherness Conveyed Merely Through Formal/Abstract Properties

It is essential to notice from Table 2 that some drawings exhibited a combination of sameness-otherness without the content of composition playing a role in conveying non-humanness, that is, without the presence of ‘constitutively’ or ‘contextually’. It is the case of four drawings. Table 3 reports the most simple cases, which only display one theme (i.e., limitless). These will be discussed in more details to explain the specific contribution of formal/abstract properties.

Drawings 3.a and 3.b both depict a human God figure in a sort of portrait bust with the outline missing at the bottom. This is combined with a particular way of positioning the figure somewhere in the middle or the upper part of the page, which deals with how the composition is ‘worked’ on. Altogether those aspects communicate a sense of the figures not being only human (i.e., sameness) but also else (i.e., otherness). An absence of limits seems to be obviously underlined, as well as some evanescent qualities. Especially in drawing 3.a, the God figure seems to be floating somehow, which adds to the idea of a different nature from human. There is some overall otherworldly effect. The simplicity of a blank background emphasizes this effect.

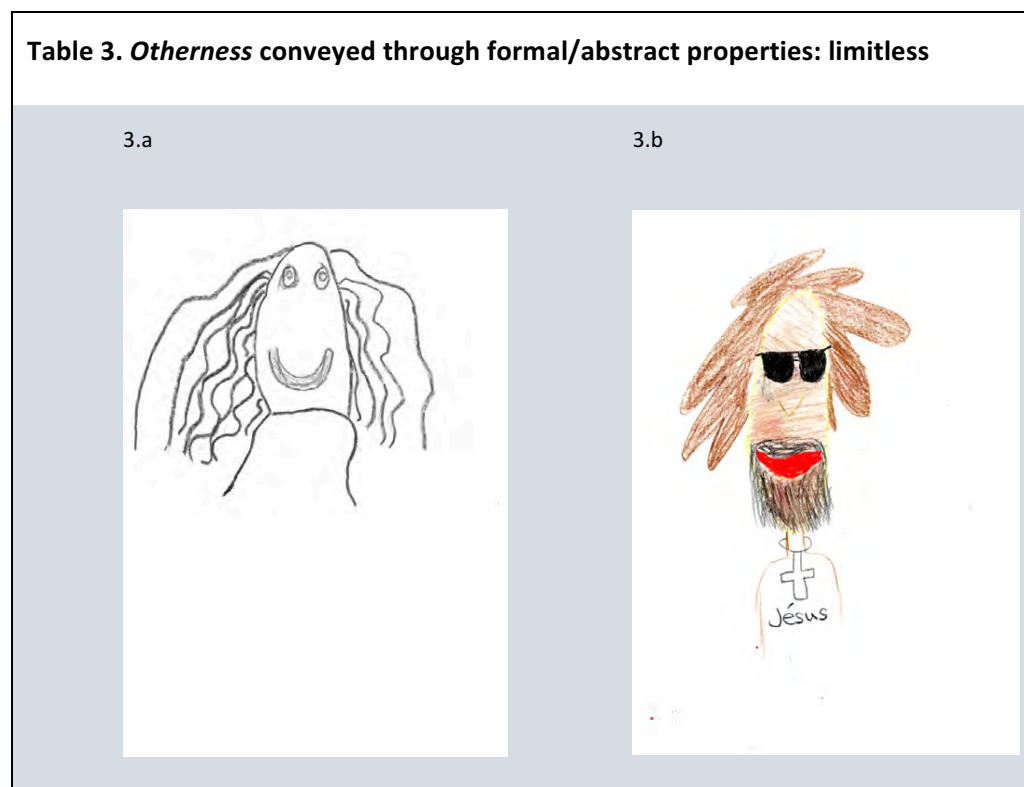
In those examples, it appears that colors, as part of formal/abstract properties, play a role as well. The white upper body, being of the same color as the blank background, may all the more suggest that the figure virtually extends through the space around it. This is particularly marked in drawing 3.b due to the otherwise colorful figure. It could be argued that a Jesus character would be expected to wear a white robe and that it is the top that can be seen here. Nonetheless, the child has decided to depict the figure partially and with that overall setup, which cannot be random.

Regarding the age of the children who have composed drawings 3.a and drawing 3.b, they were respectively 10 years-old (boy, seen during regular schooling) and 13 years-old (boy, seen during religious teaching). By that age, it could be expected that they have mastered basic drawing

techniques well enough to bring such nuances into the works. Moreover, both depictions appear to illustrate a typical representation of a realistic face-to-face interaction that children who have reached Luquet's *visual realism* stage could plausibly do. In the presence of apparent realism of depiction, elements pointing to *otherness* need to be taken even more seriously, as they can hardly be taken as completely naïve, and are more plausibly keenly reflected upon by their respective authors.

Unfortunately, the written descriptions that children have provided are, as often, only technical about how one should proceed in an attempt to reproduce a similar drawing. Therefore, additional information could not be dragged from there.

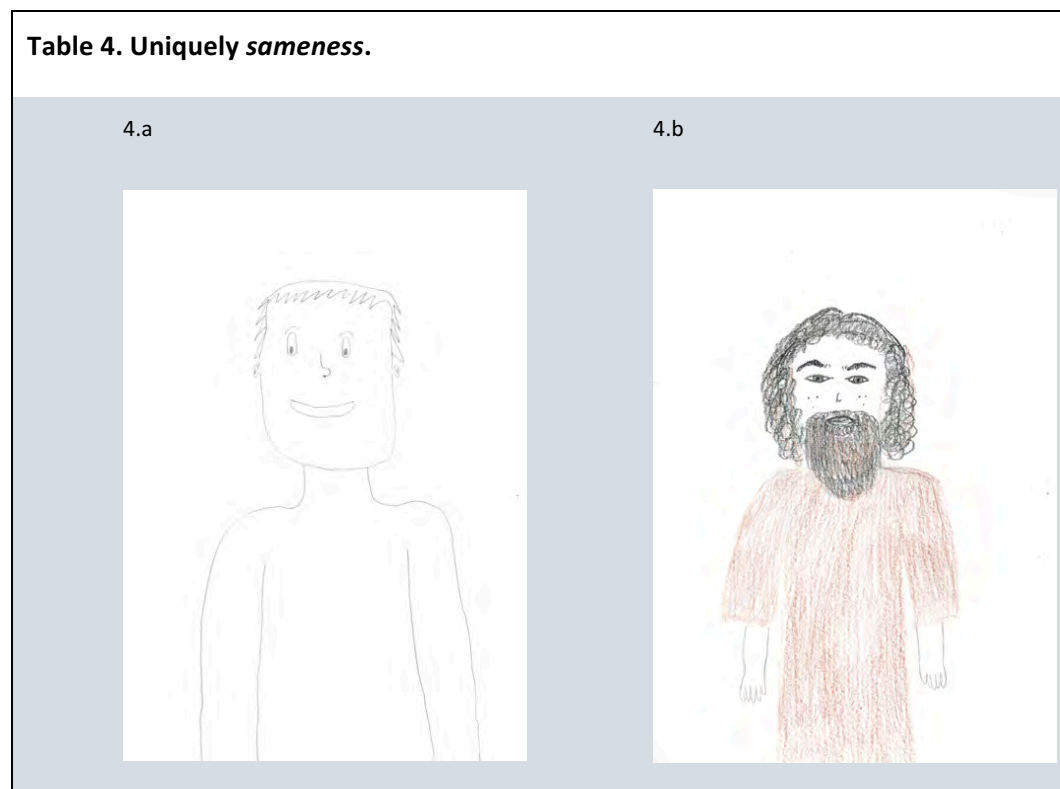
As a brief aside, it can be noticed that children can be rather subtle, not only about conveying ideas about the ontologically different from the human being in God, but also concerning communication with God. Drawing 3.b provides a striking example of a blocked interaction with the viewer - all the while facing. This is an aspect that could be worthy of attention in future research, which may play on closeness and distance, although not at a conceptual level like in the current inquiry.



When there is Only *Sameness*

In order to get a better insight into how God figures may be concerned by sameness-otherness and not sameness alone, it appears relevant to provide examples from the current N = 46 sample of figures

that could not be told apart from the drawing of an ordinary human being. Table 4 reports such cases. In the case of drawing 4.a, one could not guess, if not warned, that it is a drawing of God. The information provided by the child however confirms that it is. As for drawing 4.b, nothing would allow the viewer to conclude that it is a drawing of God. Nevertheless, one may guess that the topic is religion-related, due to the traditional Christian appearance. This is a prime example of how a human figure can be depicted as non-ordinary, without endorsing ontological otherness. That point has been discussed already in the quantitative study relating to *de-anthropomorphization* as a potential matter to investigate further. Overall, the difference between drawings endorsing *otherness* and those that do not is apparent. As previously underlined, children should have mastered basic drawing techniques by the time of the task, and no large age difference could explain radically divergent approaches between drawings from Table 3 and Table 4. Drawings 4.a and 4.b were produced by children who were, respectively, 13 and 14.



Individual Differences: Relationships Between Themes and Socio-Demographics

Statistical analyses were carried out in order to examine the possible influence of socio-demographics and answer the third part of the research question, although this part of the analyses is more commonly found in this form in relation to content analysis.

A first set of statistical analyses was carried out on age, to search for a possible developmental effect. Firstly, age-dependency was sought for the number of themes displayed by a drawing. Using a Spearman's rho (for non-parametric continuous data), no statistically significant differences could be revealed. Secondly, each theme was analyzed separately, considering that some of them might be more cognitively demanding than others. Spearman's correlations did not show any significant difference.

A second set of analyses was run to consider gender and religiosity. Based on Pearson Chi-Square tests, no significant differences were found between girls and boys for any theme. As for religiosity, given the high proportion of participants self-identifying as religious (over 84%) or receiving formal religious teaching (over 69%) it was decided to seek for differences depending on whether children had reported praying at home or not (52.2% reported doing so, and 8.7% did not provide information in that regard). No significant difference could be found for using any thematic framework.

Charting Thematic References

Table 5 shows an index of the different scenarios (subheadings) that may have contributed to each core theme (headings). Like for the themes, several scenarios may occur simultaneously. There was no incentive for this study to look further into their possible combinations. The occurrence of each scenario is reported in parentheses.

It can easily be noticed that the theme "connecting the compositional space with the viewer's", from all themes, encompasses the greatest diversity. This could be expected given the great occurrence of that theme in the data (71.7% of cases). The frequency for each scenario is reported in parentheses.

A broader diversity might be found in the larger sample of drawings, nevertheless this may provide an idea how each theme can be concretely based on.

Table 5. Thematic chart

Constitutively different

1.1 Divine (e.g., halo, aura) (21)

1.2 Anthropomorphized from non-human base (e.g., face-cloud, round light with facial elements, candy-like blotch) (4)

1.3 Humanoid (e.g., ghostly) (1)

1.4 Central human feature missing (e.g., face, head) (3)

Contextually different

2.1 Celestial (e.g., sky, clouds behind figure, rainbow and sun with no earthly reference) (14)

2.2 Outer-space (e.g., planets, Earth, stars) (4)

2.3 Paradise (explicitly mentioned) (3)

Limitless

3.1 Non-enclosing outline (e.g., bust bottom, no outline delineating the face) (6)

3.2 Coming off the compositional framework on the sides of the page (1)

Trans-realities

4.1 Positioned in background with in-between contrasting layer (e.g., aura around figure) (1)

4.2 Only slight contrast between figure and background or part of the background (e.g., black and white face on blue background filled with black and white clouds) (5)

4.3 Fading into the background (6)

4.4 Depth evoked in the figure (e.g., interplay between aura and blank background) (5)

MATERIAL

Exceeding the medium

5.1 Coming off the compositional framework through the sides or top of the page (vs. bottom of figure - characteristic of busts) (5)

5.2 Coming off the bottom of the page with bodily elements (e.g., arms) in the absence of the bust doing so (1)

5.3 Bust-like figure with the head filling most of the page (1)

Connecting the compositional space with the viewer's

Sight

6.1 Simple face-to-face (7)

Touch

6.2 Face-to-face with open arms (e.g., to the sides or upwards) (8)

6.3 Face-to-face with hands drawn to the chest - as though attracting the viewer (1)

6.4 Face-to-face with hand(s) directed at the viewer (2)

Facial expression

6.5 Face-to-face smiling at the viewer (23)

Speaking

6.6 Face-to-face with mouth open - as though talking to the viewer (6)

Supported by social group

6.7 Face-to-face and surrounded by figures indulging themselves in a face-to-face with the viewer (1)

Are There Themes that Are Specific to this Sub-Sample?

The current sample of 46 drawings was selected from a larger $N = 399$ sample of anthropomorphic God figures, based on a series of criteria (explained in the Introduction section). For that reason, it may be legitimate to wonder whether the themes ensuing from the framework analysis are specific to the sample under scrutiny or if it could possibly be found in the larger sample of drawings.

In order to answer this question, one has first to take into consideration the fact that this small sample of 46 drawings was chosen based on the assumption that its distinctive esthetic characteristics would have compelled children to emphasize otherness with the human being. It was supposed that *otherness* would likely be exhibited through techniques that merely rely on formal/abstract properties, besides the more classic content-based approach shown in past research. Consequently, there is no theoretical incentive to believe that the themes observed are exclusive to the current sample: especially given that two of them are mostly based on content, but also themes drawing more on formal/abstract properties should plausibly be found in other types of anthropomorphic drawings of God (e.g., with a full-length depiction).

Although it was not the purpose of the current study to determine whether the resulting themes would apply to anthropomorphic drawings of God in general - but instead, to explore further the means that children may employ in relation to that issue - a very summary assessment was carried out by the first author to attempt to identify themes from the current study, especially those conveying *otherness* through formal/abstract properties (i.e., “limitless”, “trans-realities”, “exceeding the medium”). Each of those themes could be identified in the larger sample. Nonetheless, they appeared to be much more occasional than in the current sample, although this would require further research. This could mean that identifying the current themes was facilitated by using the related small sample of 46 drawings but more generally showed the relevance of graphic means that are new to research in this area.

Towards an Esthetic Model of Sameness-Otherness from the Human Being in Children's Drawings of Anthropomorphic God Figures

This part of the results is meant to answer the fourth aspect of the research question: how could possible interactions between formal/abstract esthetic techniques and the content of composition be conceptualized in a model in that regard?

A model was proposed on the basis of the results from the current study (see Figure 1). This model explains interrelations between sameness and otherness with the human being in anthropomorphic God figures by describing the interrelations between types of graphic techniques (i.e., content and arrangements) and each theme identified in this study.

Two main axes are designed around the combined *sameness-otherness* theoretical underpinnings of the current study: on the left, *sameness*, and on the right, *otherness*.-On the left side of the model, sameness with the human being sets what makes the God figure appear human. It is predominantly conveyed through the content of composition, but also through formal/abstract properties, only for the theme "connecting the compositional space with the viewer's". This theme was predominant in the current sample, and was solely associated with *sameness* through arrangements, conceivably because of the eminently communicational qualities of its drawings.

The right side of the model shows how intricate content and arrangements of composition happen to be in order to convey otherness from the human being. Only the more classically analyzed approach to otherness from the human being appears to rely solely on content, that is, the theme "constitutively different". Other themes rely on formal/abstract properties to express *otherness*. The relationship between this model and the one from the quantitative study conducted on de-anthropomorphization (Dessart & Brandt, submitted) lies mainly in the following themes: 'constitutively different' and 'contextually different'. They fall under 'ontologically different from human' all the while there is some belonging to the human category. If to be compared, the former equates mostly with 'through the figure' and the latter resembles 'through the background'. In regard to those themes, the principal point of divergence with the model ensuing from the previous (quantitative) study is to be found in whether only God figures having a human base are considered or not only.

Figure 1. An esthetic model of sameness-otherness in anthropomorphic God figures.

SAMENESS-OTHERNESS						
SAMENESS	CONTENT OF COMPOSITION		Constitutively different	human	Ontologically different from	← CONTENT OF COMPOSITION
			Contextually different			
		FORMAL/ABS.	Trans-realities	Transcendent	Trans-spatial	
			Limitless			
		Exceeding the medium	Material			
Connecting the compositional space with the viewer's						
				FORMAL/ABSTRACT →	OTHERNESS	

Discussion

The current study was carried out as an in-depth qualitative examination complementary to a previous quantitative inquiry on how children may characterize otherness from the human being in anthropomorphic God figures. Its purpose was to identify additional means of expression of combined *sameness-otherness* by focusing particularly on esthetic alternatives to the content of composition, in particular, formal/abstract properties. It has consisted in a framework analysis applied to a sub-sample of 46 drawings taken from a larger sample. Drawings from this data set all shared some basic characteristics (i.e., an anthropomorphic God figure shown from close-up and partially represented within the framework of the drawing sheet - such as in a portrait type of depiction) which made them an ideal set to explore esthetic alternatives to content - without being necessarily exclusive to them.

A first central point of interest was to highlight core themes in the data accounting for combined *sameness-otherness* and relating to content or/and abstract/formal properties. In total, six core themes could be identified in the data set. Among them, five themes involved *otherness* expressed on an anthropomorphic God figure, and one theme was found to emphasize *sameness*. From the five 'otherness' themes, two related to strategies already highlighted in the previous quantitative study, which merely built upon the content of composition - either in the God figure (i.e., endorsing *otherness* itself) or in the background (i.e., evoking the God figure's *otherness*). The three remaining themes in respect of otherness from the human being strongly relied on formal/abstract properties in the drawings, such as: the relatively incomplete delineation of the figure, the fading of its outline, the depth of the figure in relation to the drawing or the size of the figure relative to the page. This pointed to the existence of much more diversity in the way children may express *otherness* in the God figure than what had been shown in past research. Most research in this area appears to have focused mainly on the content of composition (Hanisch, 1996; Brandt, Kagata Spitteler, & Gillièron Paléologue, 2009; Dandarova, 2013; Ladd, McIntosh, & Spilka, 1998; Pitts, 1976). This discovery may have substantial implications for the way researchers will analyze children's drawings of God in the future, that is, formal/abstract properties will receive a more important place than before.

Primarily, they permit to initiate a move beyond a perspective that has appraised specific traits of God representations as incompatible. For example, Kunkel et al. (1999) have conceptualized a dimension on which mystical lies at one extreme end and anthropomorphic at the other hand. However, once the current findings have been taken into account it is no more reasonable to necessarily see logic in such theorization. Indeed, God representations (in children) have revealed to endorse (but for a strict minority showing no *otherness*) both *sameness* and *otherness*. Particularly the core themes falling under the more general *transcendent* thematic framework seem to convey rather ethereal qualities all the while the figure being depicted is anthropomorphic. This points to the ability in children to manipulate quite complex combinations of symbols in relation to God and to express them in a fine manner. Additionally, it has to be observed that Kunkel et al. have used a sample of adult participants, thus the God representations they provided could be expected to endorse even more complexity. Similar to that study, Krejci (1998) has conceptualized a concrete-abstract dimension, which could somehow equate to a mystical-anthropomorphic dimension. Based on the current study, the wider quantitative study it ensued from and past research attempting to surpass such binaries (Ladd, McIntosh, & Spilka, 1998; Brandt, Kagata Spitteler, & Gillièron Paléologue, 2009) those dichotomous views appear to be outdated and should not be used in future research.

Additionally, this is consistent with the notion of *ontological violations* developed in a context different from Western Christianity (Boyer, 1994; Boyer & Walker, 2000).

More generally, the current study has relied on a three-piece distinction between esthetic techniques widely employed in psychological research exploring children's expressive drawings of emotions (e.g., Jolley, 2010): subject matter/content, formal/abstract properties and literal expression. From those three devices only literal expression seems to be bound to emotionality. The other two may be used to communicate complex ideas, and they were in fact found to play a central role in the current study. This is an essential key for psychological research on children's drawings to branch out. Mainly, it means that - maybe unexpectedly - while content has received a great deal of attention, esthetic techniques such as formal/abstract could truly contribute to expressing ideas that are not necessarily restricted to emotions. They had already been shown to be used for emotional topics, such as romantic relationships (Brechet, Picard, & Baldy, 2008). However, other topics may be examined for their abstract and maybe hard to grasp characteristics. This is arguably the case of God in the Christian tradition, and more generally in Abrahamic religions. Other notions such as death could also be considered for their somewhat intangible qualities. Past research on that topic has mainly focused on the content of composition to qualify children's drawings (Bonoti, Leondari, & Mastora, 2013; Tamm & Granqvist, 1995; Yang & Chen, 2002). Although a pioneer study (Tamm & Granqvist, 1995) set out conducting a phenomenographic inquiry that has drawn heavily on content, analyses might benefit from assessing the potential influence of formal/abstract properties, for example when identifying categories such as *metaphysical*. However, it would be misleading to claim here that those aspects have never been analyzed, but only that they could receive more attention. An example in that regard can be found in the techniques that children employ in response to one of the Karmiloff-Smith's tasks, which consists in drawing a man that does not exist. One technique used by children is to maximize the size of the figure (Karmiloff-Smith, 1990). This gets very similar to the theme "exceeding the medium" observed in the current study. Additionally, research on children's drawings may benefit from identifying common strategies used in response to different tasks and topics, which might inform researchers on their common psychological underpinnings or propose reasons why they compel the participants to adopt similar problem-solving schemes.

A second point of interest in this study dealt with possible interactions between abstract/formal properties and content to express combined sameness-otherness. In that regard, an esthetic model of sameness-otherness in anthropomorphic God figures could be constructed based on the core themes and the esthetic properties they entailed. It was helpful to better conceptualize how those two types of esthetic devices come together and to what extent. Sameness relies exclusively on content, and might be emphasized by formal/abstract properties. Otherness, however,

can be expressed through content exclusively (in the most common scenarios) or through a mix of both content and formal/abstract properties. Most themes actually combined both types of properties.

Consequently, another possible influence of the current findings with regard to the contribution of formal/abstract properties is that they underlined the prominence of God perceived as an entity that can exist in several locations at a time. While spatial properties associated with the God figure may typically be found in a representation of heaven, this finding goes further than indicating where God might dwell. Pnevmatikos (2002) had shown that when children are asked to draw God's house, some representations reflect not only a dwelling of a certain type but also a particular nature of being attributed to the God figure. His analysis indicated that God may be depicted as an entity living on Earth or in heaven but also as a non-tangible being (i.e., "ethereal-spiritual" or "idealistic"). Those results point to a series of possible places where God might be perceived to be as well as its ontological nature. The current findings go one step further in showing how children might understand God as present in several places at a time. This was highlighted through the supra-themes pertaining to transcendence or materiality, respectively.

Transcendence of the sacred (besides experiences of self-transcendence) has been frequently addressed in research on individual differences in spirituality and religiosity (Zinnbauer et al., 1997). However, knowledge is still scarce in that regard when it comes to developmental accounts and research on children and adolescents (Benson & Roehlkepartain, 2008). Adopting visual methods to explore such aspects in the youth might be fruitful, and the current study brings a special contribution to this issue. In the context of the current data set, this quality of a God figure presenting itself across a variety of places (i.e., trans-spatiality) refers to transcending space within the composition itself. Besides this, there is another important aspect that this study has highlighted, which is how the materiality of the medium can sometimes be involved.

Under the influence of Christianity, images have been used to emphasize the spiritual presence of the divine despite its obvious physical absence, setting particular human-picture relations which people get to learn as an approach to pictures (Meyer, 2011). This is characteristic of Freedberg's (1989) observation that modern Western societies may cultivate a somewhat animistic view of images. Nevertheless, it may also underline the role played by the materiality of religious artifacts - partly through the embodiment of the gaze and its multisensory associations - (Knauss & Pezzoli-Olgiati, 2015), as well as the visuality and imagination (Rose, 2012) within the person of the beholder. In that respect, from a developmental viewpoint, such a pictorial achievement seems to require a sufficiently developed 'theory of picture' (Freeman, 1998), which the children from the current data set must have had. Overall, this issue on materiality touches also on the 'material' supra-

theme identified in the current data. It has to be acknowledged that this finding has certainly been influenced by the authors' familiarity with this recent research putting a particular emphasis on materiality in the study of religions (Bräunlein, 2016).

As the reader may have noticed, dealing with the material aspects of the drawings in this study has entailed two core themes from which one emphasizes *otherness* (i.e., exceeding the medium) and the other one stresses *sameness* (i.e., connecting the compositional space with the viewer's). The matters discussed above can be judged to have concerned mostly otherness from the human being. It will now be discussed more specifically how emphasizing sameness with the human being can be understood as mere communication and closeness in this context.

When facing a visual artwork, there might be a general feeling of *bodily engagement* in the person of the viewer (Freedberg & Gallese, 2007), and this might entail internal representations in the form of bodily simulations (Damasio, 1994; Merleau-Ponty, 1945). In that respect, images that depict anthropomorphic characters may come with such an exacerbated effect on the viewer. Besides potentially having a physical effect on the viewer, the perceived materiality of the image may entail a strong symbolic play. Indeed, interlacing the depiction with the materiality of its medium an object (e.g., the Virgin Mary in a statue, God drawn on a sheet of paper, Jesus' blood in a cup of wine) may result in a dense intricacy of meaning through a constant back-and-forth movement, from 'playing' simultaneously on both ends of dual representation (DeLoache, 1987), that is, the image and its referent (in this case, the divine). Boehm (2004) even contends that what provides images their iconic meaning is the tension that exists between the material image and the imagery evoked by the image. An illustration of such symbolic tension may be found in René Magritte's well-known "This is not a pipe", or in Lucio Fontana's slit canvases used for his *Spatial Concept, Waiting*.

This might be particularly powerful when the depiction shows an anthropomorphic character that seems to seek visual contact and proximity with the viewer. In that respect, Mitchell (Mitchell 2005) has also expressed the potential power of images to engage the viewer as follows: "Pictures are things that have been marked with all the stigmata of personhood and animation: they exhibit both physical and virtual bodies; they speak to us, sometimes literally, sometimes figuratively; or they look back at us silently" (p. 30).

The predominance of the theme "connecting the compositional space with the viewer's" in the current data set points to the importance of both communicational qualities and physical proximity in images of the divine that employ a portrait type of depiction (like the majority of the current data set). It may be gathered from the current analyses that this theme is mainly due to the shared characteristics that were used to define the current data set. Without excluding the possibility

for it to be identified in other drawings of God, it seems to be strengthened by portrait-like drawings. In that regard, the current sample appeared to be composed of older children comparatively to the initial larger sample, based on those characteristics. The occurrence of that theme at a more advanced age is consistent with an accentuated search for closeness with the divine figure as children grow older (Kirkpatrick & Shaver, 1990; Eshleman et al., 1999). This theme relies mainly (but not only) on a form of gaze exchange between the God figure and the viewer. It has been argued that such a face-to-face setup can be found massively in the religious art and that it emerges from endeavors to connect with one's primary caretaker, drawing upon attachment theories (Brandt, 2002). It is yet difficult to conclude whether the utilization of such a setup appears spontaneously, in the process of mimicking what the artist has experienced early in their development, or if it is mostly a learned ability entering one's repertoire by exposure to similar artworks. One step further to answering this question might be taken from considering that there was a prevalence of children met during religious class in the current sample, although the initial sample was roughly equally divided between regular schooling and religious schooling. One may argue that this proves the influence of exposure to similar religious artifacts, while another one may claim that religious schooling may incline to an amplified need for closeness with the divine, beyond any exposure. Nevertheless, thus far, it can only be claimed that both might enter the equation.

More generally, those observations on space, materiality, mediation and communication may altogether tap into the notions of cognitive *embodiment* of abstract concepts (Lakoff & Johnson, 1999) and *grounded metaphor* (Gibbs, Lima, & Francozo, 2004). Respectively, they posit that direct experience and interaction with one's environment stand at the basis of abstract concepts, on the one hand, and that metaphorical thought and language are embodied in experience, on the other hand. Drawing upon those notions, some studies have revealed that the way individuals conceive of God (and the Devil) shows associations between their spatially defined internal representations and semantically related learning, recalling and believing (Meier et al., 2007), and that gaze orientation and selective attention (Chasteen, Burdzy, & Pratt, 2010). Consequently, it could be claimed that the current findings do align with the idea that some abstract concepts, such as the one of God, are spatially defined according to experiences that the subject might have made in connection to them. For example, imagining the divine as a close entity may favor a face-to-face encounter with an anthropomorphic figure, like it might be the case during upward sorts of prayers, underlying a human-divine connection (Ladd & Spilka, 2002).

A third main point of interest was to seek for individual differences based on age, gender and religiosity (i.e., prayer practice). Statistical analyses were conducted for each theme, but no significant differences could be found. However, there might have been a few limitations, such as: a small sample

size, participants comparatively older than the initial larger sample from which this data set was taken, a greater representation of female participants and a sample that is predominantly religious (as measured by formal religious teaching and religious affiliation). Besides searching for individual differences in the use of themes in this data set, it was found that producing drawings with the characteristics that define this sample was associated with older participants when conducting statistical analyses in the larger initial sample of drawings.

In that respect, it makes sense that older participants would be more likely to offer such types of depictions when one considers the striking realism shown in those drawings. More specifically, they seem to present scenes as though they were taking place in front of the viewer, that is, as the viewer would *see* them, and not as one would *know* them. This distinction between drawing as one sees instead of as they know made the difference between two developmental stages theorized by Luquet (1913) and referring to *intellectual realism* and *visual realism*, respectively.

Connections can be drawn with the aforementioned issues on mediation and closeness with the divine. In fact, such realism may be most appropriate to convey these aspects best, by simulating a real-life sort of depiction of a figure that is anthropomorphic, therefore evoking a real encounter. It could be argued that depicting God in such a way only follows a natural development of drawing abilities - that is, drawing as one sees. There is however a shortcoming to this interpretation: the current sample only represents a minority of drawings from a much larger sample, and they do not characterize most older children's types of drawings. In fact, older children tend to discard anthropomorphism from their drawings of God - similar to what has been observed by Hanisch (1996). This actually points to the fact that anthropomorphism itself can be very symbolic for certain central qualities (e.g., closeness with the viewer) and does not discard *otherness* from the conversation, even in the context of very realistic depictions evoking an encounter with an anthropomorphic divine figure.

Limitations and Future Research

This study presents however some limitations. One major limitation pertains to the fact that it ensued from a larger quantitative study, therefore it could have been insightful to have access to a discourse produced by children that would be more substantial than the short descriptive texts that they have provided. This would have required to be able to spend time with each participant in a one-on-one sort of setting and to conduct a series of qualitative interviews, eventually leading to a more *emic* (i.e., through the participant's eyes) understanding. Besides possibly enriching our understanding of the current issue it would have certainly increased the complexity and unicity of the phenomenon under scrutiny. Given that the drawings were in themselves the actual object of study, the data enabled the

researchers to answer the research questions that had been set, and multiplying that object would consist in a different type of inquiry.

A second limitation deals with the absence of a similarly thorough analysis of the current core themes in the larger sample. It could be important in order to judge to what extent those thematic frameworks may relate not only to drawings presenting certain characteristics (i.e., anthropomorphic God figure shown from close-up and partially represented) but a wider selection of drawings (including full-length depictions). This is a shortcoming that will have to be resolved in the future. Nonetheless, as an exploratory study emphasizing the importance of alternatives to the content of composition as vectors of *otherness*, the outcome is already merely satisfying.

A third limitation might be specific to the use of a sample of participants coming mostly from a Christian background, and more particularly one that endorses mainly two types of denominations, that is Protestant (Reformed) and Roman Catholic. Future inquiries on the current issue will have to tackle this by including a wider diversity of religious contexts and religious affiliations. Ideally, other religious traditions and different countries will be concerned. However, this also means that it is quite representative of the Swiss context.

One major possible improvement in future research could be achieved by conducting an analysis of the children's cultural background. A specific account of the sorts of discourses about religion they are in contact with or the types of visual artworks they are exposed to could be highly informative on the possible influence of their background. This would shed light on the issues discussed above about whether early experiences (for example with the primary caretaker) or merely cultural exposure to artifacts are prevalent influencers of the types of drawings from this data set and of the core themes displayed. In that respect, data should also be controlled for their specificity with the topic. There is, unfortunately, no possibility to affirm thus far that the current findings are totally specific to the God figure and could not apply, to some degree, to other topics. Future inquiries may compare different sorts of drawings.

Finally, along the same line of thought as discussed in the quantitative study on this anthropomorphic issue, the content of composition itself may be analyzed with more refinements. One such example deals with the use of clothes and accessories used to communicate the quality of a figure being not an ordinary human. In that sense, clerical clothing could be considered. An extension to such analysis could be inspired by a recent study (Jackson, Hester, & Gray, 2018) which has found that key personal characteristics (e.g., ethnicity, gender, age, self-reported attractiveness) contribute to the way one tends to imagine God visually. God was most often found to fit one's own category (i.e., same ethnicity, gender and so on). Following this logic of relating to oneself, and no more to the

human being, it would be informative to explore the possible connections between sameness-otherness with oneself and sameness-otherness with the human being in God.

Practice Implications

The current data has predominantly shown that alongside ways of conveying *otherness* in an anthropomorphic God, children also tend to underline some form of proximity. Based on theories of embodiment, such closeness may relate to previous experience associated with that concept, be it physical and spatial qualities or communicational ones. Therefore, a possible implication may be found in religious education, by inviting children to reflect upon their own understanding of God based on such underlying characteristics. Beyond fostering enhanced clarity about one's own perception of the divine, such approach would give credit to idiosyncrasies in that regard, and step out of canonical ideas communicated within one particular tradition. More specifically, this could mean that rather than 'just' seeing an anthropomorphic God figure in a pupil's drawing, the teacher or educator will be interested to converse about the less tangible characteristics that surround the depiction (e.g., trans-spatial properties, transcendence). This could be embedded in an existential approach to catechism, as it is sometimes seen in the Protestant (Reformed) teaching system in Switzerland, giving a particular place to personal reflections around God and Christianity and the discourse that is communicated within that religious denomination. For example, such personalized discussion may be oriented by the core themes found in this study and how one may relate to God all the while strongly marking its *otherness*. In the main, teachings using visual methods will be better informed about the diversity and complexity that can hide in anthropomorphic representations and be able to reach out to a particular reading.

Additionally, inter-religious dialogues, for example in the context of ecumenical gatherings between Catholic and Protestant children as they happen in Switzerland may be facilitated by referring to the core themes discovered here. In that sense, these could be used to explain how central qualities attributed to God may be expressed visually and what the general meaning can be for oneself. This is particularly important because the current issue (i.e., *sameness-otherness*) implies both closeness and distance with God, which might have concrete consequences on one's actions in relation to religion.

Implications might also be found in the area of art- and play-therapy. The therapist would then be informed about how children (at least in the context of the current sample) may symbolize a variety of sameness- and otherness-related qualities that they attribute to God. In that respect, it will be possible to rely on the content of composition as well as on formal/abstract properties exhibited in a drawing of God. Combining sameness with otherness appears to be generally associated with portrait-like depictions of God produced by 'typically developing' children. It might be argued that

disruptions in one or the other of those two aspects could be an indicator of a peculiar relationship with God that might deserve 'digging' about.

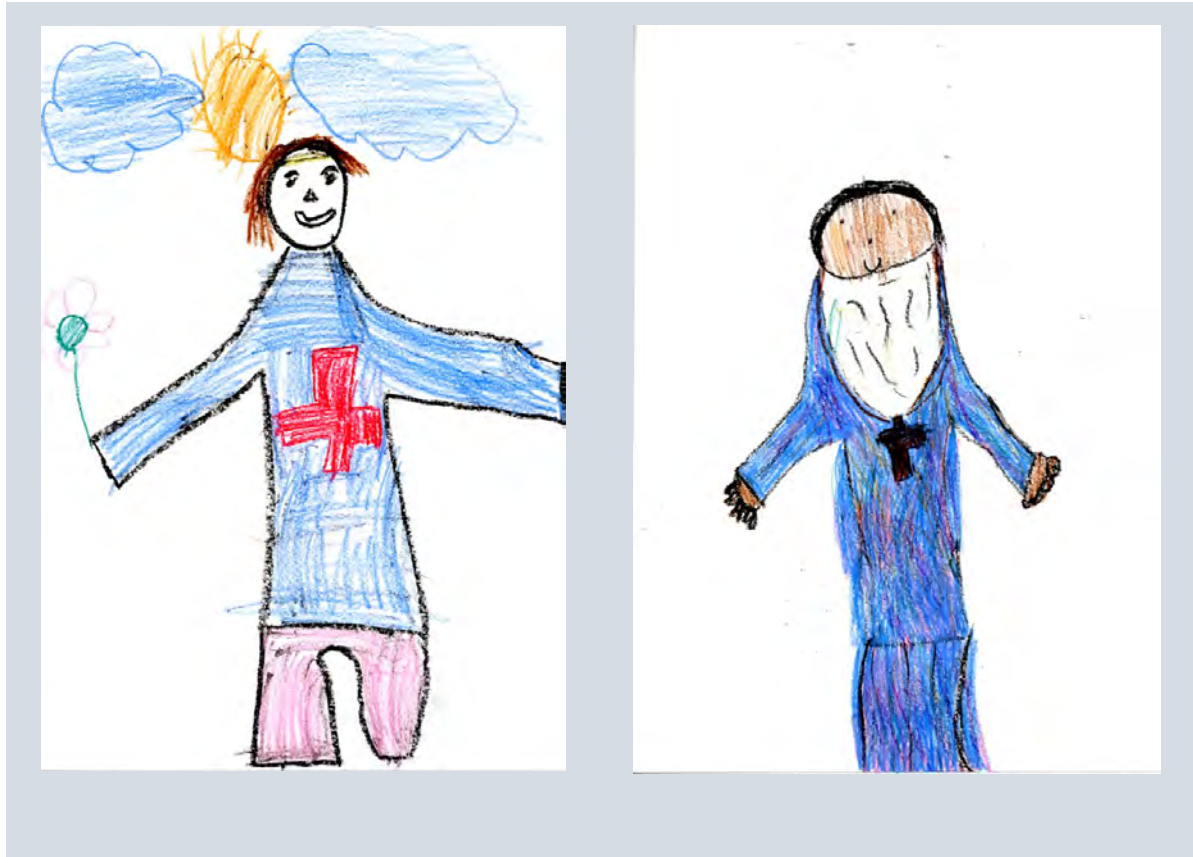
Finally, art education could also benefit from explicitly training such *sameness-otherness* nuances, particularly emphasized by abstract/formal properties.

Conclusion

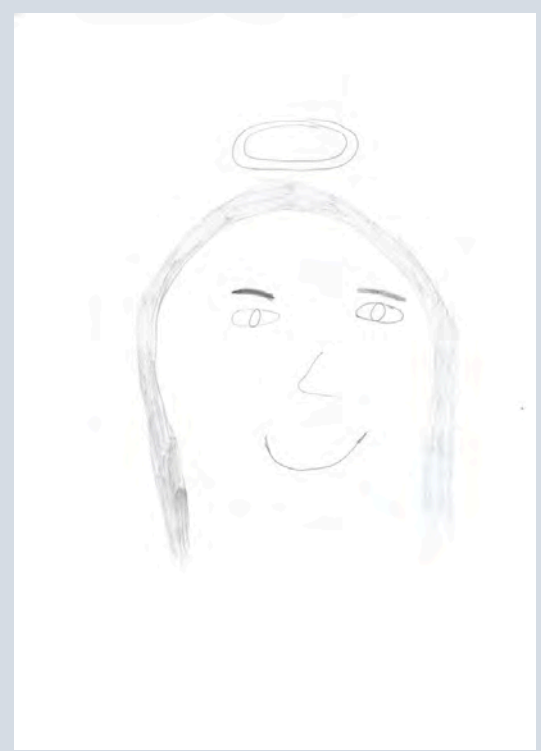
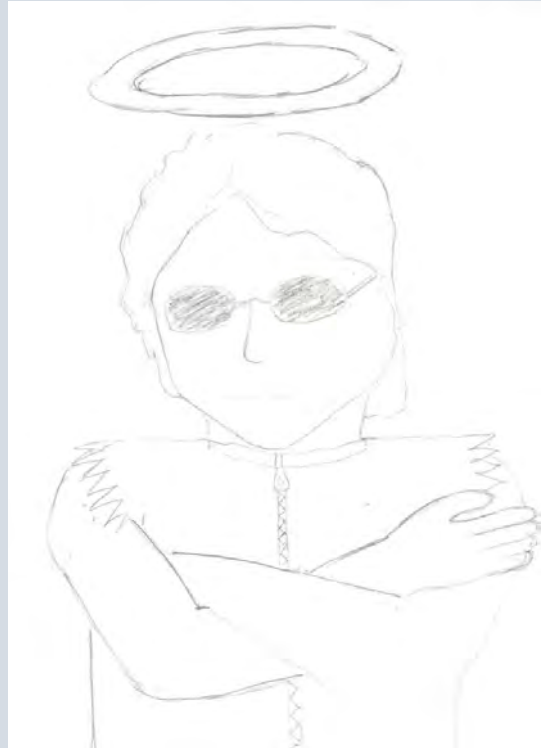
The current study provides an innovative exploration into how children may express sameness-otherness with the human being in their drawings of anthropomorphic God figures. Esthetic techniques alternative to the usual content of composition have been shown to play a role in this combination, and more specifically abstract/formal properties. A framework analysis has revealed six core themes on this issue, indicating more diversity than identified before on anthropomorphism in the divine. Children proved to be able to convey very complex ideas about God in relation to *sameness-otherness*, which surpassed a more traditional dichotomous view concerning anthropomorphism found in past research. Practice implications were proposed for religious education, therapy and art education.

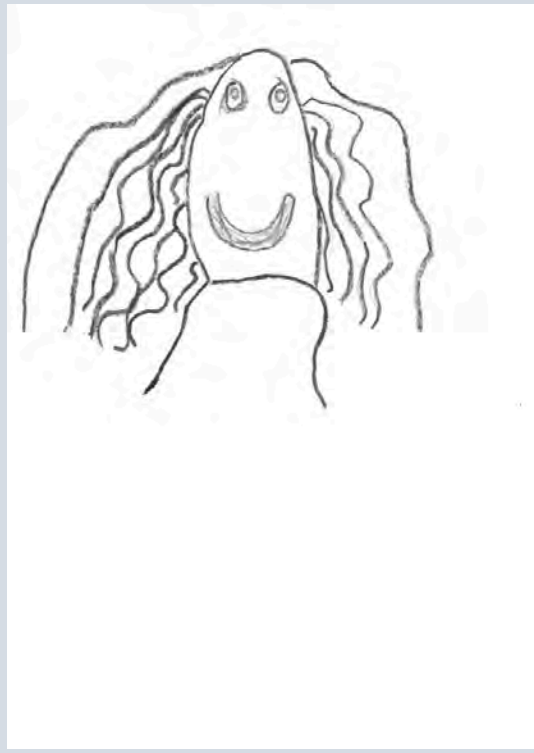
Appendices

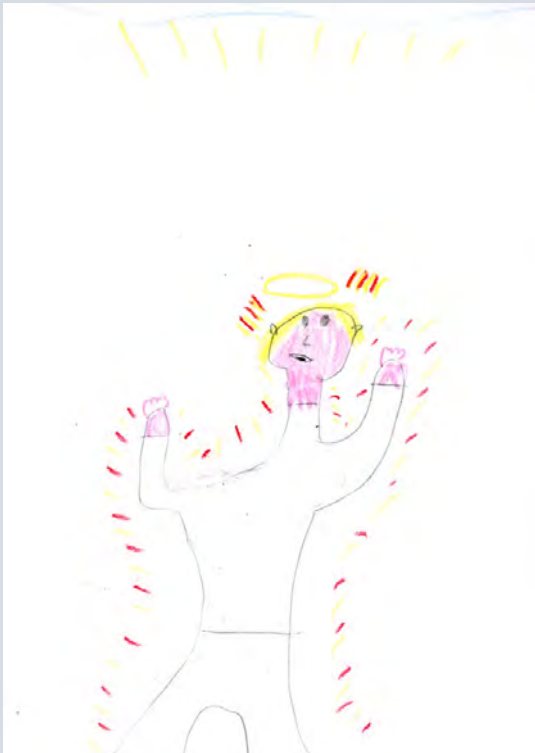
The N = 46 drawings analyzed in the current study were all reported below.

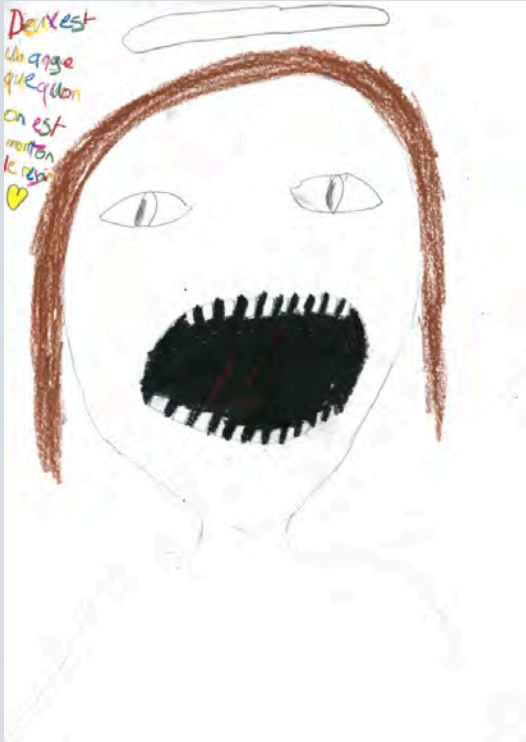








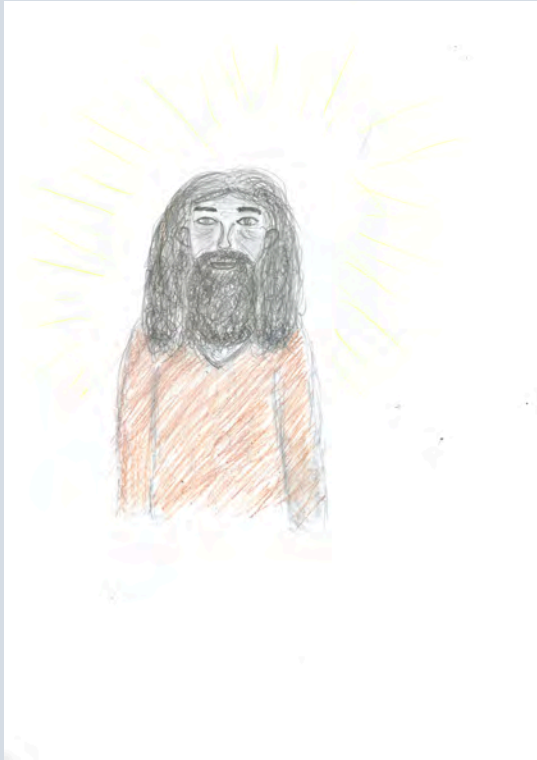




Drawing not displayed for copyright reasons²



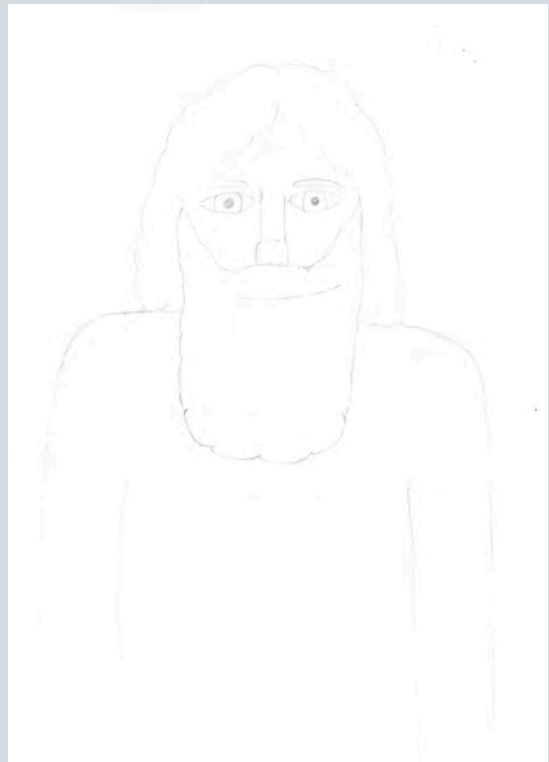
² The participant mentioned not willing their drawing be made publicly accessible.



Drawing not displayed for copyright reasons³



³ The participant mentioned not willing their drawing be made publicly accessible.



Drawing not displayed for copyright reasons⁴



⁴ The participant mentioned not willing their drawing be made publicly accessible.







Section Summary - Humanness and Non-humanness in God Representations

The main outcome of those studies is that conceptual complexity based on humanness and non-humanness both co-occurring to characterize the divine depends strongly on age among children aged 5- to 16-years old. Besides, the absence of anthropomorphism in depicting the divine depends both on age and religious schooling.

This points to slightly different psychological underpinnings to one and the other. The former appears to be eminently cognitive while the latter seems to require minimal cognitive abilities but especially a large repertoire of God representations. Such repertoire, provider of representations that are alternative to the human being, may well be fostered by religious education.

A new understanding has been reached concerning how children may involve the human being and how it is mobilized in God representations. From those observations, in future research, it will no more be deemed reasonable to call non-anthropomorphic God representations 'mature' ones. The current research has shown that they stand as alternatives to the human being rather than an endpoint towards which development would lead all individuals. If any developmental endpoint in adulthood, it would instead be more convincingly a greater degree of conceptual blending between ontological categories, including the one of the human being.

A closer look at the esthetic techniques used by children to communicate a combination of sameness and otherness with the human being has led to the development of a promising approach to the study of God representations in children. Such aspects in the divine may not necessarily be marked by obvious features that characterize a certain ontological category. Instead, particular qualities attributed to human-like divine characters can be communicated with much subtlety, which could be difficult for young children to expression by other means. Revealed in a data set that was characterized by a very realistic type of - real face-to-face encounter - perspective (Luquet, 1913), findings have shown that all the while being under a wider developmental influence exerted on the production of drawings, children still marked aspects that they would tend to attribute to God specifically. This observation consists in teasing apart general drawing development from more domain-specific scenarios.

Moreover, the underlying notions of time and space in that regard suggest a completely new field of inquiry. While experimental work has made reference to such aspects (Barrett & Keil, 1996)

they have failed to provide developmental accounts based on data collected in a free-response task format. Such aspects were spontaneously brought up by the participants in the current research.

SECOND SECTION - GENDER-TYPING GOD REPRESENTATIONS

Anthropomorphization can hardly operate without calling forth gender. The field of biology, for example, is infamous among epistemologists for its 'romance' about the respective roles of the female and male reproductive cells. This has led scientists to overlook the active role played by the eggs for a long time because of stereotypical representations about their supposed function based on a gendered understanding of the underlying biological processes, which mirrors social arrangements (Martin, 1991). In a similar fashion, it would be difficult to imagine any God that has human traits and that would not relate to gender in any way.

Gendering the divine has important social implications and may strongly orient one's worldview as well as one's own relationship to God. A natural logical shortcut is to deduce that "If God is male then the male is God" (Daly, 1973). Abrahamic religions, including Christianity, generally depict God in a predominantly male fashion (Lindsey, 2015). Moreover, masculine hegemony in the divine easily gives way to gender inequalities in religious organizations and questions whether women should even be accepted as ordained members. Perceiving God as male might favor patriarchal gender roles (Whitehead, 2012). A male imagery surrounding God may result from the use of words associated with the divine (Vorster, 1995), but also from how it is visually portrayed, in religious art for example (Pezzoli-Olgiati & Rowland, 2011). Adverse consequences might follow from male predominance. This could lead to lower self-esteem among female individuals (Bussey & Bandura, 1999).

Gender may be reduced, at times, to an indiscernible distinction between the feminine and the masculine. Blending genders together or fading them out still entails gender-typing. When accounting for parental (motherly and fatherly) traits, God seems to be rather mixed and receive both types of traits (Vergote & Tamayo, 1980). As being characterized as motherly and/or fatherly clearly relates to gender, it may be supposed that examining God representations would require to take both femininity and masculinity into account simultaneously. This is true, despite the apparent male predominance observed in the Christian tradition.

Two studies will be presented. The first study has examined the gender-typing of God representations among children from the French-speaking Swiss sample. It proposes a dimensional-categorical approach, assuming that both femininity and masculinity can be exhibited simultaneously on a figure, and that this expression may be subject to much variation. The second study offers a cross-

cultural comparison between four sample of children from different cultural backgrounds: French-speaking Switzerland, Japan, Buryatia and Saint-Petersburg.

The overall idea was to construct measurements that would be sensitive enough to capture subtle variations in the expression of gender on anthropomorphic God figures. The general purpose was to account for the respective influence of different variables associated with the participants - such as age, gender, schooling, large cultural environment.

The two chapters of this section were meant for publication. The first one will be submitted to a scientific journal. The second one was submitted for a collective book: "Le corps mis en scène: Entre norme et transgression" (Eds. I. Becci & F. Prescendi Morresi - publisher: A Contrario Campus).

Finally, with regard to contributions, both chapters were entirely written by the author of this thesis. The first chapter has benefitted from feedback and discussions, particularly on theoretical interpretations, with Prof. Pierre-Yves Brandt, who is therefore co-author of the manuscript that will be submitted. The second chapter has benefitted from feedback, discussions and data selection with Dr. Zhargalma Dandarova Robert and Prof. Pierre-Yves Brandt⁵. They are co-authors of the chapter that was submitted.

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Chapter 4 - Gender Issues in Children's Drawings: On Femininity and Masculinity of God Representations

Abstract

Should a given entity indicate some level of anthropomorphism, it is impossible for it not to be seized by gender-typing. God is certainly no exception, and is often depicted as a masculine figure in Western Christian environments. This has been a major concern in feminist theology, which has drawn attention to the social risks incurred from a predominantly male imagery and of patriarchal organization of the divine. Nevertheless, there might be inter-individual and developmental variations. The current study examined how children in French-speaking Switzerland gender-type God representations in their drawings. A sample of 399 drawings of God composed by children (52.4% girls) aged 6- to 16-years old was assessed by eighteen independent raters. Gender-typing was inspected using both dimensional (i.e., femininity and masculinity) and categorical (i.e., feminine, masculine, androgynous and undifferentiated) approaches. The age, gender and religiosity of participants were used as predictor variables. Results indicated a major influence of cultural androcentrism and same-gender preference. There was a developmental trend towards more masculine God figures, both as a matter of frequency (more often) and intensity (more strongly). This was somewhat conflicted among girls, seemingly showing opposing normative tendencies. Religiosity did not play any significant role. Gender development, in-group favoritism, exposure-based theories of gender and cultural analogies were used to interpret these findings. In addition to social consequences, practice implications were suggested for education and psychological counseling.

Introduction

“Focusing on individuals’ images of God is useful because those images serve as windows into individuals’ moral and philosophical worldviews that they might otherwise have difficulty verbalizing.” (Whitehead, 2012).

Feminist Theology and Male God Representations

Feminist theologians have previously set the ground for a critique of the predominantly male imagery being often conveyed in Abrahamic religions (Lindsey, 2015). It has been argued that God is generally described with male characteristics (Johnson, 2013) and that the use of “male language” maintains some resemblance between men - unlike women - and God (Vorster, 1995), which is illustrated by (Daly, 1973): “If God is male then the male is God.” In that respect, Tolbert (1990) refers to the eviction of women from the divine. Furthermore, if the theological discourse suggests that men are made in God’s image then “logically” women are made after men (Lazenby, 1987). Even if metaphorical, the primarily male language employed in reference to God is prone to perpetuate a deeply rooted traditional androcentric perspective (Klopper, 2002). This underlines the possible identification processes at stake, based on sex or sex identity when imagining God, which might have significant effects on individuals’ self-positioning.

It has been proposed that God stands as the “ultimate” generalized other (Berger, 1969), and social implications must be expected from gender-typing the divine and from a world that is perceived as inherently gendered (Gallagher, 2003). Specifically, gender roles become legitimized due to a hierarchical gendered organization (Christ, 1987; Gallagher, 2003), and religious groups often play a powerful reinforcing role on that matter (Woodroof, 1986). Religious institutions might perpetuate some patriarchal system bearing injustices that afflict women (Daly, 1973; Fiorenza, 1996) and support patriarchal family models (Hoffman et al., 2008). Thus, there is relevance in unveiling traditional and authoritarian ideologies that might otherwise remain invisible (Daly, 1973).

The opposite way, holding a male image of God has been associated with traditional patriarchal gender roles (Whitehead, 2012). Words employed to depict God indeed convey non-trivial values and attitudes (Vorster, 1995), and rather than being an object of contemplation God may as well be an object of interaction and guidance (Froese & Bader, 2010). At an interpersonal level, one’s understanding of God can be linked with moral behaviors, political affiliation (Bader, 2005), tolerance of immoral conducts (Stark, 2001) and implicit sexual prejudice (Tsang & Rowatt, 2007). Besides, strength of affiliation and theological conservatism can also relate to traditional gender views with differential effects based on the gender of participants (Bartkowski & Hempel, 2009). At an individual

level, comprehending God in terms of personality traits can be related to attitudes towards oneself, such as self-esteem (Benson & Spilka, 1973). Further, it seems relevant to also explore how visual images portray religious figures and themes as they might show cultural influences onto individuals as well as reflect idiosyncratic perceptions (Pezzoli-Olgiati & Rowland, 2011).

In order to understand how adult individuals come to gender-type the divine as such it is important to better understand how children proceed to attributing a gender to God, and how this may undergo changes across age. It is also relevant to address how gender development takes place across various topics and activities.

Gender Development

Gender is omnipresent in all activities in which children get involved as they attend to organizing their social world according to categories, which may at times lead to gender segregation (Maccoby, 1998). Different propensities may affect one's own preferences and social attributions in the process of making decisions based on gender.

One such tendency is characterized by *same-gender preference*. This is generally observed through in-group favoritism resulting in, inter alia, more positive ratings for members of the same gender group or in higher frequency of interaction with same-gender peers (Powlishta, 1995b). Such preference may be caused by conformity to gender schemas. The acquisition of such schemas progressively enables children to label themselves and others to further guide their choices and behaviors in a manner that is consistent with traditional gender roles (Bem, 1981; Martin & Halverson, 1981; Signorella, Bigler, & Liben, 1993). Motivational and regulatory processes may also be involved, acting in relation to sanctioning or rewarding feedback coming from children's social environment (Bussey, 2011; Bussey & Bandura, 1999).

A possible way of inquiring into children's same-gender preference is to examine their drawings of a person. A large body of research has revealed such a preference among girls and boys when they were asked to draw a person without providing any further instructions about what the gender of the figure should be (Arteche et al., 2010; Chen & Kantner, 1996; Harris, 1963; Willson, 1977).

A second major tendency pertaining to gender development is *gender flexibility*. It has been defined as "... the willingness to apply an attribute to both sexes rather than exclusively to one sex" (Trautner et al., 2005). Gender flexibility becomes generally greater in children as a function of age, especially from early to middle childhood (Serbin et al., 1993; Trautner et al., 2005). It may be revealed in less biased attribution processes, including memory and one's own preferences based on gender

(Signorella, Bigler, & Liben, 1993). Next to being merely developmental gender flexibility may be differential, that is, dependent on idiosyncrasies exhibited by children. This may involve making evaluations in relation to gender based on one's personal standards rather than external influences (Bussey & Bandura, 1992). Concerning gender differences, boys, more than girls, tend to expect social sanction for indulging in cross-gender behaviors and activities (Bussey & Bandura, 1992; Martin, 1993), receive stronger parental disapproval for such conducts (Sandnabba & Ahlberg, 1999) and are more likely to face peer rejection for non-conforming gendered behaviors (Braun & Davidson, 2017).

God Representations

God representations may endorse a series of gender-typical and parental traits. Various studies have suggested that there should be differences between women and men concerning their God representations and the gender-typical traits with which they are associated. Female individuals tend to perceive God as more nurturing (Roberts, 1989), supportive/healer/helpful (Janssen et al., 1994; Nelsen et al., 1985) and intimate (Heller, 1986), contrary to male individuals, who tend to understand God as a powerful and active (Heller, 1986), vindictive (Hammersla et al., 1986). However, such gender differences have not been systematically found in all studies (Krejci, 1998). God representations happen to encompass both mother and father typical (Vergote & Tamayo, 1980). Among children, while boys generally describe God as paternal and punishing/judging, girls tend to see God as a rather mixed - paternal and maternal - figure (Heller, 1986). The opposite observation could be made for adult participants, with more mixed representations among male individuals (Dickie et al., 2006). Besides gender, age may have an effect as well, although studies spanning early to middle childhood have provided conflicting accounts. Dickie et al. (1997) have noticed a shift from father God to mother God representations alongside more nurturance, although Heller (1986) has underlined God's distance and power increasing with age. Perceived distance may also relate to how God is gender-typed. Eshleman et al. (1999) have shown that God can be judged closer to boys when it is male and by girls when it was non-male (i.e., female or neither). Most importantly the results supported an effect of age: the older the participants the more likely for God images to be non-male (i.e., female or neither), as well as closer. Nevertheless, representations remained predominantly male overall.

The way God is depicted is more likely to be masculine than feminine in a Western Christian environment. Foster & Keating (1992) have shown that in such a cultural environment (i.e., USA) God is most often perceived as a male, both personally and as the result of expectations about the surrounding culture (i.e., what people think about other people's beliefs). They have coined the term "*androcentric*" God concept in order to describe this phenomenon. It is noteworthy that one of their studies indicated a milder expression of androcentrism when participants were put in a free-response

task - this is important for the drawing method discussed below. Individual differences based on their religiousness have been shown to share a relationship with the perception of God as a “he”, with higher religiousness playing a positive role in that regard (Whitehead, 2012). Exposure-based theories of gender may explain such variations in individual perceptions (Bolzendahl & Myers, 2004; Cunningham et al., 2005; Davis & Greenstein, 2009).

Given that prevalence of masculine God representations, it has been suggested that women and men should show contrasting responses to a male-imagined God (Johnson, 1984). This was experimentally tested by Foster & Babcock (2001), who have examined young adults’ reactions to a god whose gender was predetermined by the task. Differences in gender and parental attributes were found based on the gender of participants (e.g., action-oriented god for men and feeling-oriented god for women) - and the gender of God (e.g., nurturance attributed to a female god). The fact that surprise from God being female was elicited in a fourth of cases suggested higher expectations about a male representation of God, which is in accord with an androcentric view of God. No effect of age was reported.

Gender Category

Riegel & Kaupp (2005) have shown that sex and gender, under certain conditions, may be differentiated from one another when attempting to understand individual God representations. Their use of ad hoc methods highlighted the high complexity of such intricate relationships, unpacking those two dimensions into a myriad of facets. In their study, God was never predominantly male nor masculine. In a similar fashion, an earlier study conducted by Vergote & Tamayo (1980) has demonstrated that parental traits, understood as stereotypically motherly or fatherly, may apply to God representations in such a way that they combine features from both parents.

Some authors in the field of the psychology of religion have argued that one’s God representations may be of two different natures: on the one hand, some of them are rather conscious and rational (*God concepts*), and on the other hand some are fairly unconscious and affect-laden (*God images*) (Davis, Moriarty, & Mauch, 2013; Grimes, 2008; Rizzuto, 1979). Günther-Heimbrock (1999), by comparing various research methodologies has argued that drawings may help capture implicit (or unconscious, for that matter) qualities of God representations that verbal answers may struggle to reveal. It is in fact reasonable to expect implicit as well as explicit and thought-through understandings of God to land on the page of a drawing composed in response to a draw-God task. In this regard, implicit elements may be compared with what Goffman (1976) has called “*given off*”, that is, signals that are not voluntarily set forth in interactions, contrary to those that are “*given*”. Adapted to drawings of God, this would translate into aspects of gender that escape the artist. In this respect,

analyzing (gendered) visual representations of God is worth more than just secondary attention (Knauss & Pezzoli-Olgiati, 2015), and more generally, inquiring into visual artifacts and their interrelations with their socio-cultural surroundings should help understand nowadays cultures, facing an abundance of images (Mirzoeff, 1999).

Concerning gender issues, West and Zimmerman (1987, 2009) have proposed that a person is made *accountable* to a “*sex category*” (e.g., man or woman) based on the performance of gender leading them to be perceived as an acceptable representative of that category. As long as they are accountable for that category they can be more or less feminine or masculine, which does not impede their *category membership*. Now, drawing, as a visual medium, creates space for gender to be visually performed by the artist onto the figure being depicted, including cues that may suggest femininity and/or masculinity in the drawn figure. In that context, all cues may be relevant, thus a drawn God figure should not be examined as accountable to a sex category as though having some biology hidden ‘behind’ the curtain, which may be misleading. Instead, embracing gender from a comprehensive perspective may provide very useful information about individual perceptions of God. Using visual data might take the inquiry further by tapping into gender as a complex and perceptible display, rather than as a set of personality traits and stereotypical behaviors, like it has often been regarded in the psychology of religion.

Children’s Drawings of God

It would therefore be relevant to examine how God is gendered in drawings, and particularly so among children for several reasons. Drawings are a means of expression that is familiar to children. On top of that, using a medium that does not necessarily make the exploration of gender explicit during task completion - unlike verbal communication - is suitable for the potential expression of *given-off* cues (Goffman, 1976). Also, depending on the age range taken into consideration developmental patterns might be highlighted. Research on drawings of God in children has mostly been carried out in Western environments marked by Christianity and only a few have shown interest in gender, often receiving little attention. Drawn God figures were predominantly masculine, and the few feminine ones were mostly produced by girls (Bucher, 1992; Daniel, 1997; Hanisch, 1996; Kay & Ray, 2004; Klein, 2000). By taking into account alternatives to a binary view of gender, Ladd et al. (1998) have found the following frequencies: masculine (57.7%), “*neuter*” (i.e., neither masculine nor feminine; 37.5%) and feminine (6.8%). Their study has also revealed a U-shaped curve based on age and having neuter figures being drawn preferentially by young or older children. This may well underscore the expression of an underlying gender flexibility. In other socio-cultural and religious environments where there is a milder imperative to conceive of the divine as masculine, expectation about gender in such drawings

should be quite different. This is what was found by Brandt et al. (2009) in a sample of Japanese children, where almost a third of the figures were feminine and drawn by about half of the girls. Normative pressures may nonetheless interact in complex ways depending on various sources of influence. To illustrate this point, Dandarova (2013) has conducted a similar analysis in a Buryat sample of children (Siberia, Russia), which has revealed equivalent findings to Ladd et al. (1998). Finally, it could be argued that additional dialogue with children may add some welcomed nuance to their perception of God and in possible contrast to their drawings (e.g., Coles, 1990; Heller, 1986). However, from a quantitative perspective, drawings may stand as sufficient and valid receptacles of various - not necessarily reflected upon - normative pressures.

A few observations can be underscored from this review of previous studies on children's drawings of God. A first observation is that cultural androcentric representations of God do appear to have an impact on children's gendering of God figures in their drawings. Moreover, there seems to be an indication of same-gender preference. Now there are some limitations, including that accounts of developmental patterns are somewhat limited in this area. Gender categories were often binary and the utilization of a larger range of categories should help get a more comprehensive view. Finally, just like people in daily life, drawn figures of God are likely to display both feminine and masculine characteristics simultaneously, and it appears sensible to consider how strongly gender may be expressed, as a matter of intensity.

Current Study

The rationale was to investigate into how children attribute gender characteristics to God (i.e., gender-typing). The aim was to better understand how various factors, which may be general (e.g., age) or topic-related (e.g., gender, religiosity), may influence the way children gender-type God. The objective was twofold. Firstly, there was an interest in assessing the influence of androcentrism in the context of the current sample. Secondly, gender-typing should be examined according to the development (i.e., age), gender and religiosity of participants. There were three main research questions: Are children's God representations in French-speaking Switzerland predominantly masculine? How does gender-typing God representations vary as a function of age, gender and religiosity? How does the relationship between femininity and masculinity of God representations change across development?

One particular methodological contribution of the current study was to resort to both dimensional (i.e., femininity and masculinity) and categorical (i.e., feminine, masculine, undifferentiated, androgynous) outcome variables for gender-typing. Similar to Riegel and Kaupp (2005), it was assumed that gender-typing is made of several dimensions that co-exist. Regarding gender categories, the difference between undifferentiated and androgynous would be that the

former is not particularly characteristic of either femininity or masculinity, while the latter would be representative of both.

Hypotheses

It was assumed that mainly three different levels of normative influence may operate in the way children gender-type God: androcentrism, same-gender preference and gender flexibility. Hypotheses will be presented according to each level.

Three hypotheses were formulated for androcentrism of God figures. Firstly, masculine (vs. non-masculine) figures are predominant and masculinity is greater than femininity, overall, and this is particularly true for boys (*hypothesis 1*). Secondly, increasing age is associated with more non-masculine (vs. masculine) figures, as well as decreasing masculinity and increasing femininity, especially among boys (*hypothesis 2*). Thirdly, higher religiousness (i.e., religious affiliation, religious schooling, prayer practice) is associated with masculine figures vs. non-masculine ones, as well as with more masculinity and less femininity (*hypothesis 3*).

Regarding preference for same gender, it was hypothesized that preference for same-gender God figures is greater among boys (*hypothesis 4*) - due to a match with androcentrism for this gender group.

Finally, three hypotheses were drawn in respect of gender flexibility. Firstly, girls use atypical gender categories (i.e., undifferentiated and androgynous) to a greater extent than boys (*hypothesis 5*). Secondly, children use a wider range of gender categories with increasing age (*hypothesis 6*). Thirdly, the older the children the more often they combine masculine and feminine gendering, and this is particularly true for girls (*hypothesis 7*).

Method

Data Collection

A total of 532 drawings of God were collected in French-speaking Switzerland among children aged 5 to 17 years old (Min = 5.64 years, Max = 17.24 years, Mean = 11.05 years, SD = 2.46 years, 51.3 % girls). Children were met either during religious teaching or during regular teaching (43.2%). Religious teaching was divided into either confessional religious class at school or as an after-school activity. No discrimination for data processing was made in that respect. Regarding the denomination of such teaching, it consisted in either Protestant or Catholic catechism, roughly equally divided. Consent was

obtained through opt-out for approximately half of the sample, and through opt-in (involving written parental consent) for the other half.

Materials and Procedure

Each participant was provided with the same materials: a stiff drawing white A4 paper, a gray pencil, a ten-color set of wax pastels (yellow, orange, red, pink, purple, blue, green, brown, black, white) and an eraser.

Children were met in groups ($M = 10$), either at school or at their religious teacher's home. The procedure was similar to the one reported in Dandarova Robert et al. (2016). The task was fourfold and included, in this order: drawing God, recalling the drawing task (to ensure good understanding), providing a written description of one's own drawing, filling out a questionnaire on religiosity. All tasks were performed in a session of 30-50 minutes, although children were given as much time as they needed. They worked individually and space was managed so they would not copy from each other. For the drawing task, children were asked if they had already heard the word "God" and were told they could close their eyes and imagine God. Then, they were invited to draw God as they had imagined. No reference to gender was made in relation to God when wording the task. Importantly, they were not aware of the exact task beforehand, which could have altered the spontaneity of the task. They were also not aware of the following tasks when beginning the drawing task. Each participant went on to the next tasks at their own pace. They were encouraged to raise their hand if they had any question or if they had completed a task. Interactions with the researchers would then take place by whispering in order not to disturb other participants.

Descriptive texts of the drawings were used to identify the God figure, should there be any doubt. This would be helpful for later assessment of gender-typing by external raters.

Re-sampling and Religiosity

The initial sample of drawings ($N = 532$) had to be reduced to a smaller sample ($N = 399$) based on a series of criteria whose application would allow raters to score drawings upon gender. The main incentive to proceed this way was that it might be difficult for raters to assess drawings that did not display a minimally anthropomorphic God figure. A first set of exclusion criteria was applied based on the type of content. Drawings meeting one of the following would be excluded: no anthropomorphic God figure ($N = 27$); no God figure was actually represented ($N = 32$). A God figure would be considered 'anthropomorphic' if it was composed of at least a human-like head - for example, a sun with a human face would indeed enter this category. A second type of exclusion would be applied if a drawing exhibited several God figures ($N = 7$). Indeed, assessing several figures on gender would be

complicated and bring imbalance with the majority of single-God drawings. Some slight overlap occurred - i.e., a same drawing meeting several exclusion criteria. An additional reason for the initial sample to be reduced was that 70 drawings did not receive gender scores due to a lack of raters.

It is important for the reader to know that the data analyzed in the current study were collected for a larger intercultural project, gathering drawings from various countries and religious backgrounds: Drawings of gods (<https://ddd.unil.ch/>). Therefore, this sample reduction was specific to the current study and its aims. Data were used for other lines of inquiry - and not generally "wasted".

Initial sample (N = 532)

Socio-demographic characteristics of this sample are presented at the beginning of this section. Religiosity reported by participants is detailed below, and includes three variables: religious affiliation, prayer practice and religious schooling.

Regarding religious affiliation, it can be considered that the sample was predominantly religious, given that 69.4% have reported identifying themselves according to at least one religious denomination, versus 'does not know' (16.7%), 'no religion' (2.3%) or both (0.2%). Participants mostly identified as Christian (64.7%): Catholic (38.9%), Protestant (24.2%), Orthodox (0.4%), Evangelical (0.4%) or unspecified (0.8%). This was followed by other religious traditions: Muslim (3%), Buddhist (0.9%), Jewish (0.6%). Some participants did report having several religions: Catholic-Muslim (0.2%). Some data were missing for 9.8% of the sample for religious affiliation. Some have also mentioned having a religion concurrently to 'does not know'/'no religion' (1.7%).

As for prayer practice, 51.9% of participants reported they were praying at home (10.1% of the data were missing for that question).

Religious schooling was recorded as a dichotomous (yes/no) variable based on whether children were met in a religious vs regular schooling environment: 56.77% of the sample was met during religious teaching.

Overall, the sample was predominantly Christian, and it could be considered that excluding non-anthropomorphic and non-figurative representations of God would therefore not bias the results. More specifically, it could not be argued that there had been a selection of drawings that would discard a specific religion based on whether that religion allows or forbids believers to depict the divine (e.g., Islam, Judaism).

Research Sample (N = 399)

The reduced sample of drawings represents the research sample that was actually scored for gender and used for statistical analyses in this study. Its socio-demographic and religiosity characteristics are presented below.

The socio-demographic information associated with the children who have produced the drawings of the final sample ($N = 399$) are presented in table 1. More specific information about the three age groups is as follows: lower age range ($N = 139$, $M_{age} = 8.23$, $Min_{age} = 5.65$, $Max_{age} = 9.50$, $SD = .76$, 52.5% girls); middle age range ($N = 134$, $M_{age} = 10.90$, $Min_{age} = 9.60$, $Max_{age} = 12.47$, $SD = .82$, 51.5% girls); higher age range ($N = 126$, $M_{age} = 13.68$, $Min_{age} = 12.51$, $Max_{age} = 16.07$, $SD = .79$, 53.2% girls). Children were met either in a religious schooling context or during regular school teaching: $N = 209$ and $N = 190$, respectively.

Religiosity will now be presented. Most children identified as Christian (65.66%), and other children reported being affiliated as Muslim (3.76%), Buddhist (1.25%), Jewish (0.5%), 'does not know' (18.04%) or 'no religion' (2.76). There was an overlap between denominations for three participants. Two groups were formed: religious (70.93%) and non-religious (20.8%). This sample was divided into two groups: religious and non-religious. The latter included participants who had reported either 'does not know' or 'no religion'. One participant was removed from analysis because of undecidable overlapping answers (Christian and 'no religion').

Regarding Prayer practice, 51.1% of this sample reported praying at home. There were missing data for 10% of the participants. This is very close to the initial sample (51.9%).

Children met during religious teaching represented 52.38% of this reduced sample. This is very close to the proportion found in the initial ($N = 532$) sample (56.77%) and again, no differences should be assumed based on religiosity between both samples.

Scoring Procedure

Adult Raters

Eighteen undergraduate students ($M_{age} = 26.22$, $Min_{age} = 20$, $Max_{age} = 69$, $SD = 11.15$, 61.11% female) attending a seminar in psychology of religion took part in the study. All volunteered and no money nor course credit was received for participation.

Setting

All drawings had been scanned in order to be later displayed on computer screens for assessment. All drawings were shuffled to be randomly presented to the raters. This means that every package of

drawings would not be characterized by any special socio-demographics of participants. Only drawings were available to the raters, no additional information. All raters were in the same room. They were made aware of the nature of the data (i.e., children's drawings of God).

Attribution of Femininity and Masculinity Scores

Prior to assessing drawings for the current study, they were asked to score the same five drawings (taken from another sample) as a training for the task. After this, six packages of approximately 70 drawings from the current sample would be ascribed to three raters each. Due to greater female representativity among raters (11 women, 7 men), the inclusion of at least one male rater for each package of drawings was ensured. Each drawing was displayed for 20 seconds on 21.5-inch computer screens in the form of a slideshow.

The rating method consisted in attributing two independent scores to each drawing displayed, using: a femininity scale and a masculinity scale, respectively. Scales were 11-point, and scores ranged from 0 to 10. Raters worked independently. Therefore, each drawing received three scores of femininity and three scores of masculinity.

Intraclass correlation analyses (two-way mixed with absolute agreement) were conducted for each set of drawings, both for femininity scores and for masculinity scores. For femininity scores, reliability ICC(C,k) was generally good (.826, .886, .806, .778) and moderate for two cases (.656, .691). For masculinity scores, reliability ICC(C,k) was generally good (.734, .748, .708, .880, .754) except for one case for which it was moderate (.591).

Outcome variables

Femininity and Masculinity Dimensional Scores

Each drawing was assigned a femininity score and a masculinity score representing the mean value of the three initial respective scores provided by the raters. These scores range from 0 to 10, each. Missing data occurred in one set of drawings for one rater. This was handled by computing the mean of scores provided by the two other participants having rated that same set. Additionally, a third gender score was computed, consisting in the absolute metric distance between femininity and masculinity scores for each drawing. Graphs are shown in Fig. 1.

Gender Categories

Four gender categories were designed: undifferentiated, feminine, masculine, androgynous. They were obtained by using the average-split method proposed by Riegel and Kaupp (2005) from the two gender dimensions (i.e., femininity and masculinity). Figures scoring equal to or above average on the femininity dimension and below average on the masculinity dimension would fall into the feminine

category. The same logic was applied to the masculine category. As for figures scoring below or above average on both dimensions, they would endorse the following categories, respectively: undifferentiated or androgynous. Percentage histograms are provided in Fig. 2 and Fig. 3.

Depending on the specific hypotheses some of these gender categories will be grouped together. Firstly, two categories will be formed for masculine and non-masculine (i.e., feminine, undifferentiated, androgynous) figures. Secondly, same-gender figures will comprise feminine figures vs. else for girls, and masculine figures vs. else for boys. Thirdly, two categories consisting of androgynous figures vs. else will be arranged.

Statistical Analyses

Dimensional scores were not normally distributed (Kolmogorov-Smirnov) and non-parametric testing was used for such measures. Alpha was initially set at 0.05 and p value was adjusted according to the false discovery rate method for multiple testing (Benjamini & Hochberg, 1995).

Results

Alpha was set at 0.02 after statistical correction (Benjamini Hochberg correction).

Androcentrism

Hypothesis 1. Masculine (vs. non-masculine) figures are predominant and masculinity is greater than femininity, overall, and this is particularly true for boys. Overall, more non-masculine (55.86%) than masculine (44.13%) figures were used (see Table 2.). Analyses conducted within each gender group indicated that boys produced masculine and non-masculine figures to equal extents (50% for each category), and that girls produced more non-masculine figures (61.2%). Comparisons between boys and girls in their use of masculine vs. non-masculine figures revealed near-significance differences ($\chi^2(1) = 5.104; p = .024$). Note that this difference was significant before statistical correction. On the unique basis of the preferential use of gender categories among girls and boys, hypothesis 1 would have to be rejected. Analyses were also applied on dimensional scores. Masculinity ($M = 6.35, SD = 2.62, min-max = 0.00-10.00$) was greater than femininity ($M = 2.81, SD = 2.48, min-max = 0.00-10.00$) overall. A Mann-Whitney U test revealed significant differences between boys and girls ($p < .001$): masculinity was greater for boys than for girls, and the opposite was found for femininity, which was greater among girls. Hypothesis 1 was therefore only partially confirmed, based on gender dimensions, but not gender categories.

Hypothesis 2. Increasing age is associated with more non-masculine (vs. masculine) figures, as well as decreasing masculinity and increasing femininity, especially among boys. From the comparison of the three age groups (see Table 2.), it was observed that the use of masculine figures increased with age overall ($\chi^2(2) = 15.005$; $p = .001$), and masculine (vs. non-masculine) figures were predominant in the oldest group (54.8%). Comparisons within each gender group showed that masculine figures increased as a function of age among boys ($\chi^2(2) = 20.107$; $p < .000$), but not among girls ($\chi^2(2) = 1.208$; $p = .547$). Then, gender dimensional scores were analyzed: Spearman's rank-order correlations showed that masculinity increased with age ($r = 0.20$, $p < .001$) and femininity decreased with age ($r = -0.16$, $p = .001$) overall. A similar pattern was observed among boys (see Fig. 1d and Fig. 1e): femininity ($r = -0.19$, $p = .003$) and masculinity ($r = 0.30$, $p < .001$). Age did not show any significant effect among girls on either femininity ($r = -0.13$, $p = .03$) or masculinity ($r = 0.11$, $p = .056$). Despite non-significance, data visualization revealed a somewhat similar pattern for girls (see Fig. 1a and Fig. 1b) as what could be observed for boys. None of these relationships indicated a U-shaped pattern (see Fig. 1), which justifies the use of correlations. Based on these observations of a pattern opposite to the one expected, hypothesis 2 was rejected.

Hypothesis 3. Higher religiosity (i.e., religious affiliation, religious schooling, prayer practice) is associated with masculine figures vs. non-masculine ones, as well as with more masculinity and less femininity. No significant effect of religious schooling could be observed on the use of masculine vs. non-masculine figures ($\chi^2(1) = .716$; $p = .398$), or for dimensional scores of gendering (Mann Whitney U test): masculinity ($p = .611$); femininity ($p = .763$). Religious affiliation (religious vs. not religious) was not found to play any significant role in masculine vs. non-masculine preference ($\chi^2(1) = .000$; $p = .984$) nor in dimensional scores of gendering (Mann Whitney U test): masculinity ($p = .310$); femininity ($p = .430$). As for prayer practice, praying (vs. not praying at all) was not significantly associated with masculine vs. non-masculine preference ($\chi^2(1) = 1.382$; $p = .240$) or for dimensional scores of gendering (Mann Whitney U test): masculinity ($p = .275$); femininity ($p = .214$). As for frequency of prayer, no significant effect could be found for masculine vs. non-masculine preference (independent-samples Kruskal-Wallis test: $p = .244$), or for the dimensional scores of gendering (Spearman's rank-order correlations): masculinity ($r = -0.04$, $p = .215$); femininity ($r = 0.05$, $p = .188$). Hypothesis 3 was rejected.

Preference for Same Gender

Hypothesis 4. Preference for same-gender figures is greater among boys. Differences between girls and boys in their use of same-gender figures were analyzed: feminine vs. else and masculine vs. else, respectively. Significant differences were observed ($\chi^2(1) = 11.119$; $p = .001$), with boys using same-

gender figures more often than girls: 67.4% of the time and 51.5%, respectively. Hypothesis 4 was confirmed.

Gender Flexibility

Hypothesis 5. Girls use atypical gender categories (i.e., undifferentiated and androgynous) to a greater extent than boys. Significant differences between girls and boys were found in their use of all four gender categories ($\chi^2(3) = 19.259$; $p < .000$) (see Fig. 2a and 2b.). More specifically, girls drew androgynous figures (10.5%) to a greater extent than boys did, and boys more often drew undifferentiated (18.9%).

Considering the greater use boys made of undifferentiated figures compared to girls, hypothesis 5 was only partially confirmed.

Hypothesis 6. Children use a wider range of gender categories with increasing age. There was a significant effect of age ($\chi^2(6) = 24.172$; $p < .000$) on use of all four gender categories overall. The predominant gender category in the lower age group was feminine (38.8%), followed, in descending, order by undifferentiated (21.6%) masculine (31.7%) and androgynous (7.9%). The predominant gender categories found in the in the middle and higher age groups were masculine (47.0% and 54.8%, respectively), followed by the feminine category (36.6% and 23%, respectively). This indicates that typical gender categories (i.e., masculine and feminine) actually prevail over less typical ones (i.e., undifferentiated and androgynous) with increasing age. Analyses within gender groups showed that there was a significant effect of age on the use of all four gender categories among boys ($\chi^2(6) = 27.348$; $p < .001$), but not among girls ($\chi^2(6) = 7.568$; $p = .271$). In the group of boys, a marked decrease could be observed in the use of feminine and undifferentiated figures. Considering the predominance of masculine and feminine categories occurring with age, hypothesis 6 was rejected.

Hypothesis 7. The older the children the more often they combine masculine and feminine gendering, and this is particularly true for girls. No significant effect of age on the use of the androgynous category (vs. else) could be found overall ($\chi^2(2) = 1.277$; $p = .528$), or within the group of girls ($\chi^2(2) = 3.763$; $p = .152$) or the group of boys ($\chi^2(2) = .858$; $p = .651$). In the group of girls, even though non-significant, the percentage of the androgynous category nearly tripled from the youngest (6.8%) to the oldest (16.4%) participants. Analyses using dimensional gendering scores were conducted based on the absolute masculine-feminine distance scores. A significant positive correlation (Spearman) was found with age overall ($r = 0.21$, $p < .001$) and in the group of boys ($r = 0.27$, $p < .000$), but not in the group of girls ($r = 0.13$, $p = .028$). Note that this effect was statistically significant for girls before statistical correction. These observations suggest that gendering becomes

more specific to femininity or masculinity with increasing age, rather than a combination of both, which led to the rejection of hypothesis 7.

Discussion

The current study aimed to provide a thorough developmental examination of how children gender God in their drawings, by relying on a wide range of gender categories as well as dimensional measures of femininity and masculinity as examined simultaneously. Measures of religiosity were also included. Based on previous research, three main possible tendencies were considered: androcentrism, same-gender preference and gender flexibility. Androcentrism was found to build progressively with increasing age by means of greater masculinity and lesser femininity. This was the case overall and among boys, but no significant effect was revealed among girls. However, in respect of gender categories, masculine figures were not predominant overall, and there was no significant difference between girls and boys in their use of the masculine vs. non-masculine categories. When considering religiosity (i.e., religious affiliation, religious schooling and prayer practice) as a potential source of influence for masculine gendering no significant effect could be found with any type of (categorical or dimensional) measures. Findings in respect of androcentrism in children's God representations are, on balance, rather mixed. Regarding same-gender preference, boys drew same-gender figures more often than girls did. With regard to gender flexibility, the use of atypical gender categories - with androcentrism and same-gender kept aside - it was not shown to be greater among girls than among boys. However, preferences for certain atypical categories were revealed: androgynous by girls, and undifferentiated for boys. With respect to developmental trends, gendering God became more constrained with increasing age, becoming more binary in the use of categories (i.e., masculine or feminine) and in the distance between gender dimensions (i.e., masculinity and femininity standing further apart). Although this was observed overall and among boys, it was not the case for girls. Generally, no developmental pattern was statistically significant for girls in this study. Theoretical and methodological implications will now be discussed in the light of the scientific literature on children's drawings of God, God representations and gender development, respectively.

Gender in Children's Drawings of God

With regard to past research on children's drawings of God the current results indicated a much milder masculinity of God figures than in other studies using European samples (Bucher, 1992; Daniel, 1997; Hanisch, 1996; Kay & Ray, 2004; Klein, 2000) or American ones (Ladd et al., 1998). However, the absence of significance for religiosity is in line with a study conducted by Brandt et al. (2009) in a Japanese sample, particularly in respect of religious schooling. Ladd et al. (1998) had observed,

however, a slight effect of religious denominations within the broader Christian tradition among their female participants only. Concerning same-gender preference, it was consistent with similar studies showing that feminine God figures were mostly found among girls (Brandt et al., 2009; Bucher, 1992; Dandarova, 2013; Daniel, 1997; Hanisch, 1996; Kay & Ray, 2004; Klein, 2000). As for gender flexibility, results from the current study pointed to a progressive decrease with age, although Ladd et al. (1998) have found evidence of somewhat expanding flexibility with age. Their study has revealed an age-related U-shaped curve in the use of what they have called “neuter” figures - which could be an equivalent category of the androgynous and undifferentiated categories combined - although the current results did not find any significant effect of age in that regard. In a way, there might be some similarity between the two studies because the undifferentiated and androgynous categories seemed to characterize the youngest (boys) and the oldest (girls), respectively, in the current results. Furthermore, non-personified drawn God figures tend to be produced by older children, which means that Ladd et al.’s (1998) results might actually reflect a trend in gendered representations as well as a known developmental pattern towards non-anthropomorphic God figures. Discrepancies between studies might be due to sampling and methodological differences. Samples used in previous studies might differ by age range and religious denominations within the Christian tradition. Furthermore, besides conceivable local cultural specificities the historical distance between studies might add to such contrastive results. For example, Switzerland (context of the current sample) has become much more multicultural over the last decades (Baumann & Stolz, 2009; Campiche, 2004). It is noteworthy that this could also account for the absence of significant effect of religiosity through some diluted impact of the Christian tradition. The methods being applied are another possible point of divergence. Firstly, the number of gender categories (other studies have only employed between two and three gender categories), having an anchor point in categorical rather than dimensional measures and having raters who are independent from the research (i.e., in the current study) is a major difference. Secondly, it is not entirely clear whether other studies on children’s drawings of God were examining the gender of figures for itself or for their *accountability* to a specific category (West & Zimmerman, 1987, 2009). Finally, gender categories obtained in the current study were sample-dependent, that is, categories were deduced from dimensional scores observed in the sample. In fact, masculine figures could be predominant if only raw dimensional scores were to be taken into consideration. Nevertheless, by using sample-dependent categories, the current study has the advantage of bringing more nuance based on comparisons between children’s drawings from the same sample. Moreover, a substantial benefit lies in inquiring for femininity and masculinity at the same time, thus embracing the great complexity of gender in such data.

God Representations in the Broader Scientific Literature

While the influence of a predominantly androcentric cultural God concept onto individuals' has been empirically demonstrated (Foster & Babcock, 2001; Foster & Keating, 1992) other studies have provided evidence for a more complex gender expression phenomenon. Especially, individuals tend to attribute gendered characteristics to God in an intricate fashion that may result in a compound of fatherly and motherly traits (Vergote & Tamayo, 1980) or in various gender categories tying in with diverse expectations about a gender nature of God (Riegel & Kaupp, 2005). In accordance with this, results from the current study have shown a marked co-existence of femininity and masculinity to various levels of expression in children's drawn God figures, and its corollary of exhibiting a wide range of gender categories, on a sample level. This resonates with modern Christian theological interpretations positing that God is male and female both at the same time (Johnson, 1984; Lazenby, 1987). On the whole, this is a path that is worth following in order to further our understanding of individual God representations, by unpacking this socially relevant concept into finer non-binary parts. Giving further thought to the possible meaning of gendering God figures, it could be assessed for its evoked agency based on gender stereotypes. For example, are agentic qualities commonly ascribed to God - such as nurturant (Robert, 1989; Krejci, 1998), supportive (Nelsen, Cheek, & Au, 1985), intimate (Heller, 1986), powerful/judging (Krejci, 1998; Nelsen & Kroliczak, 1984) or punitive/vindictive (Gorsuch, 1968; Hammersla et al., 1986; Kunkel et al., 1999) - likely to relate to one gender dimension more than another? Going in that direction, Daly (1973) has suggested that representing masculinity - or femininity - could well represent some attempt to affix gender stereotypical power-connoted qualities to God figures, before even meaning to attribute an actual sex to them.

Nevertheless, masculinity in God representations remains a critical matter and can be expressed in subtle ways, as illustrated by the developmental trend towards more masculinity found in the current data. This has potential theoretical implications, especially for exposure-based explanations (Bolzendahl & Myers, 2004; Cunningham et al., 2005; Davis & Greenstein, 2009) of gender ideology and its impact on the gendering of the God image (Whitehead, 2012). That is, social influences regarding one's proclivity to gender God as a masculine figure might not just be differential (e.g., depending on one's gender or one's gender ideology) but also developmental (e.g., through cognitive maturation). This means that the extent to which individuals are affected by socio-cultural norms depends on their age, in such a way that androcentric pressure seems to grow stronger with increasing age - at least as far as boys are concerned.

Exposure to masculine God figures in one's environment cannot be sufficient, and there are two main reasons for this. Firstly, intensified masculinity with age would mean that children up to 16 years old become increasingly more aware of those gender-typing properties of the divine displayed around them. However, it is not likely that such awareness keeps on developing so late in development. Secondly, Christian representations are often gender-ambiguous and femininity of the Christian God has undergone fluctuations across history (Boespflug, 2009). For example, long robes and long hair as perceived from nowadays' gender norms may appear rather feminine. Rather as a continuity to exposure to cultural artifacts, religious representations may be appreciated for their semi-propositional nature (Sperber, 1975, 1996), lending them metaphoricity of some sort. Considering cultural analogies - such as God being the supreme (masculine) judge - individuals may perceive social affordances that may guide which representations they choose and how they use them (Kauffman & Clément, 2007). In the present case, it is possible that boys get to contemplate the masculine affordance in the divine more strongly based on their gender identity and their ongoing socialization with that topic. Girls may either present a different perception of that affordance, based on how they define themselves as gendered individuals, or they might even adopt a subversive approach to *queering* the divine as a socio-political gesture.

Gender Development and Social Norms

The current study, as it finds parallels with the broader literature on gender development, asks the fundamental question of whether findings are domain-specific or domain-general. The main prediction that was confirmed in the current data is the presence of same-gender preference as displayed by girls - while it was anyways expected among boys, due to androcentric pressure. Although indirect paths being specific to the topic (i.e., God) may be suggested, such as the search for consonance between self-image and the God figure (Benson & Spilka, 1973), a general proneness to display in-group favoritism on the basis of one's gender (Powlishta, 1995b) might be well, if not better, suited. Boys are generally more reluctant than girls to indulge in cross-gender conducts (Bussey & Bandura, 1999; Bussey, 2011). The imbalance between boys and girls in their use of undifferentiated figures and androgynous figures, in the current data, could reflect this common phenomenon. These findings may also support the observed later acquisition of gender-role knowledge and gender labeling among boys (O'brien et al., 2000). Then, as gender flexibility intensifying throughout one's development (Serbin et al., 1993; Trautner et al., 2005) could not find support from the current results, it may also be hypothesized that socio-cultural influence (e.g., masculinity) can be too coercive on certain topics (e.g., God representations) for it to be displayed.

Normative pressures may be expressed to various degrees depending on the area that is considered. For example, concerning representations of the human being/a person, drawings composed by girls may display higher proportions of cross-gender depictions (i.e., drawn male figures) among older individuals, alongside a predominant same-gender propensity across ages (Arteche et al., 2010). However, when girls are asked to choose their hero, their answers get more mixed and same-gender predominance is less clear (Gash & Bajd, 2005; Holub et al., 2008). There could thus be a gradient of normative pressure leading to several distinct paths when children attend to gendering a figure representing a certain topic, and God figures may lie at the upper-end, at least in a socio-cultural environment that is particularly marked by a Christian tradition. For all varying degrees based on topics, male figures tend to be favored in many societies (Lakoff, 1973), and gender-neutral figures such as the word 'person' are more likely to be attributed masculine properties than feminine or unspecified ones (Wise & Rafferty, 1982). Following a similar line of thought, patterns of hegemonic masculinity may lead to masculine power reification (Connell & Messerschmidt, 2005), involving internalization processes that apply to both male and female individuals (Uhlman & Uhlman, 2005). This could explain an underlying, domain-general, androcentrism in children's choice of figures.

Limitations

Conclusions from the current study are limited due to its cross-sectional design, which only allows for non-causal relationships. Another possible limitation is that the methods were only applied to part of the data sample, that is, 'personified' God figures, and it may be argued that gender could be encountered even in non-anthropomorphic drawings. For example, such drawings might be regarded as an attempt to portray undifferentiated figures. However, the goal was both to evaluate data that would be comparable in form as well as representative of the entire sample. Although the current methods were likely to grasp some implicit construal of God the actual intention borne by the subjects was not specifically addressed. An analysis of intentions might be informative about the statements children make on the basis of gender, next to the more normative analysis that was provided by the current study. To use Goffman's (1976) terminology, "given" and "given off" might have been combined regardless of one another in the context of the current study. If drawing can be construed as a lived social and cultural experience (Pearson, 2001), detailed situational aspects in-the-process could not be taken into consideration during the data collection. The main reason is that a quantitative perspective was adopted with the purpose to find general tendencies in the data. Nevertheless, in order to avoid too much 'noise' in the data, the potential influence of the group settings was controlled. Finally, a potential source of bias lies in the perceptive processes taking place to interpret gender in the drawings, depending both on stereotypical gendered representations within a cultural

environment and religious traditional images. However, each drawing was evaluated by several raters (i.e., three) and all raters have received a randomly selected sub-sample of drawings.

Drawing human figures is quite common among children. If there is a general same-gender preference in that regard (e.g., Arteche et al., 2010), then it may be objected to the current findings that children might be better “trained” for figures of the same gender as theirs. An arguable consequence might be that gender-typing according to one’s own gender is more accurate than drawing the opposite gender. In terms of the current study, this may translate into higher scores on the same-gender dimension. However, this hypothetical chain of relations from gender preference through heightened practice to graphic skills is not well documented in the past scientific literature. This point would certainly deserve more attention in the future, but as it stands, it would be difficult to conclude to more gender-typing accuracy emerging from initial gender preference.

Future Research Directions

Future research might firstly encompass more variables. Mediation variables may be concerned, such as impacting the relationship between gender of participants and gendered God representations: for example, gender orientation (Francis & Wilcox, 1996; Thompson, 1991) and gender ideology (Whitehead, 2012). More diversity in the sampling might be another aspect. Cross-cultural and inter-faith comparisons should also be carried out, which would help cover the three main components of the *person-god relationship*, that is: culture, faith and gender (Weiss Ozorak, 2003).

Secondly, attempts should be made at unpacking the techniques children use to gender God in their drawings. Inventorying the occurrence of gender criteria (e.g., physical features, clothes, accessories) might be a first step, in the same way as for drawings of a person (Arteche et al., 2010; Machover, 1949). Nevertheless, there would be predictable challenges, such as: an overlap between stereotypical femininity and traditional masculine religious figures - e.g., long hair and long robes, or the sometimes partially depicted human-like God figures (limiting the application of a grid). While this pertains to content, formal properties such as colors may be relevant too: for example, following gender-based color preference (LoBue & DeLoache, 2011) or gender-stereotyping through colors (Cunningham & Macrae, 2011).

Finally, visual culture and arts education may be concerned. The field of visual culture is not limited to visual artifacts (Mitchell, 2002), and artifacts issued from a visual culture cannot be considered outside their social, political and historical context (Duncum, 2001). These consist in meaning-making through social practices (Knauss & Pezzoli-Olgiati, 2015). In this regard, the data produced for the current study could represent some form of support for considering the current historical, linguistic and geographical context (French-speaking Switzerland). While Freedman (2000)

has observed relationships between public gender displays - such as in advertisements - and the fine arts, refocusing the analysis on developing (age-dependent) folk psychology in the young might be fruitful for two main reasons. One such reason would be that wider day-to-day exposure to gendered representations be put in relation to a specific topic such as the divine. This would also suggest a form of continuity between 'high' and 'low' cultures of artworks (Morley & Chen, 1996). Additionally, with the overrepresentation of certain genders comes the one of specific ethnic features - e.g., the ubiquitous white-male Christ (Raab, 1997). This may deserve further attention.

Practice Implications

There are a few practice implications that could be suggested from the current findings. A first possible implication is to be found in school and parental education. It is not trivial for children to gender-type God, and to do it differently depending on their own gender. The absence of effect of religiosity measures in the current study suggests that the issue is to be found in wider educational matters than just religious ones. This may imply gender segregation, especially in schools and households (Lindsey, 2015). Indeed, how are children raised in such contrastive ways that they come to conceive of a socio-cultural concept - such as God - so differently? Additionally, it might also concern exposure to gendered roles, such as in educative materials. It has been observed that educative books often portray very traditional gender roles (Chen & Kantner, 1996). In that respect, if male individuals are depicted as dominant, attributing masculinity to God might be a logical consequence. By promoting exposure to a greater variety of gendered representations of the divine, children's representations might develop in a less masculinity-constrained way. This may be achieved through general education about various religions, which involve goddesses, for example. Another possibility lies in *queering* biblical texts (Yip, 2005) or the language used in reference to God (Klopper, 2002). Educating more about art history may be yet another means to draw attention to less masculine characteristics of God in Christian environments: for example, by highlighting the noticeable femininity and motherhood of images of "God the Father" in the Western Middle Ages (Boespflug, 2009).

Social consequences of such measures would be valuable, especially since the current results indicate strengthening masculinity with age. More gender variety in the divine may positively impact girls' self-efficacy - based on social roles arrangements and perceiving one's gender at better odds (Bussey & Bandura, 1999). Moreover, lessening the effect of a patriarchal institution from early on may counteract later gender prejudice. God images tend to symbolize male hegemonic control over non-male individuals (Althaus-Reid, 2003), and although male references to God act through some metaphorical language and have their anchor into specific historical and socio-political backgrounds, they keep alive a "legacy of androcentrism" (Lindsey, 2015). Following this, individual perceptions of

God may relate to moral behaviors and political affiliation (Froese & Bader, 2008), tolerance of immoral conducts (Stark, 2001) and implicit sexual prejudice (Tsang & Rowatt, 2007).

A second implication would concern psychological counseling. Religion and spirituality may be an important source of coping (Koenig, 2013) and meaning-making (Park, 2005). Preferred coping styles (e.g., surrender, differing) tend to be associated with specific God concepts (e.g., benevolent or guiding) (Maynard, Gorsuch, & Bjorck, 2001). The way God is gendered impacts on the perception of its attitude to the human kind (Foster & Babcock, 2001) as well as to its personally felt distance (Eshleman et al., 1999). In that context, it would be important to take into consideration the developmental and gender-based differences observed in the current study for therapeutic work with the youth. If God becomes mainly masculine at later points in development, it would certainly not lead to the same care for girls or boys. Importantly, the absence of relationship between gender-typing God and religious practice does not suggest a differential treatment on that basis.

Conclusion

As children get involved in many activities gender may be displayed to various levels of intensity and complexity. Socio-normative pressures are likely to be expressed in a potentially conflicting fashion based on differential as well as developmental accounts. When it comes to gendering visual representations of a socio-cultural concept, femininity and masculinity may be expressed simultaneously to varying levels of intensity. Individual God representations seem to stand at a particularly tense crossroads in this regard, although they show similarities with other topics (e.g., human being, hero). The current findings showed that children's drawings of God, in a mostly Christian Swiss French-speaking sample of children, display differences between girls' and boys' compositions. Age was also a relevant variable for gender expression among boys. God representations therefore display both differential and developmental patterns in this context. However, religiosity did not appear to play a part at all, which suggests that more general socio-normative processes might be involved. Domain-general and domain-specific normative interplays were deduced from comparisons with the broader literature on gender development.

Appendices

Table 1. Distribution of children participants by gender and age.

	<i>Female child</i>	<i>Male child</i>	<i>Total</i>
<i>Lower age range</i>			
<i>Count</i>	73	66	139
<i>% within age range</i>	52.5%	47.5%	100.0%
<i>% within gender</i>	34.9%	34.7%	34.8%
<i>Middle age range</i>			
<i>Count</i>	69	65	134
<i>% within age range</i>	51.5%	48.5%	100.0%
<i>% within gender</i>	33.0%	34.2%	33.6%
<i>Higher age range</i>			
<i>Count</i>	67	59	126
<i>% within age range</i>	53.2%	46.8%	100.0%
<i>% within gender</i>	32.1%	31.1%	31.6%
<i>Total</i>			
<i>Count</i>	209	190	399
<i>% within age range</i>	52.4%	47.6%	100.0%
<i>% within gender</i>	100.0%	100.0%	100.0%

N = 399 (209 girls and 190 boys)

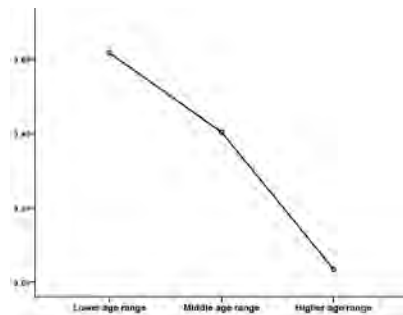
Table 2. Masculine (vs. non-masculine) drawn God figures by child gender and age.

	<i>Lower age range</i>	<i>Middle age range</i>	<i>Higher age range</i>	<i>Total</i>
<i>Boys</i>	34.2%	39.1%	43.3%	50.0%
<i>Girls</i>	28.8%	55.4%	67.8%	38.8%
<i>Total</i>	31.7%	47.0%	54.8%	44.1%

N = 399 (209 girls and 190 boys)

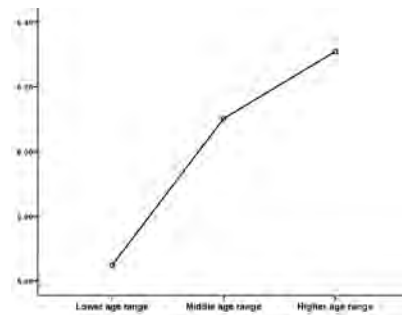
Fig. 1 Drawn God figure's femininity, masculinity and femininity-masculinity distance by child gender and age. Ratings were made on an 11-point scale (from 0 to 10) for each of the three measures. Age ranges were: Lower (6-9 years), Middle (10-12 years), Higher (13-16 years). Graphs were created with SPSS Statistics 24.

Fig. 1a Femininity among girls.



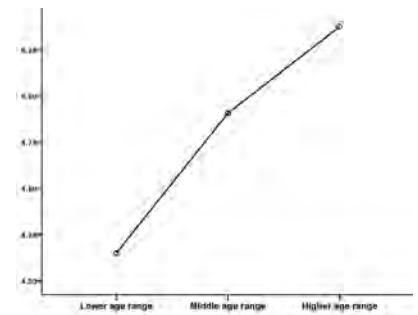
Lower age range: $N = 73$, $M = 3.62$, $SD = 2.36$; Middle age range: $N = 69$, $M = 3.40$, $SD = 2.78$; Higher age range: $N = 67$, $M = 3.03$, $SD = 2.77$.

Fig. 1b Masculinity among girls.



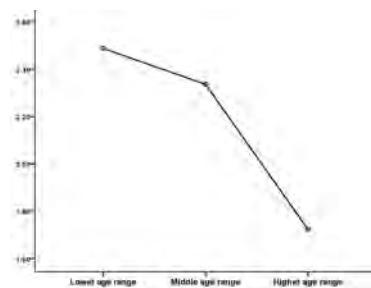
Lower age range: $N = 73$, $M = 5.65$, $SD = 2.41$; Middle age range: $N = 69$, $M = 6.10$, $SD = 2.86$; Higher age range: $N = 67$, $M = 6.31$, $SD = 2.91$.

Fig. 1c Femininity-masculinity distance among girls.



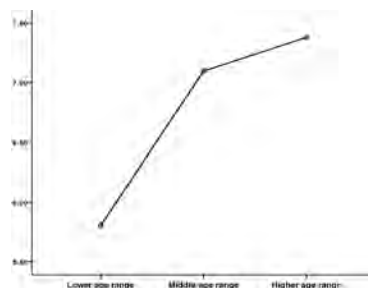
Lower age range: $N = 73$, $M = 4.15$, $SD = 3.32$; Middle age range: $N = 69$, $M = 4.91$, $SD = 3.32$; Higher age range: $N = 67$, $M = 5.37$, $SD = 3.24$.

Fig. 1d Femininity among boys.



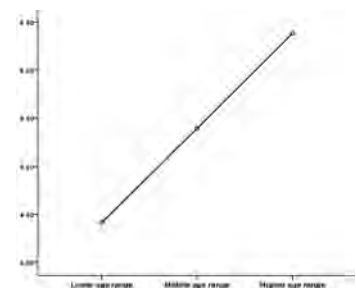
Lower age range: $N = 66$, $M = 2.49$, $SD = 2.12$; Middle age range: $N = 65$, $M = 2.34$, $SD = 2.13$; Higher age range: $N = 59$, $M = 1.72$, $SD = 2.14$.

Fig. 1e Masculinity among boys.



Lower age range: $N = 66$, $M = 5.80$, $SD = 2.34$; Middle age range: $N = 65$, $M = 7.09$, $SD = 2.23$; Higher age range: $N = 59$, $M = 7.38$, $SD = 2.49$.

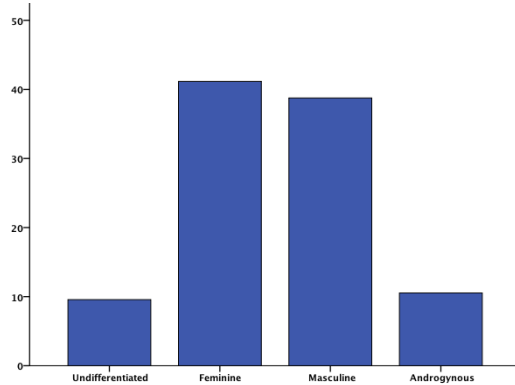
Fig. 1f Femininity-masculinity distance among boys.



Lower age range: $N = 66$, $M = 4.41$, $SD = 2.49$; Middle age range: $N = 65$, $M = 5.38$, $SD = 3.26$; Higher age range: $N = 59$, $M = 6.38$, $SD = 3.00$.

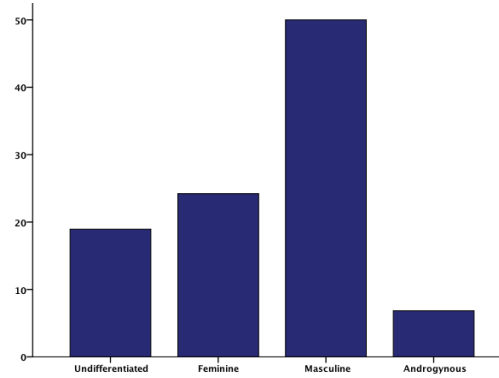
Fig. 2 Gender categories of drawn God figures by child gender. Graphs were created with SPSS Statistics 24.

Fig. 2a Among girls.



Percentage of children in each gender category. Undifferentiated: 9.6%; Feminine: 41.1%; Masculine: 38.8%; Androgynous: 10.5%.

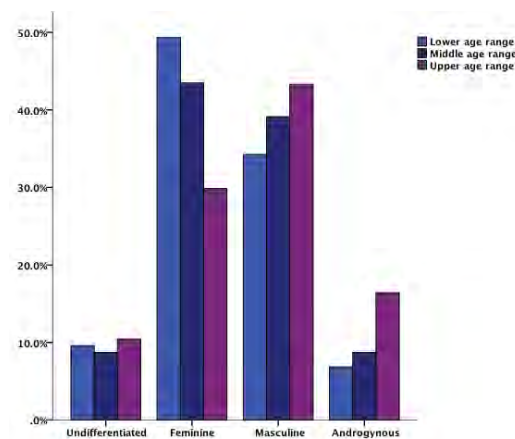
Fig. 2b Among boys.



Percentage of children in each gender category. Undifferentiated: 18.95%; Feminine: 24.21%; Masculine: 50.0%; Androgynous: 6.84%.

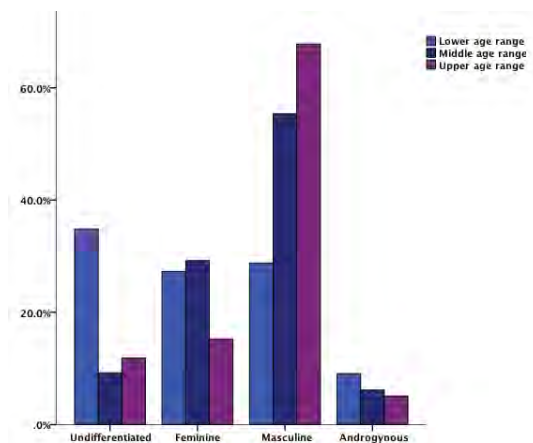
Fig. 3 Gender categories of drawn God figures by child gender and age. Age ranges were: Lower (6-9 years), Middle (10-12 years), Higher (13-16 years). Graphs were created with SPSS Statistics 24.

Fig. 3a Among girls.



Percentage of children within each age range. Lower age range: Undifferentiated: 9.59%; Feminine: 49.32%; Masculine: 34.25%; Androgynous: 6.85%. Middle age range: Undifferentiated: 8.7%; Feminine: 43.48%; Masculine: 39.13%; Androgynous: 8.7%. Higher age range: Undifferentiated: 10.45%; Feminine: 29.85%; Masculine: 43.28%; Androgynous: 16.42%.

Fig. 3b Among boys.



Percentage of children within each age range. Lower age range: Undifferentiated: 34.85%; Feminine: 27.27%; Masculine: 28.79%; Androgynous: 9.09%. Middle age range: Undifferentiated: 9.23%; Feminine: 29.23%; Masculine: 55.38%; Androgynous: 6.15%. Higher age range: Undifferentiated: 11.86%; Feminine: 15.25%; Masculine: 67.8%; Androgynous: 5.08%.

Chapter 5 - Construction and Transgression of Gender Categories in Representations of Divine Figures: Cross-Cultural Study of Children's Drawings

Introduction

Does the divine evoke masculine or feminine properties, or does it surpass such a dichotomous view of gender? Previous studies on drawings of "God"⁶ conducted in the United-States and in Europe have found out that children mostly attributed a masculine gender to God (Hanisch, 1996; Kay & Ray, 2004; Ladd, McIntosh, & Spilka, 1998). Data collection waves in the present study took place in Japan, Switzerland and Russia. It made us notice that this issue is not as simple as had been assumed. Outside a cultural background heavily imbued with Christianity feminine representations do occur much more often. In the end, attributing masculine properties to god may well reflect the influence of religious socialization within cultural environments where gendering god is hardly ambiguous. For example, the Christian God is often depicted as the "Heavenly Father", as conveyed by the Lord's Prayer or by the Apostle's Creed. It may therefore be difficult to conceive of god as feminine in that context. If only. But a thorough analysis of how children indulge in gender-typing god - including children from areas principally characterized by Christianity - have revealed a series of gender transgression.

When confronted with having to draw god children are standing at the crossroads of a few normative pressures of different types. Indeed, some children do proceed to fading out typically feminine or masculine traits while other participants do mix them together. The present study exemplifies this issue by analyzing the utilization by children of gender categories and the strategies attached in several socio-cultural contexts.

Data Collection in Several Socio-Cultural and Religious Environments

Children from Japan, Buryatia (Oriental Siberia, Russia), Saint-Petersburg (Russie) and French-speaking Switzerland were asked to draw god freely as they imagined. Participants were aged 6 to 17 years, girls and boys. Data were gathered from a larger - interdisciplinary - research project based mainly in

⁶ Given the intercultural and inter-faith qualities of the present study it was decided that "god" would be used throughout the text.

the human and social sciences at the University of Lausanne (Switzerland) and involving research teams from other countries. The data sample is accessible on an online database using the following link: <http://ddd.unil.ch/>.⁷

The materials provided to the children participants were as follows: a blank sheet of paper, a gray pencil, a ten-color set of wax pastels and colored pencils (the latter only concerns participants from Russia). Data were collected among small groups by allocating children to individual places in the room so that they would not attempt to copy from each other. Each child was also invited to provide a written description of their own drawing as well as to fill out a questionnaire addressing religious socialization (e.g., religious affiliation and religious practices).

A Few Hurdles Faced by Children... as Well as the Researchers

Drawing god is a fairly complex task. How to draw: god, God or gods, and so on? In order to attend to composing their drawings children have to make decisions at two important levels: the topic (i.e., god) and the medium (i.e., the drawing). The ensuing task pertaining to the interpretation of the drawings by the researchers is a very difficult one as well, as it is based on gender-connoted visual elements.

Attributing gender to drawn figures depends on the interpretation given to a series of markers (or criteria) that one can identify in a drawing. But what are features may be relevant for determining the gender of a figure? Based on a review of the scientific literature on children's drawings of a human person was particularly insightful in that regard (Arteche, Bandeira, & Hutz, 2010; Baldy, 2008; Chen & Kantner, 1996; Cox, 1993; Perron & Perrott-Borelli, 1996; Royer, 2011). Concerning feminine figures, the most consistent markers seem to be: hair (long, braided, parted, curly or with a knot), clothes (skirt, dress, heels, top), facial features and makeup (eyes being much detailed with lashes, eyebrows and pupils, red or heart-shaped lips), body shape (rounded, chest), accessories (jewels, handbag, feminine hat). Now regarding masculine figures, the most consistent markers were: hair (short or absent), beard or mustache, masculine clothes (shorts, trousers, jacket), body shape (muscular, heavy shoulders), accessories (hat, tie, pipe, cigarette). Using such markers and combining them together may however lead to equivocal interpretations of gender for this strongly reflects a Western - and binary - view of gender.

⁷ Numerous cases will be used in order to support our claims and are accessible on the aforementioned online database. One may copy-paste a drawing identifier (for example: ch15_fr_f_rvz_09_02_hen) in the upper-right box on the internet page.

With this in mind we may want to consider potential obstacles that the child is likely to come against during the drawing-god task:

- A first possible obstacle pertains to traditional religious practices and god representations conveyed in religious art. Some representations might be perceived by the child as transgressing gender categories. One such example may be found in heads of hair or clothes from the Christian tradition: masculine priests and other ordained masculine individuals wear a dress; Jesus Christ and saints are usually represented with a dress and long hair. Another example may be found in the wearing of jewels, long eyelashes and red lips in a Buddhist context. Being socialized within socio-cultural environments strongly characterized by such religious traditions requires specific knowledge about visual codes and to bring them into play in a manner that fits one's esthetic intentions. It is the case of a Russian girl (ru09_sp_f_px_11_xx_nas) who has produced a rather feminine-looking figure whereas she had a different understanding, which is supported by her written text: "God is in Paradise. I wanted to draw Paradise, where Jesus Christ is seated in his throne."
- A second issue that the child may have to deal with pertains to feminine or masculine stereotypical elements according to one's current cultural environment. That environment may or may not be consistent with traditional religious features (ch16_vd_f_rrd_07_08_mar).

Two additional difficulties may be found in relation with how researchers themselves handle the decoding of gender:

- Part of it consists in knowing and being able to recognize gender codes within a specific religious tradition, on the one hand, and to be able to account for how gender stereotypes work in one given socio-cultural environment. For example, long hair may point to masculinity - rather than femininity - among Japanese children who are very familiar with manga (jp04_fa_f_pkk_14_03_ikx). However, a similar approach to masculinity within a background distinguished by prevalent Christianity would be expressed differently and would require some obvious reference to traditional iconography, without which one's intention may simply go unnoticed.
- The child's intentionality in constructing gender might be difficult to interpret. In that regard, referring to the written description attached to a drawing proves to be very useful. Illustrating this point with the Japanese example mentioned above (jp04_fa_f_pkk_14_03_ikx) it can be noticed that the written description provided by the child comes in to substantiate the researcher's initial opinion that the figure is masculine. However, there are instances where the drawing and the description are in obvious contradiction, which poses huge problems to

the researchers. Such divergence could already be found in Heller (1986) with the case of Lorraine: she verbally underlined god's androgyny all the while this was not at all visible in her drawing - which was clearly masculine. A similar case can be found in the sample from the present study: a drawing from Buryatia (ru08_bo_f_pb_11_03_tou) distinctly depicts a feminine figure although the written text indicates the masculine pronoun "he".

Although most drawings of god show an anthropomorphic figure they do not necessarily display "ordinary" human beings. They often mix together human features and other categories, such as sentient (e.g., animal or vegetal) or non-sentient (e.g., light, cloud). This is an additional hurdle that researchers are confronted with when assessing gender-typing.

Several Normative Pressures Lying at Different Transgressive Levels

Three central sources of normative pressure can be assumed with respect to gender-typing divine figures in children's drawings. Each source suggests a distinct form of gender transgression.

Firstly, there may exist a prevalent gender category associated with divine figures within a specific religious tradition. It is reasonable to think that facing an overrepresentation of masculine figures, for example, is likely to lead children to draw a masculine god. Such tendency may be best explained by exposure processes, possibly upheld by a specific gender ideology that is encouraged by religious institutions (Whitehead, 2012).

Secondly, research on gender development suggests that some in-group favoritism may be operating on the basis of one's gender (i.e., female or male). This may result in a propensity to prefer activities, behaviors or objects that are typically associated with one's gender, and it appears that boys are particularly prone to such inclination (Bussey & Bandura, 1999). Similar observations have been made in children's drawings of a person (Arteche et al., 2010).

Thirdly, gender norms that prevail in a given social environment might as well influence children's preference for a particular gender category attributed to a divine figure. Patterns of hegemonic masculinity are likely to reify masculine "power" (Connell & Messerschmidt, 2005). This may involve internalization processes, both on the part of female and male individuals (Uhlman & Uhlman, 2005).

As a result, children are confronted with at least three forms of normative pressure when attending to drawing god. Transgression may appear to various degrees depending on the prevalent gendered expression being constrained by each of these three sources of influence. Beyond having a figure that stands in contradiction of gender with respect to one such source there is another type of

transgression likely to occur: that is the one of figures that do not abide by binary genders, such as androgynous and undifferentiated figures.

In the main, the transgressive quality of gendered god depends on a series of factors that are either specific to an individual (e.g., child) - such as their own gender - or characteristic of their surrounding socio-cultural environment. Such factors may act synergistically or antagonistically. The child's mastering of gender codes, both at a cognitive and at a graphic level, add to the interpretive complexity left to the researcher.

Gender Categories and Children's Socio-Demographics

Data Sample

In order to conduct an analysis of gender categories in children's drawings of god a sample of N = 1000 participants was used. It consists of four groups from different socio-cultural environments: Buryatia (N = 354), Saint-Petersburg (N = 174), Japan (N = 143) and French-speaking Switzerland (N = 329). Participants were aged 6 to 17 years old and were roughly equally distributed across all four groups in regard to age.

In the Japanese group half of the children were attending Buddhist school and the other half were attending a non-confessional school. All children from the Buryat group were met during public (non-confessional) schooling. However, this group includes two ethnic sub-groups: children from a Slavic Russian background - characterized by Christian Orthodoxy - and children from a Buryat Russian background - characterized by Buddhism. Children in the group from Saint-Petersburg were met in two distinct schooling contexts: regular (non-confessional) schooling or Orthodox schooling in church. Finally, the Swiss group of participants includes children met in a religious schooling context (either Catholic or Protestant) or during regular (non-confessional) schooling.

Gender Categories and Study Object

For the purpose of the present study it is important to consider a few key-notions previously suggested by West & Zimmerman (1987; 2009): *gender*, *sex category* and *accountability*. According to these authors gender, as a socio-cultural construct, is performed in order to put forth one's accountability for a particular sex category - usually woman or man. Nonetheless, the concordance to such a category will not necessarily be perceived in direct connection with a high degree of feminine or masculine expression. As demonstrated by Garfinkel (1967), a woman may be seen as non-feminine without being a "poor" candidate for the "woman" category. Bearing this in mind should help clarify out the present approach. Firstly, it is the accountability of drawn divine figures that was assessed - and not

their degree of expression according to a gender dimension. Secondly, references are made to gender categories (see Riegel & Kaupp, 2005) and not sex categories for the main reason that the nature of drawings does not permit to assume the existence of actual biological features on the drawn god figures.

Every drawing from the sample has been assigned to one of the four following categories: masculine, feminine, androgynous, undifferentiated and irrelevant. The first two represent unambiguous figures. Androgynous figures endorse both feminine and masculine traits. Undifferentiated figures have a poor expression of gender traits to the point that it is impossible to allocate them to any of the previous categories. As for irrelevant figures, these are non-anthropomorphic and categorizing them according to gender is not pertinent.

Gender analysis in the present study relied on both the drawing and its written description. Data were assessed by three different raters (a woman and two men) from the same research team in the psychology of religion. A kappa coefficient was computed by pairs of raters: .69, .65, .59. Interrater reliability was relatively low, given that it is usually deemed acceptable from .67 upwards (Hallgren, 2012). This observation reflects the clear ambiguity inherent to the data. Disagreements were resolved through discussion, except for 7 drawings, which were taken out of the analysis for the report below. The final sample was therefore of N = 993.

Distribution of Gender Categories

The following percentage could be observed on the total sample (including all four groups of participants):

- 73.0% of masculine figures
- 11% of undifferentiated figures
- 9.5% of irrelevant figures
- 5% of feminine figures
- 0.8% androgynous figures

Cross-Cultural and Inter-Faith Comparison on Feminine Figures

Looking at feminine figures in particular was deemed informative because of their specific position between normative pressure sources when adopting a binary view of gender and because of the large predominance of masculine figures overall:

- 18.2% in Japan

- 8% in Buryatia
- 1.4% in Saint-Petersburg
- 0.9% in Switzerland

Gender of the Divine Figure vs. Gender of Participants

Certain categories are mostly drawn by girls. This is the case of feminine figure (90% from that category) and androgynous figures (62.5% from that category). Only slight differences occurred between girls and boys regarding the use of the other gender categories.

Girls

- French-speaking Switzerland: 1.2%
- Saint-Petersburg: 2.6%
- Buryatia: 15.4%
- Japan: 38.3%

Boys

- French-speaking Switzerland: 0.6%
- Saint-Petersburg: 0.0%
- Buryatia: 0.9%
- Japan: 3.6%

Developmental Aspects

In order to explore the possibly effect of age on gender-typing divine figures two groups were formed: 6-10 years old and 11-17 years old, respectively. Two principal observations could be made: there is a decrease of the undifferentiated gender category with age - from 14.5% down to 8.5% - as well as an increase of irrelevant figures with age - rising from 5% up to 12.8%.

Summary

Results seem to confirm the three hypothesized sources of normative pressure through the identification of related levels of transgression. Gender-typing of the divine as it is communicated within a religious tradition appears to influence children in the gender categories they use to depict god. That is, children from a socio-cultural background strongly characterized by Buddhism do use feminine figures to a greater extent than children from a mostly Christian background. In contrast, the

Christian tradition emphasizes masculine figures through the Father and Christ. Although Catholicism and Christian Orthodoxy do accentuate the figure of the Virgin Mary they do not grant her the status of a goddess. In that respect, feminist theology has harshly criticized the preponderance of masculinity attributed to the divine in the Christian tradition (Johnson, 2013; Lindsey, 2015). It is quite the opposite for the Mahayana Buddhist cosmology, present in Japan and Buryatia, which includes several goddesses (Shaw, 2015). This opens a whole range of possibilities for children from such a background to draw away from masculine figures of the divine. Such potential is particularly true of the Japanese context, where “kami” is employed to name a divinity: kami is gender-neutral and is neither singular nor plural (Dalby, 2015). Moreover, there are feminine Shinto deities (Miller, 2010), which adds to the representability of the feminine. The Japanese group of children is therefore less likely than the others to be subject to normative pressures in favor of masculine figures. Concerning Buryat children, the influence of Buddhist representations is coupled with influence of Christianity (Vanchikova, 2006). This might explain the smaller percentage of feminine figures in this group compared to the Japanese one. More generally, the use of gendered articles in the language of the participants has a plausible impact of the gender-typing of god. It is worthwhile that, except for the Japanese group, the task referred to a masculine word in the language spoken by the children - even though all gender articles were purposefully avoided in the wording of the instructions.

Depending on whether the participant is a girl or a boy the assumed underlying in-group favoritism should be observable through a higher proportion of feminine divine figures among girls. Now accounting for the child’s cultural background did suggest some interactions with their own gender, in a manner that would either favor or inhibit its expression on the divine figure.

Regarding the last level of normative pressure, masculine hegemony seems to be present across all groups from the sample, although it remains difficult to pin it down and tell it apart from normative pressures coming from religious traditions which may go in the same *androcentric* direction.

From a developmental perspective, it might be that the undifferentiated gender category as it is used by young children leads virtually to non-anthropomorphic figures (*gender-irrelevant* figures) in the oldest.

Besides gaining insights into children’s utilization of specific gender categories in relation to god one may wonder how these are expressed. This issue will be covered in the next section.

A Few Strategies Utilized by Children for Expressing Gender

The analysis of gender-typing strategies utilized by children has been structured as follows: each gender category (i.e., feminine, masculine, androgynous and undifferentiated) has been addressed across all four socio-cultural groups. The very purpose was not to conduct an exhaustive analysis but rather to get a sense of the possible strategies used to express gender, and by doing so it was expected that shared or specific strategies between those groups be found.

Masculine Divine Figures:

- French-speaking Switzerland: the divine figure may exhibit biological features that are typically associated with the masculine category, such as a beard, all the while that figure is wearing a dress (ch10_ne_m_pfo_12_07_raf). The masculine category may also be accentuated through the text, saying for example that it is “a man” (ch10_ne_m_pfo_12_07_raf). Inspiration from the Christian tradition is often made evident. Clear traditional references, such as Christ on the cross, indicate the masculine gender of the figure. This can be very useful particularly alongside ambiguous gendered features (ch09_vd_m_pbu_11_11_jul). The divine figure may also be represented as an ordinary human being whose identification as a masculine figure relies on clothes (ch10_ne_f_psr_08_05_ama).
- Saint-Petersburg: some figures are depicted as celestial patriarchs, and these happen to be very masculine - tough with a beard (ru10_sp_m_rs_15_02_ale). Beyond depicting gender for itself, it seems that some masculine figures are used to underline power qualities, like in this case: “I meant that god is almighty and stands above us and holds our world.” (ru10_sp_m_rs_15_02_ale). Representations of Jesus Christ can also be observed (ru09_sp_f_rn_17_01_kri) as well as god figures whose patriarchal qualities are only perceived in the written description of the drawing (ru09_sp_m_px_13_03_ern).
- Buryatia: both Buddhist and Christian influences can be observed through the depiction of Buddha (ru12_bo_f_pb_15_03_lud) or Jesus Christ - including the Madonna and Child sort of compositions (ru12_bo_f_px_12_00_nas). An influence from shamanism may be found in the form of a human figure with the head of a dog (ru08_bo_m_pb_10_11_tam), for example. Children do appear sometimes to get inspired by further sources, such as Ancient Greek gods - including Ares, the war god (ru08_bo_m_pb_10_09_ars). Finally, there are borrowings from popular culture, such as Bruce Almighty (ru09_bo_m_px_13_11_vas), which is a movie character played by Jim Carrey.

- Japan: as one would expect, Buddha is found in this group (jp04_to_m_rnx_08_08_stx), but also characters from popular culture, such as *Goldorak*, depicted as a patriarch, surrounded by his celestial court consisting of *Mario Brothers* (jp03_to_m_pfx_10_02_tax). References to people from the child's own family (e.g., grandfather) can also be noticed (jp03_ca_f_rlx_07_10_amx).

Divine figures may be characterized as masculine at two different levels: gender features themselves and references to familiar characters. While the first level simply consists in including stereotypically masculine features on the divine figure, the second level is made up of characters whose sexual category is known, for example: a children's grandfather, Buddha, Jesus Christ or Bruce Almighty.

The commonly transgressive character of traditional religious representations (e.g., long hair, dresses) may be lessened by the inclusion of more contemporary features that fit masculinity more tightly. This is the case of Jesus Christ in French-speaking Switzerland (ch16_vd_f_rcb_14_11_oxa) or Buddha in Buryatia (ru12_bo_f_pb_15_03_lud).

Feminine Divine Figures:

- French-speaking Switzerland: figures may exhibit features that are usually considered feminine, such as feminine curves, braids, pink cheeks and lips (ch16_fr_f_rcn_12_09_gae). References are also made to religious traditions that are not typical of this group's cultural background, such as the Hindu goddess Lakshmi (ch09_vd_f_pbu_12_00_oli).
- Saint-Petersburg: references are made to the Christian tradition, such as the Virgin Mary (whose identification was supported by the text): ru09_sp_f_px_08_01_sta. More "generic" references also occur, including fairies (ru09_sp_f_px_07_10_nas).
- Buryatia: feminine body features are used, such as prominent breasts (ru12_bo_f_pb_12_06_adi). Some gendered personality traits can also be found in written texts, like in the case of a drawing that depicts a woman warrior (ru09_bo_f_px_11_03_nel) and of which the description says: "My god is a woman. She is authoritative, untameable and glowing in her own beauty. She has a long and beautiful stick which can do magic...". Other representations exhibit The Virgin and Child from the Christian tradition all the while the child insists that it is the mother - that is, Mary - who is the divine figure (ru09_bo_f_px_10_10_vik), not the child. It happens that the feminine qualities of the divine figure are only clearly apparent in the written text (ru09_bo_m_px_10_06_bou).

- Japan: many figures are gendered as feminine by very stereotypical features (especially showing on the hair and clothes) and sometimes look like a princess (jp03_to_f_pfx_13_06_sax). Some figures take after traditional Christian figures, such as Mary⁸, produced by a boy: jp04_to_m_rtx_10_10_kyx. In some exceptional instances, feminine features (e.g., long feminine hair) are used to symbolize qualities that go beyond gender, for example: protecting the world can be embedded in the figure’s hair (jp04_ca_f_rix_14_03_kkx).

Two main strategies are found here. Some figures display stereotypical feminine traits, and sometimes bear masculine features to a sufficiently low level for those figures not to be androgynous. Other figures do clearly refer to traditional feminine deities.

It is worthwhile that at a graphic level expressing feminine traits seems to be more straightforward in the Buryat and Japanese groups.

Androgynous Divine Figures:

- French-speaking Switzerland: gender markers may be found on the outfit (dress, earrings and braids) or on the body (beard and hairy legs): ch10_ge_f_rbc_15_04_val. The divine figure may also be divided into half a woman and half a man (ch10_ge_m_pco_11_00_flo; ch09_ge_m_pco_10_00_flo). The use of several gender divine figures may elicit androgyny as well (ch10_ge_f_rbc_12_11_jul).
- Saint-Petersburg: no androgynous figure was identified in this group.
- Buryatia: there are conflicts between feminine and masculine features, including the body, clothes and hair (ru09_bo_f_px_08_00_tan) or the cheek color (ru09_bo_f_px_13_02_eka), without it being necessarily made explicit in the texts.
- Japan: the androgynous qualities of the divine figure may be grasped by referring to the written text provided by the child in the presence of a divine figure having a somewhat masculine appearance (jp04_fa_m_pcx_11_05_tyx). In this group too may androgyny be distributed over several divine figures, some of them being feminine and the others being masculine (jp03_to_f_pfx_07_06_max). Androgyny also happens to be constructed upon several known cultural figures being condensed into one. For example, the following drawing

⁸ It is worthwhile that this might also be equivalent to borrowing from within the Japanese popular culture. In fact, there are stories about the Virgin Mary - known as “Maria-sama ga Miteru”, in Japanese, or “The Virgin Mary is Watching you”, in English - in various forms, such as novels, anime or manga (Hairston, 2006).

displays a single figure that combines the “Seven Lucky Gods”, including Benzaiten, which is a feminine character (Miller, 2010): jp04_to_m_rtx_08_09_fyx.

Three main strategies could be identified. One first strategy consisted in mixing feminine and masculine features on a same figure with much density of expression. Secondly, the god figure was sometimes represented in a dual form, with the body being divided into distinct feminine and masculine parts. Finally, androgyny could also be expressed through the distribution of gender traits over multiple figures, each figure standing for either the feminine or the masculine categories, in a way that suggests polytheism⁹.

At an intercultural level, Saint-Petersburg was found to be the only one not to draw androgynously. Also, while ontological duality as expressed through gender seemed to characterize the group from French-speaking Switzerland the Buryat group did refer to it without necessarily involving gender (e.g., ru09_bo_m_px_11_06_vit).

Undifferentiated Divine Figures:

- French-speaking Switzerland: gender traits happen to be frankly weakened on figures having a human body (ch08_ge_f_rap_11_00_and). For others, there is instead some personification of non-human entities (e.g., a light) that are supplied with a (schematic) human face (ch09_vd_f_pbu_12_06_mel). It may also happen that god is drawn as a faceless figure in a way that makes gender impossible identify (ch10_ge_f_ral_13_05_kok).
- Saint-Petersburg: gender traits also happen to be strongly weakened, sometimes with the accompanying statement that god appears like “not an ordinary human being” (ru09_sp_f_px_11_04_tan). Here too, the absence of a face may lead to undifferentiated figures, as it is the case, for example, of this drawing of a Christian angel about which the descriptive text underlines the ineffable properties: ru09_sp_f_px_11_xx_ana.
- Buryatia: similarly, faceless figures may lead to gender undifferentiation (ru09_bo_f_px_11_03_dar), and here again this happens to be applied to angels (ru08_bo_f_pb_15_01_nin). Gender attenuation also occurs on otherwise traditional representations of Buddha, sometimes depicted as a statue (“Burkhan”), for example (ru08_bo_f_pb_07_05_ali). A strategy that seems to be typical of this socio-cultural group consists in adding human body features (e.g., eyes and ears) to already complete human

⁹ The authors are aware that there could be some misunderstanding over theological biases concerning the possible construal of a same divine “substance” in multiple representations of the divine. This is not the case. Considering a gender category, such as androgyny, over several god figures is derived from the methods. More precisely, each drawing is assigned to a gender category, be it for one or more god figures. In the main, this approach does not group theologically but on the basis of gender instead.

figures, which happens to express the multiple in the divine (ru08_bo_m_pb_11_09_dan), all the while the figure remains gender-neutral.

- Japan: like in the other groups, gender traits may be weakened, and different types of characters may be concerned, such as Buddha (jp04_to_m_rtx_08_07_whx) or more ordinary figures (jp03_ca_f_rix_13_02_rix). In this group, the absence of a face is characterized by the inclusion of a mask (jp04_ko_m_ryx_13_01_trx).

There are two main approaches to drawing undifferentiated figures in the present sample. One possible approach consists in reducing the salience of gendered features overall, and another one equates to attenuating features that make a human figure typically human, which is typically the face. The two groups from Saint-Petersburg and French-speaking Switzerland appeared to blur gender expression by applying personification to non-human figures. Regarding the absence of face, Japanese children stood out by sometimes including masks in place of faces. Now, unlike other gender categories, undifferentiation of gender was only rarely reflected upon or mentioned in the written texts describing the drawings. One possible effect produced by the display of this gender category may be reminiscent of god transcending gender: in the Christian tradition, Thatcher (2011) referred to a *supra-sexual* god.

Summary

There seems to be common strategies for gender-typing influenced by religious traditions, in this case: Christian models prevailing in the groups from Saint-Petersburg and French-speaking Switzerland, on the one hand, and Buddhist models in Japan and Buryatia, on the other hand. It is worthwhile however that the Buryat group still manifested a complex influence from both religious models. Such mixture had already been observed by Dandarova (2013).

Contrary to drawings that rely mainly on canonical religious examples others do show more distance from ready-made representations and seem to tie into several forms of gender transgression. Borrowing from outside one's socio-cultural background was also observed and included references to both religious and popular culture (e.g., anime) figures.

Discussion

Drawings are particularly appropriate for the child to communicate representations of god. Anthropomorphic god representations - which were predominant in the present sample - ineluctably express gender, in forms that are either unambiguously pronounced (i.e., feminine or masculine), mixed (i.e., androgynous) or faded (i.e., undifferentiated). Getting the researchers to decode gender

in drawings is an ambitious objective, and this is the main reason why several raters carried out this task. Oftentimes have written descriptions helped interpret associated drawings and deal with sometimes high degrees of ambiguity, therefore acting out ekphrastic knowledge.

The present findings point to great diversity of god representations in all four socio-cultural groups (i.e., Saint-Petersburg, Buryatia, French-speaking Switzerland and Japan). Similarities as well as divergences between these groups could be highlighted by assessing specifically four gender categories (i.e., feminine, masculine, androgynous and undifferentiated). This could be observed at three different levels: predominant religious tradition(s) within a socio-cultural environment, the artist's gender and gender power relationships. The respective influences stemming from all three levels may cause tension or even conflict in the child. The impact of the first level could be noticed in the lesser utilization of feminine figures in groups that are strongly characterized by Christianity (i.e., Saint-Petersburg and French-speaking Switzerland). It has to be mentioned that while religious traditions do seem to bear an effect in that regard it does not mean that when feminine figures are found they should necessarily abide by traditional iconography. So, this influence is understood as more widely about gender than just canonical styles. Regarding the second level, girls clearly used feminine figures more frequently. The third and last level was more complex to examine because it pertains to broader socio-cultural trends. Nevertheless, general androcentrism in the data may, with grains of salt, be construed as the expression of general cross-cultural masculine hegemony in the groups that were studied. Finally, a developmental pattern was apparent: divine representations progressed towards an absence of gender by an increased use of non-anthropomorphic figures among older children (Brandt, Kagata Spitteler, & Gillièreon Paléologue, 2009; Dandarova, 2013; Hanisch, 1996; Ladd, McIntosh, & Spilka, 1998).

With respect to the strategies that children employ in their drawings one may think of *perceptual lures*, such as the ones used in ethological research (Detrain & Deneubourg, 2009) - insofar as their drawing abilities permit, especially of in accentuating the salience of gendered properties. Lures may equate to the inclusion of usual gendered markers, traditional and popular figures or be inserted in the descriptive texts associated with the drawings. This entails that researchers are facing two types of data: visual and textual. Combining elements in the form of a perceptual lure, if well-performed, leads to a frank and non-equivocal expression of gender (including gender *mixity*).

This leads to distinctions between explicit and implicit performances of gender. Goffman (1976) has coined the term *gender display* in order to refer to one's affiliation with a particular gender. Gender can be willingly (explicitly) performed in the form of what Goffman has called a *given*. This correspond to the perceptual lures mentioned above. It can also be *given off*, through elements that are deliberately put forth by the social actor. Many parallels can be drawn between this and the

present study, in that gender was not always made explicit by children, and even seemed to be out of the child's conscious reach at times.

Observations from the present sample have underlined the transgressive nature of certain divine figures in regard to gender. However, possible tensions ensuing from transgression were found to be attenuated in the case of more modern representations and occasional borrowings from popular culture. Gender was also sometimes expressed through divine representations taken from religious traditions outside one's background. This was especially the case of feminine figures, which often appeared to conform to ready-made depictions available in the culture. Analysis of the data also helped find out that known feminine characters happened to be credited with divine nature (e.g., the Virgin Mary).

Concerning gender categories that did not fit a binary - masculine or feminine - view of gender (i.e., androgynous and undifferentiated) references to religious figures were less obvious. Nevertheless, angel-like Christian figures were often drawn as androgynous or undifferentiated. This is consistent with Witt (2011), who gathers that angels are initially non-gendered, and with famous paintings, such as Leonardo da Vinci's or Michelangelo's, which exhibit angels bearing either mixed feminine-masculine or attenuated gendered features.

Beyond communicating gender for itself gender-typing may underline other types of qualities. For example, mystery happened to be conveyed through the use of a beard (which is usually associated with the masculine category) or through faceless figures (often gender-undifferentiated). Similarly, almighty power may well be associated with sturdy masculine figures or with feminine warriors. As for androgynous or undifferentiated figures, they are sometimes used to convey some multidimensional nature of god. Such effects are not unique to gender, and there might be overlaps between the functions endorsed by a variety of symbols.

In conclusion, by drawing god in an anthropomorphic form children cannot ignore gender-typing, and therefore they inevitably face potential gender transgression. This may result in fairly surprising compositions. Children from various different socio-cultural backgrounds do copy, reconstruct and create throughout their drawings of gendered gods. Future research should examine social scenes and explore how they might display power plays based on gender. In that regard it might also be interesting to consider drawing compositions in which the divine is spread over several figures of the same gender only. This can result in very feminine (jp03_fa_f_pfx_10_02_eri) or very masculine drawings (jp03_to_m_pfx_10_02_tax) about which one may recall *sisterhood* and *brotherhood* organizations aiming to heighten *empowerment* and social support in the face of gender discrimination (Radina, 2017).

Section Summary - Gender-Typing God Representations

The current section has moved on from exploring humanness and non-humanness in children's drawings of God to assessing gender-typing in God figures showing some levels of humanness. Indeed, one could hardly conceive gender not to be concerned in the presence of anthropomorphic figures.

A quantitative study of children's drawings of God in French-speaking Switzerland has shown that masculine God figures tended to become more frequent with age, which is consistent with previous research addressing how children gender-type human characters in a draw-a-person task (Arteche et al., 2010). Further, adopting a scoring approach inspired by Riegel & Kaupp (2005), two-dimensional scores were attributed to each God figure: a score of femininity and a score of masculinity. By doing so, it could be observed that femininity and masculinity occurred simultaneously on a same God figure, and the intensity of expression of one or the other varied with age. Following increasing age, masculinity seems to be intensified and femininity diminished, among both girls and boys. Gender-typing also depended on the gender of participants. A same-gender preference could be observed, with girls and boys favoring their own gender. Mixing femininity and masculinity to similar degrees, translating into either androgyny or undifferentiation, was not found to be more frequent with age. Religiosity (i.e., religious education, religious affiliation, prayer practice) did not play any significant role.

Using intensity scores and a two-dimensional system for gender-typing represents yet a novel approach, both in the scientific literature on children's God representations and in the area of children's drawings. Therefore, comparisons with past research may be limited at this point.

Overall, it can be deduced that gender-typing remains an activity that is partly domain-specific, given its relation to the gender of participants. Its age-dependency as well as differences based on the gender of participants suggests that it is a cognitive activity that builds up across years of socialization within highly gendered environments. The absence of effect of religiosity suggests that such socialization is not domain-specific, but instead pertains to a more general gendered organization of the social world in which children grow up.

Following the cross-cultural study, the bigger picture could be seen and allowed to conceptualize sources of influence more broadly. While *androcentrism* (Foster & Keating, 1992) characterizing certain religious traditions and same-gender preference (Bussey & Bandura, 1999) had been observed in the previous study using the French-speaking Swiss sample, an additional normative

pressure could be found, dealing with *hegemonic masculinities* (Connell & Messerschmidt, 2005). Those different sources of influence indicate that gender-typing God is only partly domain-specific and stands at the crossroads with broader gender-related issues than the one of the divine.

In comparison to the previous section, dealing with humanness and non-humanness in the divine, gender-typing has shown to follow a reversed course. More specifically, rather than branching out across development, as it could be observed for ontological belonging, gender becomes more and more restricted to one form (i.e., masculine), which fits the one that is regularly found among adults (Foster & Keating, 1992). Nevertheless, similar to the previous section, the current section on gender-typing has underlined the highly complex and intricate nature of God representations depicted by children. Indeed, while a system based on exclusive categories would potentially only consider a small portion of drawings as depicting both femininity and masculinity, the first study has pointed to a much more composite reality.

As for the second study, it has mostly provided a better conceptualization of possible sources of influence on gender-typing God among children from different socio-cultural environments and religious backgrounds. The commonality with the outcome of the previous section is that the issue at stake (i.e., gender-typing God) appears to be domain-specific only up to some point. With the use of non-anthropomorphic representations, it could be seen through the effect of religious education, which did not go further along de-anthropomorphization. In this case, it could be seen that religious education in itself was not particularly influential within a same socio-cultural environment. Instead, more general sources of influence - not limited to the religious domain, but pertaining generally to the organization of gender - were shown to play an important part in gender-typing God.

In the main, the current section has suggested that gender-typing God is deeply socio-normative, and that children stand at the crossroads between several sources of influence. The part played by one's development is also substantial. Masculinity in the divine is prevalent, and not only within social environments marked by Christianity. Considering the increasing masculine gender-typing across children's development - rather than a progression towards more gender flexibility - it can be expected that androcentric models of the divine will be replicated by new generations coming into adulthood. This may suggest societal concerns, as advanced by feminist theologians. Hereby, focusing on children's development, actions could be taken through youth education by fostering reflections on gender issues in the religious domain and their possible implications on individuals' worldviews.

THIRD SECTION - EMOTIONAL EXPRESSION IN RELATION TO GOD REPRESENTATIONS

Up until this point, the current work has consisted in a further inquiry into existing issues already addressed in past research. Addressing anthropomorphism and gender-typing has shown even more complexity than previously suspected in those areas. Emotionality, however, has hardly been touched on in the previous literature on children's representations of the divine. Such research lacks a systematic examination of emotional expression in drawings of God, and this is what the current section aimed to achieve - particularly the first (quantitative) study being presented. Although God might be conceived of as a 'cold' notion, such as suggested by research on anthropomorphism especially, it might also be understood as a 'hot' concept, involving a great deal of emotionality.

God may act as an attachment figure (Granqvist & Kirkpatrick, 2013; Kirkpatrick & Shaver, 1990). The relationship one perceives between themselves and God may also orient how they cope in the face of adverse life events (Koenig, 2013; Pargament et al., 1990). Some form of social characteristics is often used to depict the divine. Those characteristics are almost inevitably loaded with emotional traits, such as: authoritarian, powerful, judging, vindictive, punitive, benevolent, nurturant, loving. It can be observed that depending on the role that is considered, the depiction may be more or less intense and can be clearly divided between positive and negative. Some God *images* (in this case) may be described by depth psychologists as either positive or negative (Rizzuto, 1979; Schaap-Jonker et al., 2002). More generally, conceiving of God a certain way may impact on one's worldview and shape meaning-making (Park, 2005). Emotional states also happen to be directly attributed to God (Gray & Wegner, 2010), or in regard to some relative humanness (Haslam et al., 2008).

The scientific literature on children's drawings of God has made allusions to emotional characteristics associated with God. However, it has often failed to be thorough and specific to emotionality overall. Instead, emotion-related characteristics identified in such drawings have been part of the 'picture', without ever being primarily targeted. Similar to the aforementioned research, emotions associated with the divine could often be deduced from social roles endorsed by God in such drawings. Direct references to emotions in drawings, such as 'happy' or 'emotional expression', have been scarce however. Ana-Maria Rizzuto (1979) has conducted an exhaustive examination of unconscious affects in connection with the God image. She has partly relied on drawings of God among adults seen in a clinical setting.

Despite such paucity of empirical work on emotions in children's drawings of God, emotions appear to always be present one way or another. This might be through indirect reference (e.g., emotionally loaded role attributed to the divine), compelling scenes, the utilization of colors or direct (literal) expression (e.g., God smiling). Emotional expression appeared to be particularly important to explore for several reasons. Firstly, it seemed to be present throughout drawings of God analyzed in previous studies (from the terminology being used) and in the current data (from subjective impression). Secondly, it sat well next to anthropomorphism and gender-typing issues as another aspect of drawings of God that could relate rather obviously to psychological underpinnings. The former (anthropomorphism) connects with conceptual foundations and the latter (gender-typing) concerns more clearly socio-normative traits. The current issue deals with a more emotional understanding of the divine. Thirdly, as reviewed in past research, emotions associated with the divine matter deeply in the life of believers and at many levels.

An important aspect to consider, coming with measuring emotional expression in this case, deals with the systematic consideration of a drawing as a whole. More precisely, it was decided that emotionality could be found in the entire composition, and not only on the God figure. This is a fundamental methodological decision that was made based on the apparent necessity to understand how children broadly characterize God emotionally, rather than restricting the investigation to how they feel about God, or how God is perceived to be feeling, for example. Such an approach is typical of psychological research on expressive aspects displayed in children's drawings (e.g., Jolley et al., 2016), which has strongly influenced research carried out in relation to this section. The focus being put on the entire drawing composition would lead to appreciate not only the core of the concept at stake, that is, the God representation, but also the scenario taking place, which may have an overall different emotional significance. For example, a God figure can be portrayed as a wrathful judge with a rather mean emotional facial expression. If it condemns bandits who have committed to crimes, the general meaning already takes a turn and the drawing may come off as more positive than when just focusing on the God figure. Moreover, in the current data, the mere literal (i.e., facial and postural) expression of God figures appear to lie within a rather restricted range of emotions and to a limited degree of variations. This supports the idea that examining each drawing as a whole should be fruitful. It also represents an attempt to embrace all the data - not only God figures that show some humanness - and to compare all drawings at a same level with a same measure.

Two studies were carried out on the French-speaking Swiss sample. The first one addressed emotional intensity and valence as expressed in drawings as a whole. That study was developed and conducted at Staffordshire University, in the UK, under the supervision of Dr. Richard Jolley, and in close collaboration with Dr. Claire Barlow, and to some degree with Dr. Sarah Rose. Those researchers

have a substantial background in assessing children's drawings, and particularly expressive drawings, from a developmental perspective. It was also possible to benefit from the expertise of two expert-artists to score the drawings. They had been previously involved in similar work conducted by those same researchers. This may bring more credit to the results, given that they had experience in assessing emotional expression in drawings made by children, and that scientific journal articles have already been published based on their work.

It was not necessarily straightforward that drawings as a whole should be considered, and intense discussions were run about whether it should be the God figure only or the entire drawing that are up for evaluation. For the reasons exposed above, it is the latter that was chosen.

The second study dealt with possible connections between traditional religious subjects and their emotionality. The idea was that children, depending on their age for example, will not necessarily attend to traditional subjects with similar emotionality of expression, although such subjects remain and may keep on playing a central role - particularly among religious individuals. From the perspective of developmental research on expressive drawings, that study stood as some deeper exploration into subject matter, taken as broadly as possible within the religious domain.

Overall, this part of the current research opens up a whole new field of possibilities on the exploration of children's God representations. Moreover, assessing those data as expressive drawings is innovative.

The first chapter will be submitted to a scientific journal for publication. The second chapter was only meant to enrich this thesis and will not be submitted for other publication.

With regard to contributions, both chapters were entirely written by the author of this thesis. The first chapter has benefitted from feedback, thorough discussions, research design and choice of statistical analyses with Dr. Richard Jolley. Developing the scoring system, interrater methodology and managing sessions and communication with the expert raters was carried out with Dr. Richard Jolley and Dr. Claire Barlow¹⁰. Later suggestions prior to submission will be provided by Dr. Richard Jolley, Dr. Claire Barlow and Prof. Pierre-Yves Brandt. They are therefore co-authors of that chapter. The second chapter was entirely conceptualized by the author of this thesis.

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Chapter 6 - Emotional Expression in Children's Drawings of God as a Function of Age, Gender and Religiosity

Abstract

Introduction. *Emotionality in relation to God has thus far poorly been explored and would deserve more thorough investigations. Previous findings have addressed experiential (feeling in relation to God), relational (feeling towards God) and attributional (God feeling) aspects of God representations. However, the overall emotional load that can be connoted in a God representation has failed to be examined. Visual depictions seem to constitute an appropriate way to examine emotional characteristics, especially for developmental studies, using samples of children participants. Past research on children's drawings of God has merely focused on ontological types of representations and symbolic abilities, especially quantitative accounts. The current study has benefitted from the large body of research on the development of children's expressive drawing abilities.*

Methods. *A sample of 407 drawings of God was scored by two expert-artists for emotional intensity and valence, respectively, considering the drawing as a whole (rather than just the God figure). Each of these 7-point scales was constructed for this study in collaboration with those two expert-artists. Participants were aged 6 to 15 years, girls (51.8%) and boys living in French-speaking Switzerland. The sample was mostly Christian. Independent variables consisted of: age, gender and three measures of religiosity (i.e., religious schooling, religious affiliation and prayer practice).*

Results. *Multiple regressions analyses (stepwise) indicated that gender and schooling were consistent predictors for both intensity and valence: scores showing more intensity and more positive valence were associated with being female and receiving religious schooling. Surprisingly, age only shared a significant relationship with valence.*

Discussion. *To the best of our knowledge, this was the first scientific study to propose a thorough quantitative investigation into emotional expression in children's drawings of God. Findings suggest mainly two important aspects. Firstly, spontaneous emotional expression in that respect seems to be multifarious with different facets (e.g., intensity and valence) relying on partly distinct psychological underpinnings. Secondly, normative influence (through gender and schooling) appears to play a central role, unlike cognitive development. Practice implications are discussed in relation to religious education, clinical counseling and inter-cultural and inter-faith communication.*

Introduction

When depicting God in their drawings, children do not only seem to convey ideas about a complex and abstract notion. Instead, visual representations on this topic rarely fail to be emotional. It is those aspects of God representations that the current study has attempted to explore.

Why Is It Important to Study Emotional Expression Associated with God Representations?

God is a meaningful notion to the majority of the worldwide population (Maoz & Henderson, 2013). Gaining insight into how individuals represent God in their own way is important for a number of reasons. It may contribute to mutual understanding and lessen socio-political tensions in increasingly multicultural societies (Aldridge, 2007). It may also help to explain some psychological functions involved in cultural worldviews surrounding religion, such as emotional security (Vail et al., 2010). God representations may have both personal and familial implications and are not just “cold” cognitive concepts (Boyatzis, 2005).

The God image is generally conceptualized as a complex multidimensional construct (Grimes, 2008). Emotionality may encompass several of its dimensions. Nevertheless, such a research area has been understudied (Emmons, 2005). In that regard, one may also ask whether the notion of God is more of a *hot* concept (i.e., presenting itself with much emotionality) or of a *cold* concept (e.g., relating more to intellectual concerns). There is substantial evidence that information is processed differently depending on the perceived emotional properties of a target concept (Garavan, Pendergrass, Ross, Stein, & Risinger, 2001; Rusting, 1998; Yuan et al., 2007). Such properties tend to vary with age (Carstensen & Mikels, 2005; Mather et al., 2004).

Emotional Properties Associated with God

Emotions may be relevant to this area on at least three different levels - identified by the authors. Firstly, emotions may be concerned with how they are modulated according to one’s experience with God (e.g., coping, meaning-making). This level may be called “experiential”. One’s perception of God may serve to regulate emotions as part of individual coping strategies (Koenig, 2013; Pargament et al., 1990). Positive or negative God images may also be associated with happiness (Dezutter et al., 2010) or psychopathological outcomes (Rizzuto, 1979; Schaap-Jonker, Eurelings-Bontekoe, Verhagen, & Zock, 2002). Individuals are also liable to experiencing new emotional states depending on changes happening in their approach to the divine (Corwin, 2012). God representations are embedded in a

personal belief system or worldview and may provide existential meaning (Park, 2005), in which God is often accounted responsible for one's hardship as a moral agent (Gray & Wegner, 2010).

Secondly, a "relational" level would pertain to how people relate their own emotional experiences directly to God, either positively (Samuels & Lester, 1985) or negatively (Exline & Grubbs, 2011). This may have psychological correlates such as centrality of religiosity (Zarzycka, 2016) or personal distress (Exline & Grubbs, 2011). Attachment styles may be concerned (Beck, 2006; Granqvist, 2002) as well as the degree of personal religious commitment (Cassibba, Granqvist, Costantini, & Gatto, 2008).

Thirdly, an "attributional" level deals with emotions attributed to the God figure itself. At an attributional level, individuals may consider that God makes the experience of emotional states, for example: in relation to its perceived agency as a moral agent (Gray & Wegner, 2010), or in regard to some relative humanness (Haslam, Kashima, Loughnan, Shi, & Suitner, 2008). Emotional states perceived in God may be negative or positive. This may concern personality, as through neurotic traits (e.g., anxiety, depression) attributed to God (Cheston, Piedmont, Eanes, & Lavin, 2003). It may also be the case of socially significant attitudes carried out by God that convey information about its emotionality. God may be perceived as either authoritarian or benevolent (Johnson, Okun, & Cohen, 2015), powerful or judging (Krejci, 1998; Nelsen & Kroliczak, 1984), vindictive or punitive (Gorsuch, 1968; Hammersla, Andrews-Qualls, & Frease, 1986; Kunkel, Cook, Meshel, Daughtry, & Hauenstein, 1999), nurturant (Krejci, 1998; Roberts, 1989), supportive (Nelsen, Cheek, & Au, 1985), intimate (Heller, 1986), benevolent and guiding (Maynard, Gorsuch, & Bjorck, 2001). Some type of emotionality may also be rather typical of the divine, such as the Christian emotion of *agape* love (Beck, 2008).

A fourth important level is worth observing and will be considered specifically in the current study. It concerns how God representations are emotionally connoted. It pertains to the emotionality associated with God as a whole and in-context, potentially involving social scenes. Typically, examining it in visual depictions would require accounting for the whole image and not only the God figure. This conceptual level is complementary to the aforementioned levels (i.e., experiential, relational and attributional). There is a gap in this area of research. God, as an emotionally connoted concept, has hardly been explored. The attributional level is the one that has come closest to it. There is also a strong need to understand how variations may occur depending on individual differences (e.g., gender, religiosity) and development (i.e., age). A developmental account on this matter is particularly needed, as religiosity and spirituality in the youth have been understudied (Benson & Roehlkepartain, 2008; Benson, Roehlkepartain, & Rude, 2003). In order to obtain a comprehensive view of God representations in that respect, visual methods seem to be particularly appropriate.

Benefits from Analyzing Drawings

Examining complex notions, such as God and emotionality, with children participants might happen to be rather complicated. The use of visual methods, especially drawings, shows a series of advantages. Firstly, drawings represent a means of expression that children are familiar with. They may help to counteract verbal limitations - or misleading verbal reports (Kagan, Hans, Markowitz, Lopez, & Sigal, 1982), and decrease social demands and potentially overwhelming interactions with a stranger, and make the activity appear more like a play activity (Kirova, 2006). They are more suitable for questioning children particularly on complex topics (Brooks, 2005). Pictures, more generally, are appropriate for characterizing God (Bassett, Miller, Anstey, & Crafts, 1990) - at any age. Secondly, there might be a clear advantage from using free-drawing tasks. Mainly, they allow participants to provide a unique and comprehensive answer to the task, tapping into their *emic* (Yelle, 2011) or authentic (Eldén, 2012) understanding of the notion at stake. Finally, drawings are pertinent to the examination of emotional expression because they allow participants to signify emotionality through various esthetic dimensions (e.g., colors, facial expression, social scene).

Children's Drawings of God

An Overview

Previous studies on children's drawings of God have produced notable findings mainly at three levels. Firstly, they have revealed major changes throughout development, especially in terms of a shift from anthropomorphic to symbolic/non-figurative representations (Brandt, Kagata Spitteler, & Gillieron Paléologue, 2009; Dandarova, 2013; Harms, 1944; Ladd, McIntosh, & Spilka, 1998; Pitts, 1976, 1977). Secondly, gender of children seems to have a strong influence on the way they gender-type their God representations (Brandt, Kagata Spitteler, & Gillieron Paléologue, 2009; Heller, 1986; Kay & Ray, 2004; Ladd, McIntosh, & Spilka, 1998). Thirdly, religiosity appears to play an important role, both in regard to religious schooling (Brandt et al., 2009; Hanisch, 1996) and across religious denominations (Ladd et al., 1998; Pitts, 1976, 1977). In the main, anthropomorphism and gender-typing have retained most attention in this area, and emotional expression has hardly been covered.

Lack of Attention to Emotional Expression in Children's Drawings of God

Although it has received scarce attention, emotionality associated with children's drawn God representations is probably subjectively striking to any beholder. In his seminal paper on children's drawings of God, Harms (1944) did refer to emotions several times, mentioning words like "emotions", "feelings" and even "emotional expression". However, the only practical utilization was as part of what characterized his *group B*, belonging to what he has called the *individualistic stage* of religious

development. Two other groups forming that stage did not make any reference to emotions. Emotions experienced by God (attributional level) have sporadically been directly mentioned: *smiling* and *angry* (Brandt et al., 2009) or *happy* (Kay & Ray, 2004). This was, however, among other (non-emotional) aspects. The emotional connotation of God representations may also be less directly communicated. It may be deduced from social roles, such as *protector* or *guardian of morality* (Tamm, 1996) or similar socially loaded qualities (Hanisch, 1996). It may also be concerned with traditional religious themes: "... Jesus as a baby, Jesus with the children, Noah and the ark..." as described in Kasserman and Johnson's (1992) study. More specific to drawings, children's utilization of colors in this context are likely to convey emotional information about how they perceive God (Dandarova, 2013). Emotionality associated with God also happens to show through children's verbal reactions to their own drawings. It is the case of this boy in Brandt et al.'s (2009) study, who provided a written description of what appears to be God in the 'form' of (yellow) light: "It is something that is deep in my heart and in anybody's heart." (p. 17).¹¹ Arguably, this would relate to the "relational" level identified above. As it has not been the object of direct assessment, emotionality has often led to considering altogether rather asymmetrical conceptual characteristics, resulting, for example, in a mix of quite different traits, such as *protector*, *religious mythological figure* or *male figure*, in Tamm (1996). Nevertheless, such methodological decisions had merit for the specific questions they aimed to answer.

Now considering qualitative research on children's God representations, there has been a tendency to employ drawings as additional interviewing tools to assessing the affective significance of God rather than as a finality in itself. Such studies have focused on the general emotional expression by individuals within their (verbal and visual) discourse (Coles, 1990; Demmrich, 2015; Heller, 1986; Reimer & Furrow, 2001; Streib, 2000). This is particularly true for qualitative inquiries building essentially upon depth psychology theories (Coles, 1990; Demmrich, 2015). This is also true of adults (Goodman & Manierre, 2008; Rizzuto, 1979).

There might be three main reasons for this lack of attention. Firstly, there has been a strong focus on the influence of cognitive development, adopting a general stage-theory perspective (often within a Piagetian framework). This might have led to map God concepts in association with general cognitive development instead of analyzing specific psychological dimensions (e.g., emotionality). Secondly, researchers' interest in emotions have involved mostly unconscious processes, confronting indirect means of expression. Thirdly, emotional characteristics were often anchored in wider social or parental roles - preventing, again, a direct assessment of emotional expression. The present observations call for a thorough emotion-focused analysis of children's drawings of God. In order to

¹¹ Translated from French by the first author.

do so, it is relevant to consider some methods applied in developmental research on expressive drawings.

Input from Developmental Research on Children's Expressive Drawings

The Depiction of Emotions and Developmental Patterns

Depending on the task, children may depict emotions in free-drawings (no emotions mentioned) or in an attempt to perform as well as they can for a predetermined emotion (e.g., a happy person). The latter has most often been used in research. In that regard, two approaches have predominated in assessing children's expressive drawings. One of them sets the focus on the quality of the esthetic achievement. The other one examines the specific esthetic devices that were employed - for example as an indicator of relative complexity (Picard & Boulhais, 2011). Similar to artists, children resort to three esthetic devices: literal expression (e.g., facial expression of emotion), subject matter (e.g., a specific social scene) and formal properties (e.g., use of colors, lines, balance of composition). The last two correspond to metaphorical techniques.

It is the 'quality' approach that was used in the current study. That approach has witnessed a vibrant debate with regard to the specific developmental patterns for expressive abilities (Jolley, 2010; Jolley, Barlow, Rotenberg, & Cox, 2016). Previous research has supported two main tendencies: an L- or U-shaped age trend (Davis, 1997; Gardner, 1982; Rosenblatt & Winner, 1988), on the one hand, and an age-incremental (Carothers & Gardner, 1979; Ives, 1984; Morra, Caloni, & d'Amico, 1994; Picard, Brechet, & Baldy, 2007; Picard & Gauthier, 2012; Winston, Kenyon, Stewardson, & Lepine, 1995), on the other hand. The main reason for such differences appears to depend on the artistic outlook adopted by researchers, with the former relying strongly on a modernist art perspective (Davis, 1997; Jolley, Fenn, & Jones, 2004; Pariser & van den Berg, 1997). It has been shown empirically (Jolley et al., 2016) that it is specifically representational drawing abilities that produce for such discrepancies: accounting for them would lead to observe an age-incremental pattern, while disregarding them results in a modernist L- or U- shaped curve. By accounting for them, the current study should witness an age-incremental pattern on that basis.

Depicting Emotions Across Conditions and Topics

Children might be asked to draw a specific emotion by referring to a particular topic (e.g., person, tree, house) or to communicate that emotion through any topic they want. Certain topics may elicit the spontaneous expression of emotions in drawings. This is likely the case of topics that involve human relationships - e.g., family drawings (Tharinger & Stark, 1990), romantic relationships (Brechet, 2015). More abstract topics, for which children have not made the experience of real-life instances, may also

generate a great amount of emotionality in children's drawings. The following types of drawings might be concerned: drawings of the future in zones of ongoing conflict (Kamens, Constandinides, & Flefel, 2016), drawings of death (Bonoti, Leondari, & Mastora, 2013; Tamm & Granqvist, 1995; Yang & Chen, 2002), drawings of the soul (Yamada & Kato, 2001). It turns out that personal experience/commitment with the topic at issue seems to play an important role (Bonoti, Leondari, & Mastora, 2013; Brechet, 2015; Kamens, Constandinides, & Flefel, 2016). It has been shown that abstract words may be associated with even higher affective ratings than concrete words (Vigliocco et al., 2014). Children's drawings of God may be considered in that camp.

The Current Study

Dependent Measures

The psychology of emotions has seen the emergence of various theoretical views, of which discrete/categorical vs. dimensional approaches have been the most prominent ones (Izard, 2009). Building upon the latter, the two central dimensions of pleasure-displeasure (i.e., valence) and activation-deactivation (i.e., arousal or intensity) have been repeatedly employed in the scientific literature (Cacioppo & Gardner, 1999; Davidson, 2000; Larsen, Diener, & Cropanzano, 1987; Russell, 2003; Scherer, 2005). They have been proposed as the basis to *core affect*, which determines the emotional quality of ongoing events (Russel, 2003). Therefore, it was decided that emotional intensity and emotional valence should be examined in the current study. Emotional intensity was understood as a one-directional dimension, ranging from low intensity to high intensity. Emotional valence was conceived of as a bi-directional dimension with two extreme points representing high negativity (i.e., strongly negative) on one end, and high positivity (i.e., strongly positive) on the other end, with a midpoint corresponding to an equal balance of both types of valence.

The entire drawing (i.e., the complete response to the task) was considered for analysis, and not only the God figure. The main reason is that emotions are likely to be communicated through the whole drawing. There are other advantages doing this, such as: obtaining a comprehensive account of emotional expression by not editing out parts of the child's answer to the task; considering the God figure in-context; being able to account for drawings which do not display any God figure (i.e., non-figurative).

Predictor Variables and Why They Should Be Associated with Dependent Measures

It could be expected that emotional intensity and emotional valence would both depend on three main predictor variables: age, gender and religiosity. Firstly, the older a child is the more likely they are to draw more expressively and better communicate emotional qualities of a topic in their drawings

(Jolley et al., 2016). Moreover, previous research has shown that God was perceived as closer to older children (Eshleman, Dickie, Merasco, Shepard, & Johnson, 1999), which might reflect greater connectivity (therefore, possibly intensity of emotions) with the God figure as a function of age. Moreover, it has been shown that children draw associations between specific emotions and religious practices, such as prayer, and that these appear to increase in complexity as a function of age (Bamford & Lagattuta, 2010).

Secondly, female individuals have consistently been found to be more religious than male individuals (Donahue & Benson, 1995; Francis, 1997; Francis & Wilcox, 1996), and among children girls tend to perceive God as closer to them than boys do (Eshleman et al., 1999).

Thirdly, theories from the Cognitive Science of Religion have focused on the means by which religious beliefs are adopted and transmitted (Andresen, 2001). Modes of transmission may be found in religious rituals (McCauley, 2001). This pertains to religious socialization. Within a same religious tradition (e.g., Christianity), differences may be observed based on the specific denomination (Bullard & Park, 1998). Differences in the use of teaching material, such as picture books, from one denomination to another is also likely to bear influence in respect of emotional expression about God, as they might be a source of inspiration in relation to the development of spirituality (Kendall, 1999). On the whole, it is reasonable to suppose that variables such as religious schooling, religious affiliation and prayer practice should contribute to variations in individual God representations.

Overview of Methodological Aspects, Rationales and Objectives

Rationales to carrying out the current study include: reaching a better understanding of emotional expression restricted to a specific topic (i.e., God representations) as well as adding to the current scientific knowledge about the visual expression of emotions on abstract topics (i.e., for which there is no direct access to real-life referents) involved in a spontaneous task (i.e., not requiring any performance on the expression of a specific emotion). The principal aim of the study was to investigate emotional expression in children's drawings of God. More specifically, the objective was to propose a thorough examination of emotional intensity and emotional valence displayed in children's drawings of God in relation to the aforementioned three predictor variables. There were two research questions. Firstly, is variability in intensity and valence predicted by age, gender and religiosity? Secondly, how are intensity and valence interrelated?

In order to do so, a large sample of drawings of God was collected from children across a wide age range who were met during regular schooling or during religious schooling in French-speaking Switzerland. No mention of emotions was made in the instructions and children were free to draw God as they liked (i.e., free-drawing task with regard to emotions). The predictor variables were: age,

gender and religiosity (i.e., religious schooling, religious affiliation and prayer practice). The drawings were independently assessed for emotional expression by two artist-experts.

Children's Drawings of God and Epistemological Considerations

Drawings should not be considered a direct reflection of children's inner ideas about God but instead, as a subjective formation process (Günther-Heimbrock, 1999). Moreover, the current study aims to make sense of drawings of God as the receptacles of individual endeavors to organize symbols towards the articulation of this complex culturally constructed notion. Drawings should not be understood as fixed representations held inside children's minds, but as likely outcomes in response to a task about a complex abstract notion. Understanding emotional or esthetic expression in the arts has often been considered to operate on (at least) two different parts: one being the artwork and the other being the artist, both being accounted for by a beholder (Dewey, 1934; Freedberg & Gallese, 2007; Freeman & Sanger, 1995; Goodman, 1968). The current study focused on the former, that is, the drawing. Moreover, the utilization of rating booklets, in this study, is in agreement with Goodman's (1968) distinction between the esthetic emotions overtaking the beholder and the emotions expressed by esthetic means in the work of art: "... the frequent disparity between the emotion felt and the emotive content thereby discovered in the object is now readily understood." (p. 249).

Hypotheses

In total, three sets of hypotheses were formulated for: emotional intensity and emotional valence, respectively, and an intensity-valence relationship as well.

Regarding emotional intensity, hypotheses were twofold. Firstly, an age-incremental pattern was expected, due to increasing expressive abilities (for a review, see Jolley et al., 2016) and God being perceived as closer with age (Eshleman et al., 1999; Kirkpatrick & Shaver, 1990) (hypothesis 1a). Secondly, a positive association would be found with each religiosity measure, i.e., religious schooling, religious affiliation and prayer practice (hypothesis 1b). Thirdly, it was anticipated that girls would draw with more emotional intensity than boys, based on both the literature on expressive drawings (Picard & Boulhais, 2011) and research on individual differences regarding religion (Donahue & Benson, 1995; Francis, 1997; Francis & Wilcox, 1996) (hypothesis 1c).

Concerning emotional valence, hypotheses were threefold. Firstly, drawings would tend to lie more in the middle of the scale (i.e., of equal balance, less positive or less negative) with increasing age (hypothesis 2a). This would be in line with empirical findings showing increasing conceptual complexity of God representations (Brandt et al., 2009; Dandarova, 2013; Ladd et al., 1998; Pitts, 1976) and of emotional states associated with prayer (Bamford & Lagattuta, 2010). Secondly, it was

expected that girls would produce positive drawings to a greater extent than boys (hypothesis 2b), based on girls tending to draw God as a happy figure more often than boys (Kay & Ray, 2004) and female individuals generally reporting greater religiosity (Donahue & Benson, 1995; Francis, 1997; Francis & Wilcox, 1996). Thirdly, religiosity measures would be associated with positive rather than negative emotional valence (hypothesis 2c). In view of the predominantly Christian context of the current sample, it was assumed that religious schooling, religious affiliation and prayer practice are associated with an overall positive imagery.

Finally, it was predicted that intensity and valence would share a positive relationship, that is, the more positive the more intense (hypothesis 3). Due to the mainly positive and compelling messages about God in the Christian tradition, children would feel more connected to positive depictions, therefore making them more intense.

Method

Participants

The drawings of four-hundred seven participants aged 6 to 15 years ($M_{age} = 11.10$, $Min_{age} = 6.62$, $Max_{age} = 15.35$, $SD = 2.35$, 51.8% girls) were analyzed for the current study. Data were collected in French-speaking Switzerland either during regular state teaching (47.9%) or in a religious teaching context (which relates to the religious schooling variable used in this study). The age distribution of the sample is presented in Table 1. Regarding consent to take part in the study, opt-out was used for half of the sample and written parental consent could be obtained for the other half of the sample (the former part was collected between 2009 and 2010, and the latter were collected between 2015 and 2016).

Materials

All participants were given an A4 sheet of white drawing paper, an HB pencil, a ten-color set of wax pastels (yellow, orange, red, pink, purple, blue, green, brown, black, white) and an eraser. A questionnaire was also provided to the participants in order to obtain religiosity measures (i.e., religious affiliation and prayer practice).

Procedure

Participants completed a drawing task (i.e., a drawing of God), a task recall, a written description of their drawing and a questionnaire. All tasks were performed in a single session and would last between 30 and 50 minutes overall, even though no time limitation was imposed. Participants were tested in

groups (M = 10) in a same room (either in a classroom or in a religious teacher's living room). Space was managed so as to avoid copying.

For the drawing task children were asked if they had ever heard the word "God" and were then invited to close their eyes and to try to picture God as they imagined. They were next asked to open their eyes again and to draw what they had imagined, that is, to draw God. They were invited to use as many materials as they deemed necessary and were reassured that there was no right or wrong answer. The procedure was similar to the one described in Dandarova Robert et al. (2016). Children did not know in advance what they would be asked to draw, in order for their answers to be spontaneous, and no reference to emotions was made to the participants.

The tasks following the drawing task were administered one after another as children finished individually at their own pace. Each participant was first asked to recall the drawing instructions to ascertain their good understanding of the task, followed by a written description of their own drawing. Written descriptions were however not used in the current study. At last, a questionnaire was administered to obtain religiosity measures (described below). This series of tasks was dealt with as quietly as possible and interactions with the participants were carried out by whispering in order not to influence other participants in the process.

All children were eventually thanked for their participation and congratulated on their drawings.

Religiosity Measures

Regarding the *religious affiliation* variable: 320 children (78.6%) reported to be religiously affiliated (all denominations included) and 87 children (21.4%) reported not to be religiously affiliated. Participants could select a specific affiliation among a series of choices as well as were given the opportunity to write free text. With respect to the *prayer practice* variable: 232 children (57%) reporting praying at home and 175 (43%) reported not to. Those measures were obtained from children's answers to a questionnaire that they filled out at the end of the drawing activity. As for the *religious schooling* variable was deduced from the nature of the setting where drawings were collected.

Scoring of the Drawings for Intensity and Valence

Drawings were assessed on two measures: emotional intensity and emotional valence. Emotional intensity consisted in assessing the extent to which each drawing expressed emotions as a matter of intensity. Scores ranged from 1 to 7: 1 = unemotional, 4 = moderately emotional, 7 = very strongly emotional. Emotional valence consisted in assessing where a drawing lay on a continuum from

strongly negative to strongly positive. Scores ranged from 1 to 7: 1 = strongly negative, 4 = of equal balance, 7 = strongly positive. No similar measurements for free drawings were available in the past scientific literature and *ad hoc* scales had to be constructed for the current study. This was achieved through collaboration with two English female professional artists. They were familiar with the rating of emotionality in children's drawings, as they had previously worked on similar research projects carried out by Jolley et al. They helped construct each scale, based on discussions between the two of them, facilitated by the research team (made up of the first three authors).

A small training sample - representative of the larger sample - was used for scale construction and testing independent rating accuracy. It was not used in the final statistical analyses. This was followed by the operationalization of each point on the scales. The expert-artists were encouraged to take all esthetic devices (i.e., literal expression, subject matter and formal properties) into consideration, although they were not assessed separately, but as a whole. The entire drawing would be assessed, and not only a figure recognizable as God. Importantly, and in connection with past debates in research on children's expressive drawings, representational qualities of drawings were not disregarded during the rating process. While these were not examined directly, if a composition was too "tentative", for example, its emotional intensity or emotional valence (negative or positive) may have been considered as somewhat lessened. Indeed, poor representational qualities might limit the expression of the overall emotionality of a drawing.

All drawings were rated independently by the same two female expert-artists. Reliability of scores was measured using intraclass correlation analyses (two-way mixed with absolute agreement). Good reliability was obtained for emotional intensity: $ICC_{(C,k)} = .832$, 95% CI (.796, .862). Disagreements lying more than two points apart on the scale were discussed for resolution (N = 5). A mean score was automatically computed for drawing scores lying one (N = 183) or two points (N = 59) apart between the two raters. Excellent reliability was obtained for emotional valence using intraclass correlation analyses (two-way mixed with absolute agreement): $ICC_{(C,k)} = .986$, 95% CI (.983, .989). Disagreements either lay more than two points apart or went across valence categories (i.e., between negative, 'of equal balance' or positive valence) (N = 13). A mean score was automatically computed for drawing scores lying one point apart between the two raters (N = 26). In view of the underlying categorical nature of the valence scale, an intraclass correlation (two-way mixed with absolute agreement) was also calculated within the negative and positive valence categories. Excellent reliability was obtained for each: $ICC_{(C,k)} = .986$, 95% CI (.968, .994) for negative valence; $ICC_{(C,k)} = .957$, 95% CI (.946, .965) for positive valence.

Statistical Analyses

Multiple regression analyses (stepwise) were mainly employed in order to examine the effect of predictor variables (i.e., age, gender, schooling, religious affiliation, prayer practice) on both emotional intensity and emotional valence scores. Age was computed as a continuous variable, and other predictors were binary variables: gender (0 = female, 1 = male), schooling (0 = non-confessional, 1 = religious), religious affiliation (0 = non-affiliated, 1 = affiliated), and prayer practice (0 = does not pray, 1 = prays).

Results

For each outcome variable (i.e., intensity and valence) the following independent variables were considered: age (continuous), gender (female or male), religious schooling (schooling vs. no schooling), religious affiliation (religiously affiliated vs. not), prayer practice (praying at home vs. not).

Emotional Intensity

A multiple regression (stepwise) analysis was conducted to predict emotional intensity based on age, gender, religious schooling, religious affiliation and prayer practice.

A significant regression equation was found ($F(2, 404) = 18.347, p = .00000005$), with an adjusted R^2 of .079. Predicted emotional intensity is equal to $3.913 -.468. (\text{GENDER}) + .517 (\text{SCHOOLING})$, where gender is coded as 0 = female, 1 = male, and schooling is coded as 0 = regular schooling, 1 = religious schooling. Predicted emotional intensity was .468 points more for female participants and was .517 points more for participants receiving religious schooling. Both gender and schooling were significant predictors of emotional intensity. It is worthwhile that data visualization revealed no developmental tendency: no curvilinear relationship between age and the dependent variable could account for the lack of statistical significance in the multiple regression model.

Based on the significant effect of religious schooling on emotional intensity additional analyses were conducted in order to compare children within the group from religious schooling context on the basis of religious denomination, Catholic or Protestant. A Mann-Whitney U test indicated that there were no statically significant differences for emotional intensity between Catholic and Protestant schooling, $U = 5007.50, p = .204$.

Emotional Valence

A multiple regression (stepwise) analysis was conducted to predict emotional valence based on age, gender, religious schooling, religious affiliation and prayer practice. Scores of the dependent variable

ranged from 1 to 7, and the scale was bi-directional in respect of valence, but it could be understood as follows: the higher the valence score the more clearly positive, and the lower the more clearly negative.

A significant regression equation was found ($F(3, 397) = 15.329, p = .00000005$), with an adjusted R^2 of .104. Predicted emotional valence is equal to $4.718 -.506. (\text{GENDER}) + .372 (\text{SCHOOLING}) + .047 (\text{AGE})$, where gender is coded as 0 = female, 1 = male, schooling is coded as 0 = regular schooling, 1 = religious schooling, and age is incremental. Predicted positive emotional valence was .506 points more for female participants, was .372 points more for participants receiving religious schooling, and was .047 more for each age year. All three gender, schooling and age were significant predictors of emotional intensity.

From a categorical point of view, the vast majority of drawings were of positive valence ($N = 335$), followed by of equal balance ($N = 41$) and negative valence ($N = 25$). There were 6 drawings that did not show any emotionality (having previously been scored as showing no emotional intensity), and those were not included in the analyses.

Additional analyses were conducted due to the nature of the dependent variable - i.e., both categorical and bidirectional. For that reason, the three underlying categories of the valence scale were examined separately. Negative and positive valence scores were respectively examined using Spearman correlation analyses for age, gender and schooling. It has to be noted that for negative valence scores, higher scores equated to lower negative valence. Age was positively correlated with scores both from the negative ($r = .227$) and the positive ($r = .142$) valence scores, respectively. This means that for each of these two categories the older the participants the less negative and the more positive the drawings within. For negative valence, correlation coefficients for gender and schooling were, respectively: $r = -.093$, and $r = .305$. This indicated that stronger negative valence was positively associated with being male and was negatively associated with receiving religious schooling. For positive valence, correlation coefficients were: $r = -.194$ for gender, and $r = .184$ for schooling. This indicated that stronger positive valence was positively associated with being female and receiving religious schooling. Regarding drawings 'of equal balance', a logistic regression analysis was carried out with age, gender and schooling as predictor variables. The model explained 11.3% (Nagelkerke R^2) of the variance in anthropomorphism of representation and correctly classified 89.8% of cases. Gender and schooling were statistically significant predictors ($p = 0.00034$ and $p = .007$, respectively). Being male was associated with increased likelihood to produce drawings 'of equal balance'. Receiving religious schooling was associated with decreased likelihood to produce such drawings.

Based on the significant effect of religious schooling on emotional valence additional analyses were conducted in order to compare children within the group from religious schooling context on the basis of religious denomination, Catholic or Protestant. A Mann-Whitney U test indicated that there was a statistically significant difference between children receiving Catholic schooling (N = 95) and children receiving Protestant schooling (N = 114), $U = 4363.50$, $p = .011$. The Catholic group showed higher scores (mean rank 116.07) compared with the Protestant group (mean rank 95.78), which indicated that the former expressed more positive emotionality in their drawings.

Relationships Between Intensity and Valence

In order to test hypothesis 3, a Spearman correlation analysis was carried out on intensity and valence scores. A sample of $N = 401$ was used since drawings that had received an intensity score of 0 ($N = 6$) were not scored on valence. The results indicated a positive association between intensity and valence ($p = 2.97E-31$, $r = .536$), which supported hypothesis 3.

Discussion

Summary of Main Results

The current study was initiated to acquire a better understanding of emotional expression associated with children's God representations. Drawings of God were collected from children aged 6-15 years of age in French-speaking Switzerland. In total, 407 drawings were scored by two expert-artists for their emotional intensity and valence, respectively. It is worthwhile that the entire drawing was considered as a potential display of emotionality, and the assessment was not restricted to the God figure alone. Intensity and valence were examined separately, with and the effects of the following predictor variables were tested: age, gender, religiosity (including, respectively: religious schooling, religious affiliation, prayer practice). As a second step, intensity and valence were inspected for their potential relationship with each other.

Firstly, for emotional intensity significant predictors were: gender and schooling. More specifically, being a female individual or receiving religious schooling, respectively, increased the chance to produce an emotionally intense drawing of God. Therefore, hypothesis 1c (gender) was confirmed, and hypothesis 1b (religiosity) was only partially supported - religious affiliation and prayer practice were not significant. However, hypothesis 1a, positing an effect of age, was not supported. Data visualization indicated that there was no developmental tendency at all. No effect of the specific religious denomination endorsed by religious schooling (i.e., Roman Catholic and Protestant/Reformed) was found.

Secondly, concerning emotional valence significant predictors were: age, gender and schooling. Age, being female and receiving religious schooling were all positively associated with greater valence scores, meaning scores lying higher towards the positive end of the continuum. All hypotheses 2a-c were supported, although hypothesis 2b was only partially supported (religious affiliation and prayer practice were not significant predictors). Given the bidirectional nature of the valence scale, additional analyses were conducted for each underlying category of that scale, that is: negative, positive and 'of equal valence'. Age, being female and receiving religious schooling were all associated with lower negative valence scores, and all associated with higher positive valence scores. Drawings falling into the 'of equal balance' category were less likely produced by female individuals and participants receiving religious schooling. Differences could be observed within the religious schooling group between Catholic and Protestant contexts. Children receiving a Catholic type of teaching were more likely to produce more positive drawings of God than the Protestant group. Overall, it could be observed that the vast majority of drawings lay within the positive end of the valence continuum, followed by drawings 'of equal balance', then a few negative ones.

Thirdly, hypothesis 3 was confirmed, revealing that intensity was positively associated with positive valence.

In the main, results have revealed that gender and schooling seem to be consistent predictors of emotionality - unlike age, which was only significant for valence. Importantly, the specific denomination endorsed by religious schooling did play a role (on valence) to some degree.

Brief Discussion of Findings and Broader Interpretations

The absence of age-dependency for emotional intensity was surprising, and it could receive two main explanations. Firstly, the most straightforward explanation would posit that spontaneous emotional intensity does not change in drawings of God throughout childhood. This might be due to the nature of the task: it was free in respect of emotional expression, which was never mentioned to the participants. This is different from what has been done in research on the development of children's aesthetic abilities, where children were asked to draw expressively as well as they could. A strengthening argument lies in the general observation that differential (vs developmental) variables (i.e., age and schooling) appeared to be particularly relevant to emotionality. The poor contribution of age may point to the particular importance of socio-cultural and normative points of influence insofar as emotional expression is concerned, for this topic. Such influence may operate directly through exposure to visual artifacts (e.g., religious paintings), but also through the indirect influence of adults' testimonies, as these operate on a great variety of topics, including the divine (Harris & Koenig, 2006; Harris, Pasquini, Duke, Asscher, & Pons, 2006).

Secondly, an alternative explanation would be that there is a discrepancy between intention and expressive skills, which would counterbalance each other's effect. More specifically, past research has consistently found an age-incremental trend in children's expressive drawings of emotions (Jolley et al., 2016) - when using assessment methods similar to this study. This pertains to how well children are able to perform for a predetermined emotion. However, the circumstances were somewhat different concerning drawings of God, given that children were free to draw as they wanted. A consequence is that children's willingness to draw very expressively might have varied much from one child to another. Older children might be less prone to draw God with intense emotionality. A reason for this would be that in view of decreasing anthropomorphism with age (Hanisch, 1996; Kay & Ray, 2004; Ladd et al., 1998; Pitts, 1976; Tamm, 1996), older children might emphasize God's ontological properties, presuming a focus on 'cold' conceptual aspects. Nonetheless, previous findings indicating a relationship between expressive drawing abilities and emotion recognition (Brechet & Jolley, 2014) seem to speak against this interpretation. Indeed, if they were willing to curtail emotionality in their drawings, older children should be able to attune their intentions to the outcome. Altogether, it is the first explanation, presented above, that is most likely: the lack of age-dependency for emotional intensity would be due to both the nature of the task and the topic.

Perspective from the Psychology of Religion

Religious and Spiritual Development in Childhood

This study helped shed light on children's drawings of God by utilizing two new instruments and setting a new focus - i.e., emotionality. The data were considered for their expressivity, rather than mainly representational aspects (e.g., anthropomorphic vs non-anthropomorphic). It has shown not only that emotional expression permeates drawings of God made by children, but also that emotionality is multifarious in that regard. The combination of a poor developmental influence, on the one hand, and a major association with religious schooling and gender, on the other hand, came unexpectedly. This observation certainly contributes to presenting a nuanced picture of relationships with independent variables, beyond a main developmental concern, as previously recommended (Kay & Ray, 2004; Ladd et al., 1998). Consequently, more weight may be given to socio-cultural learning in the future.

In past research, age has been consistently associated with very cognitively 'cold' properties of God figures - especially regarding anthropomorphism and figurativeness. Besides this, the gender of participants has been found to share a relationship with the way that drawn God figures would be gender-typed (Brandt et al., 2009; Kay & Ray, 2004; Ladd et al., 1998). Religious schooling and religious denominations have shown a less straightforward role. They sometimes influenced the degree of anthropomorphism (Hanisch, 1996; Pitts, 1976) or the use of semantic categories of God figures

(Brandt et al., 2009), and other times not (Ladd et al., 1998). Nonetheless, it clearly influences the compositional themes (Pitts, 1976), which, similar to gender, advocates for its normative influence. Altogether, this may suggest different psychological underpinnings in relation to the specific qualities of God representations that are inspected. Emotional expression appears to stand rather on the socio-cultural and normative side.

Nevertheless, older children appeared to produce more strongly positive drawings of God. This is consistent with previous observations according to which children are inclined to perceive God as closer with increasing age (Eshleman et al., 1999), which may indirectly suppose more positivity. Along the same line of thought, Kirkpatrick and Shaver (1990) have put forth the idea that as individuals grow older, God becomes an attachment substitute to parental figures - at least for children identified as religious. The fact that the valence of God representations did not become more nuanced with age, unlike the concept of prayer (Bamford & Lagattuta, 2010), may suggest different developmental courses between those two concepts. Valence differences based on religious denominations in schooling (i.e., Catholic vs Protestant/Reformed) might reflect the historical past of Switzerland and the ban of religious images and artifacts through the Protestant Reformation.

On the whole, emotional expression, in this context, seems to be particularly bound to the socio-cultural environment that children live in. This is particularly true of emotional valence. The current research might represent one more contribution to the much-needed improvement to our current understanding of how religiosity and spirituality may develop in childhood and adolescence (Benson & Roehlkepartain, 2008). This is also important because of the potential explanatory power to explain adults'.

God Representations and the Psychology of Religion

More generally, the current scientific contribution adds to our yet limited understanding of God defined as a 'hot' concept, besides being often apprehended as a 'cold' and intellectual concept (Boyatzis, 2005). God representations may help cope and regulate emotions (Koenig, 2013; Pargament et al., 1990) as well as have important psychological effects (Rizzuto, 1979; Schaap-Jonker et al., 2002). They participate in specific and global meaning-making (Park, 2005) and may endorse qualities of moral authority (Gray & Wegner, 2010). Emotionality may also pertain to one's experience of emotions towards God (Exline & Grubbs, 2011; Samuels & Lester, 1985) and emotional attachment to God (Beck, 2006; Granqvist, 2002). In addition, God may be perceived as experiencing emotions, as a sentient agent (Gray & Wegner, 2010). This study was thus intended to play a part in that body of research.

Because of its combination of methods and topic, the current research is situated in the field of visual methods in religious studies. Analyzing drawings for their expressivity and with a developmental perspective could be an interesting methodological complement to related research relying on visual culture (Harvey, 2011; Knauss & Pezzoli-Olgiati, 2015) or semiotics (Yelle, 2011). In return, the contribution of such approaches to the current issue might help bring in a more context-sensitive perspective as well as consider the more *emic* aspects, drawing on religion and spirituality as lived experiences. An example from the current study might be found in Jesus on the cross. Although it would generally carry the meaning of suffering, from a theological viewpoint, it may communicate ideas of salvation for the humankind. While the rating procedure adopted in the current study lead to a horizontal assessment of drawings, a child's discourse about their drawing of Jesus on the cross might emphasize one valence pole or another.

Generally, the vast area of visual research in the human and social sciences (Margolis & Pauwels, 2011) could benefit from this particular application of emotional expression scales applied to an abstract notion (in this case: God).

General Research on Children's Drawings

Contrary to initial expectations, the current findings did not show a substantial effect of age on the expression of emotions in children's drawings of God. This is surprising in regard to the vast body of research on the development of children's expressive skills (Carothers & Gardner, 1979; Davis, 1997a; Gardner, 1982; Ives, 1983; Jolley, 2010; Jolley et al., 2016; Morra, Caloni, & D'Amico, 1994; Picard, Brechet, & Baldy, 2007; Picard & Gauthier, 2012; Rosenblatt & Winner, 1988; Winston et al., 1995). As discussed above, it is possible that emotionality in drawings of God depend more on differential normative aspects than developmental ones. Nevertheless, emotional valence was found to share a significant and positive relationship with age.

This is important for the scientific literature addressing children's drawings because it suggest a major influence of the topic itself (in this case, God), which may have been underestimated in previous studies. In spite of that, it must be conceded that most research on expressive drawings has relied on tasks requiring that children perform as well as then can, or to compare to a control drawing, unlike in the current study, where the task was equivalent to a free drawing task in respect of emotional expression.

Limitations and Future Research

Limitations

There are some limitations to the current study. Firstly, the use of a cross-sectional design only allows for the identification of non-causal relationships. Secondly, the current findings are also limited to a mostly Christian sample, with two main denominations, in a specific socio-cultural context (i.e., French-speaking Switzerland). This impedes possibilities to generalize those results. Thirdly, confounding variables (e.g., state mood during the task) or individual differences (e.g., representational drawing skills, emotional comprehension, visual metaphor comprehension, divergent thinking, working memory) should be taken into account in the future. This could also be the case for religiosity measures: although prayer practice (as a matter of yes or no occurrence) was not found to play a role here, types of prayer (Ladd & Spilka, 2002) and frequency of prayer might. Fourthly, there has been debates whether emotional valence should be conceived of as defined by one or two dimensions (Davidson, 2000; Cacioppo & Gardner, 1999; Russel, 2003), that is, whether negative and positive emotions are extreme opposites or each has its own dimension, implying that an event or object can be relatively negative and relative positive at the same time. Recent research has shown promising findings resulting from the adoption of a bi-dimensional view - based on the Evaluative Space Model (Cacioppo & Berntson, 1994) - for explaining behavioral data on processing ambivalent words (Briesemeister, Kuchinke, & Jacobs, 2012). This might be a degree of precision that lacked in the current study, given the relatively ambivalent nature of the data used for this study due to the religious themes. However, after considering such an approach prior to constructing the scales, the authors of this study had envisaged the possible repercussions that scoring emotional valence on two scales could have. It was deemed very time-consuming, besides potentially causing confusion in the mind of the raters', as folk-psychology seems to have it that people spontaneously think of emotional valence based on negative-positive opposites despite more nuanced scientific findings (Cacioppo & Gardner, 1999).

Future Research

There are a series of aspects that future research may consider. Firstly, examining children's utilization of esthetic devices as impacting on emotionality in their drawings of God could benefit from accounts of their frequency and complexity of combination (e.g., Picard & Boulhais, 2011; Picard, Brechet, & Baldy, 2007). In that regard, the current approach has adopted a methodology closer to the assessment of quality of expression (Jolley et al., 2016). The assessment of emotionality may also benefit from the larger psychological research on emotions by looking into discrete emotions, or by considering classifications such as approach-avoidance (Elliot, 2006). This may help work out specific

profiles of participants, and possibly shed light on concealed developmental patterns. In that regard, discrete emotions associated with prayer have shown to change with age (Bamford & Lagattuta, 2010).

Secondly, each esthetic device would deserve closer attention. As long as formal properties are concerned, it might be valuable to examine colors that are central to the topic at stake. When depicting the divine, children might make a special utilization of yellow. Automatic color detection (e.g., color intensity, spatial distribution) would help move past limitations presented by the human eye (Cocco et al., 2017). In the case of subject matter, social roles may have a great influence on emotionality. For example, besides literal expression and formal properties, a negative drawing might be so because of various content-related elements, such as the role endorsed by God. God might be a fair judge or a wrathful vindictive character. Emotionality may depend on the specific message being communicated. In a similar fashion, traditional religious scenes may impact on the emotional reception on the part of the viewer, taking into account their understanding within a particular socio-cultural group. In that respect, a depiction of the Sacred Heart, although generally poignant, might communicate a different message whether it was made in Switzerland or in Ghana (Meyer, 2011). Such intricate interrelations would deserve to be analyzed in light of the net of intentionality proposed in Freeman and Sanger (1995). This also deals with relationships existing between image-making and image-understanding. This could be insightful to explore, similar to Ladd, Ladd, and Sahai (2015), who have compared self-produced photographs of places that inspire prayer and gaze orientation across pictures.

Finally, adopting a within-subject design involving for the participants to draw different topics may help work out what is specific to God representations in terms of emotionality. Various other complex and rather abstract topics also appear to lend themselves to much emotionality in children's drawings: death (Bonoti, Leondari, & Mastora, 2013; Tamm & Granqvist, 1995; Yang & Chen, 2002), romantic relationships (Brechet, 2015) or the future (Kamens, Constandinides, & Fiefel, 2016). Adding a distinction based on concrete/imaginable concepts vs abstract ones (Binder et al., 2005; Vigliocco et al., 2013) might have important implications for neurosciences. Generally, combining drawing methods with neuroscientific measurements may thus be encouraged in the future, as suggested by Newberg and Waldman (2009).

Practice Implications

Findings from this study may be exploitable in various settings. Firstly, accounting for emotional valence and intensity associated with God representations may be valuable to work with in the contexts of clinical counselling and play/art therapy. Based on the current findings, depending on

whether religion has a special place in a child's life - for example through religious education - or whether it is a girl or a boy, the resulting emotionality may deserve differential attention. The scales constructed in this research could be part of the practitioner's toolbox. There is a long tradition, in clinical practice, of using drawings as a screening method (Arteche, Bandeira, & Hutz, 2010). Without claiming the detection of psychological issues, the present point suggests vigilance upon the observation of unusual emotionality with respect to the client's socio-demographics. More generally, different types of God concepts (e.g., benevolent, guiding) may be differently associated with certain coping styles (e.g., surrender, differing), such as shown in Maynard, Gorsuch, and Bjorck (2001). As their perceived social roles might tie in with specific types of emotionality, these might deserve special attention as well. Secondly, in the context of religious education, the current findings may orient the teaching aims insofar as emotional expression is at stake. Educators may then not regard emotional intensity and valence as on a same level when considering the course of development expected for their pupils' God representations. This may be extrapolated to education in general. Indeed, as Benson and Roehlkepartain (2008) have pointed out: "Single institutions do not have exclusive responsibility for specific parts of young people's development." (p. 24). Consequently, all youth educators may feel concerned. Thirdly, inter-faith and ecumenical dialogues might benefit from reporting on the perceived emotionality of God (particularly emotional valence), given the effect of religious denomination in the current research. Resorting to visual means of expression (e.g., drawings) would be easily implemented in related activities and discussions.

Conclusion

The current inquiry has provided advances in the understanding of children's representations of God in respect of emotionality, by using the drawing method. Findings may serve research in the psychology of religion as well as researchers adopting mainly visual methods. Overall, it contributes to the general exploration of abstract notions (e.g., folk representations of death or the future). Future assessments will require additional experimental testing and cross-topic comparisons.

Appendices

Table 1. Age of participants from the N = 407 research sample

<i>Age (year)</i>	<i>Frequency</i>	<i>Percent</i>	<i>Cumulative Percent</i>
6	8	2.0	2.0
7	28	6.9	8.8
8	68	16.7	25.6
9	40	9.8	35.4
10	50	12.3	47.7
11	40	9.8	57.5
12	62	15.2	72.7
13	57	14.0	86.7
14	50	12.3	99.0
15	4	1.0	100.0
<i>Total</i>	407	100.0	

Chapter 7 - Emotionality in Children's Drawings of God: Traditional Religious References, Significance and Intentionality

Abstract

Introduction. *The current chapter was meant as a tentative exploration of emotional expression in connection with traditional religious references in children's drawings of God. The sample used was the N=532 drawings collected in French-speaking Switzerland. In that sample, themes or scenes taken from the Christian Bible or Christian art were pervasive, and such topics showed various degrees of emotional expression (e.g., in regard to intensity or valence). It then appeared relevant to pursue an exploratory examination of that possible reference-emotionality connection. This comes in addition to the previous quantitative study on emotional expression.*

Exploration. *Three aspects were covered. Firstly, traditional religious references that may be found in the data were reported with some illustrations. Secondly, a limited number of them were qualitatively analyzed with regard to: their traditional significance in the religious domain, the associated emotionality in drawings and the possible influence of children's socio-demographics (e.g., age, gender, religiosity). Thirdly, some theoretical background was provided in order to move the inquiry further and build foundations for future research.*

Discussion. *This preliminary exploration into traditional religious references and their emotionality has led to a better understanding of how children may manipulate and symbolize them. It has also helped unpack relationships between them and overall emotional expression, as well as the possible differences based on socio-demographics. In addition, some theoretical support was gained from Freeman and Sanger's (1995) intentional net of relations, helping put drawings and their makers (i.e., children) into a wider perspective, involving also the beholder and the world. Paths for future research have been suggested and more complex interrelations between variables should be accounted for, and a larger number of epistemic levels should be embraced (e.g., including children's discourse around their drawings).*

Introduction

When asked to draw God, children tend to communicate much emotionality in their compositions. As it has been demonstrated in the previous quantitative study, emotional expression in such drawings can be measured on at least intensity and valence. Those dimensions may vary according to socio-demographics associated with the participants, and they were consistently found to depend on religious schooling and gender. Additionally, emotional valence was also influenced by age.

In order to convey emotions, children usually rely three types of esthetic devices, in a similar fashion to professional artists: subject matter, literal expression, formal properties. Those were previously considered altogether to assign a score of intensity or valence to each drawing, which was assessed as a whole. Although the thematic properties of a drawing may have concerned a specific theological reference (e.g., crucifixion of Christ), it counted only as one aspect among others to possibly influence the emotionality of that drawing. Moreover, subject matter was taken into consideration only for the specific point in time shown in a drawing. It was not looked at for antecedent events or its deep theological meaning. Such carefulness was meant to avoid potential over-interpretation by the raters.

In the current chapter, the content of composition was examined more thoroughly, for it may refer to particular traditional religious themes or scenes. It was understood that traditional religious themes or scenes, such as the crucifixion of Jesus Christ or the Sacred Heart, may carry with them more emotionality than appreciated at a first - straightforward - level of interpretation. Without aiming to draw too hard conclusions, in this chapter, some possible dynamics in the data will be contemplated to suggest a more complex state of affairs concerning the expression of emotions in drawings of God. This may translate into ideas for future studies.

Rationale, Aim, Objectives and Research Questions

The rationale of this preliminary exploration was to look more specifically into subject matter in relation to emotionality in children's drawings of God.

The aim was to suggest possible connections between religious themes and scenes, on the one hand, and emotional expression, on the other hand.

The objective was threefold: firstly, to provide some insight into the traditional religious themes and scenes that children from the current sample use; secondly, to propose some reflections

about possible connections between such themes/scenes and emotional expression; thirdly, to tentatively suggest differences based on socio-demographics.

The research question was threefold: firstly, what are the main traditional religious themes/scenes exhibited in the current sample? Secondly, how could they relate to emotional expression? Thirdly, how could age, schooling or gender have an impact on either the choice of religious theme/scene or its relation to emotional expression?

Data and Approach

The Swiss N = 532 sample of drawings was used in order to conduct this preliminary and tentative inquiry. As a first step, traditional religious themes and scenes were inventoried in a somewhat exhaustive manner, although it is not impossible that some more could further be identified. Following this step, commentaries about some of the specific themes or scenes depicted were made, leading to reflections about their role in the overall emotionality of the drawings. Finally, theoretical perspectives were put forth in order to suggest paths that future research could take to further analyze this issue on traditional religious themes/scenes and emotionality.

A terminological distinction was made between religious 'theme' and religious 'scene'. The former refers to broad topics, such as God's celestial court in heaven, God watching over the humankind or being the light that guides our lives. It may be compared to 'semantic memory' - vs 'episodic memory'. The latter was meant to allude to situations or unfolding actions that are time-determined, thus bearing the quality of being *episodic*, in the neuropsychological sense - as for 'episodic memory'. Just like episodic memories, a scene refers to an actual event, be it historical or theological, that takes place in time.

Principal Religious Themes Identified in the Current Sample of Drawings of God

Traditional religious themes and scenes were inventoried based on familiarity with the sample (bottom-up approach) and expectations about what may lie in the data (top-down approach). Following this, the data were scrutinized again for enriching the findings. As expected in respect of the mainly Christian background of the sample, many typically Christian references were found in the drawings - with the caveat that the Old Testament be considered in relation to the Christian tradition in this case, and not according to its Jewish roots.

In order to be considered in this exploratory examination, drawings had to be straightforward with regard to the traditional references they depicted. This left up the possibility for several themes/scenes to be combined in a same drawing, as long as they were separately identifiable. Some references were also fused together when they got close, for the sake of limpidity, in this tentative chapter. For example, 'God the Creator' and 'God's creation' were reported alongside each other, although it could be argued that they are not the same in terms of focus, the former being on God and the latter being away from God.

A series of references were identified in the data. Those were organized by topics and sub-topics on the basis of their central religious references. They are shown in Table 1.

Some illustrations consisting of drawings from the current sample are provided for each traditional religious reference in the Appendices section at the end of this chapter. They were chosen for a series of reasons, ranging from the contrast in emotionality of the drawings falling under a particular theme/scene to broad socio-demographics differences allowing for diversity. Among those, a few will be discussed below.

Table 1. Religious references (themes and scenes) identified in the N = 532 French-speaking Swiss sample.

Traditional Christian references

Themes:

Heaven and Hell

God's Paradise

God's celestial court

God's absence

References taken from the Old Testament

Themes:

God the Creator/ God's creation (theme for the former; scene for the latter)

God the Patriarch

God is powerful, our judge, punishing/vindictive

Scenes:

Moses and the stick changing into a serpent

Noahic covenant - Alliance between God and humanity after the Flood

References taken from the New Testament

Themes:

God is love/ God is peace

God is our friend

God is watching over us

God is the light/ God is our guide/ God shows us the way

Intricate mixes of central references

Themes:

Mix - light/guide, created man, always with us

Mix - God's mystery, God's love, God's peace

References involving Jesus Christ

Scenes:

The Nativity of Jesus

Jesus the Good Shepherd

Crucifixion of Christ

Resurrection of Jesus

The Ascension of Christ

The Holy Spirit

The Christian Holy Trinity

Themes:

Christ's dual nature (hypostatic union)

The Eucharist

The Sacred Heart

References widespread across Abrahamic religions

Themes:

God is unknown/ ineffable/ a mystery

God can manifest to humans through several forms

God is in every one of us

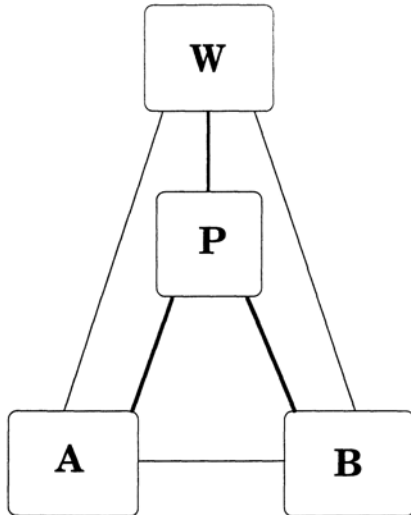
God is big/infinite

God is a king

Theoretical Perspectives: Image Understanding, Esthetics and Intentions

Before properly commenting on some of the religious themes and scenes identified in the data, it will be useful to follow the logic of a specific psychological model of image understanding. Freeman and Sanger (1995) have proposed a model based on a "net of intentional relations that define a picture" (p. 3). Their model is reported in Figure 1 below. These authors have described four main parts composing an intentional net in relation to the apprehension and the making of pictures. They consist in: the picture (P), the artist (A), the beholder (B), the world (W). This net implies six possible connections between its different parts.

Figure 1. "Net of intentional relations that defines a picture (P) as being at the center of relations with Artist (A), Beholder (B) and World (W)." (Freeman & Sanger, 1995, p. 3)



Each Part of the Net and Emphasizing Specific Relations

Each element composing Freeman’s intentional net will be briefly addressed in order to provide a sense of how the current data may be concerned in that regard and from the perspective of emotional expression through religious scenes.

The picture

Children’s drawings of God often depict culturally worked-on references, that is, they draw the composition based on some cultural and religious references that are relatively easily accessible to them and that the beholder coming from a similar background as them can recognize without much effort. In that respect, the picture magnifies the artist-beholder relationship provided that they share a similar background - at least to some degree. The drawing also lies at the center of Freeman’s intentional net because it is through the picture that all relations are made in this context. The picture is the receptacle of cultural knowledge sharing (the world) as much as it is the place of performance for one’s emotional expression about God (artist), and is a potential trigger of one’s own sensitivity (beholder). In that sense, the drawing is the place where intentions and relations become concrete.

The artist

The child may feel personally concerned with the topic of God, as well as it might not be the case at all. This relationship between the artist and the traditional religious reference will greatly influence the way they attend to the task. This claim elaborates on finding religious schooling consistently significant in the previous (quantitative) study on emotional expression. A wide range of emotionality is therefore likely to be manifested depending on that artist-picture connection. This point also entails that the artist (i.e., the child) may attempt to purposefully involve the beholder by producing an esthetic effect: for example, positioning the God figure on the page in such a way that it emphasizes the role it is meant to endorse. This may be the case of a patriarch overshadowing other characters in the composition and denoting much power to the individual gazing at the page. This would equate with symbolizing one's perceived power in God and transferring it to the beholder through a specific setup. In this example, it could consist in communicating a sense of smallness on the part of the beholder who faces that God figure, underlying the protagonist's authority.

The beholder

While the artist does not live in a vacuum, the beholder is evidently not a blank sheet either, and is facing and judging the drawing based on both previous knowledge and individual subjectivity/sensitivity. One's own familiarity with the topic at stake may deeply influence how the drawing will be interpreted, and depending on one's level of erudition about religion(s), a relatively great number of elements will catch one's attention and enter the conversation towards an overall appreciation of emotionality conveyed in a drawing. This aspect deals with the beholder-world connection in the intentional net. Besides the beholder's background, individual subjectivity (e.g., attentional biases, cognitive heuristics) and sensitivity (e.g., past experience, personal significance) will guide one's construal of the drawing composition they are facing. In the presence of elements that do trigger the beholder's knowledge and sensitivity, the drawing will be likely perceived as emotional. A strong beholder-artist link will be reflected in sharing similar background knowledge and similar sensitivity.

The world

The world component enters Freeman's intentional net in this context through the insertion of culturally known elements that the artist borrows and that force the beholder to look 'outside' the sole drawing composition. Much of the emotionality surrounding those cultural references will for a large part depend on the emotional properties initially exhibited by the famous artifacts referred to. On the current topic of drawings of God, the theological meaning generally attributed to certain scenes will surely modulate the emotionality that the beholder is likely to perceive in a given drawing. This will obviously be eased by the artist's own depth of understanding in that respect - for that reason,

children of an older age or receiving religious schooling will be overall more inclined to grasp profound significance. For example, young children may find in the crucifixion of Christ merely suffering and injustice, while older children, with their more advanced process of emotions and possibly deeper religious knowledge, will often move beyond the sole point in time of that act, and tap into its more profound theological meaning. Channeling emotionality will be achieved through the use of esthetic techniques in a way that they coherently come together to communicate certain properties (e.g., intensity) of emotional expression.

The epitome of emotionality in drawings of God may be found in their use of well-known references to already very emotional scenes. An outstanding example of this from the current sample is a drawing of the Sacred Heart. Knowing that mainly adherents to the Roman Catholic Church use this devotion, it appears all the more meaningful that a child met in the context of Catholic religious schooling produced a drawing with that reference. Although versions and interpretations of the Sacred Heart vary significantly overall, a point of similarity deals with its strong emotionality. Inevitable connections between the picture and the world are made through the intentional net, the former drawing heavily on the latter. This of course presupposes that both the artist and the beholder have sufficient knowledge about this devotion - which emotional strength would be dampened by lacking perception and simple 'cold' reproduction of a cultural artifact known through past exposure.

Overall

Considering this entangled and rather complex net of relations between units that eventually define the understanding of images, it appears that interpreting children's drawings of God is multi-layered. Should it happen through broad quantitative or fine qualitative methods, providing explanations about pictures is so relative that only by looking at scientific findings emerging from a variety of methods may end up providing a meaningful account of the foundations of how drawings are made and received. It will be important to keep in mind the which connections are most relevant to examine for a specific issue.

A dimension that would be worth adding to this model is time, and how each unit is liable to change across time. The artist and the beholder are seemingly the most prone to change, for their subjectivity may be reshaped across large periods of time. Finally, an additional dimension that may deserve more attention is space. The context in which the units of this entangled net happen to be at work will have an impact on the resulting image interpretation. This point deals with aspects that are similar to addressing state and trait properties of mood, and the former is hereby concerned.

Psychological Observations on a Few Traditional Religious References Found in the Data

A few References in the Light of a Net of Intentional Relations

A few references from Table 1. will be discussed in this section, emphasizing the possible role played by different parts reported in Freeman and Sanger's (1995) net of relations, and additionally how those may share particular connections. From the references being addressed, the reader will find sub-topics associated with 'Christ', mystery and sub-topics from the Old Testament. The purpose was to provide the reader with an exemplification of that theoretical net applied to traditional religious themes that can be found in the current data. Proceeding that way should allow the reader to first get a better grasp of such application concurrently to considering some general emotionality.

Only in the next section will actual drawings be used in order to underline the importance of each element composing the net of intentionality. Emotionality will thence be brought to the fore and commented thoroughly.

– *Christ*

Christ represents a figure leading to a great variety of traditional religious references and is not construed as a reference in itself. Indications of Jesus Christ may be construed differently in various religious and cultural backgrounds. This concerns the World (W) in the aforementioned model conceptualized by Freeman and Sanger (1995). In a Muslim environment, for example, the legitimacy of mentioning Christ will depend on the role attributed to him. Given his recognition as one messiah among others in that context, depicting his image may not be as compelling as it would in a Christian context. This pertains to the Beholder (B), but also to the Artist (A), given that whether an individual of Christian, Muslim or other faiths has produced the picture will greatly condition its reception. Similarly, the wider cultural background may strongly influence the reception as well as the utilization of representations of Jesus Christ. This has been shown in detail by Birgit Meyer (Meyer, 2011) with the re-appropriation of The Sacred Heart in Ghana, its prominence and the functions it has been endowed with.

In relation to Christ as well, describing the Eucharist may be understood differently depending on the whether the Artist (A) or the Beholder (B) interpret it as an actual metaphysical act (i.e., *transubstantiation*) or as more of a symbolic act. The common denominator will be the wider intimation of the Last Supper, where Jesus indulges in such ritual, but again, coming with different meanings.

– *God is unknown/ ineffable/ a mystery*

Drawings symbolizing a limited access to knowledge about what God might be like, underlying mystery in that regard, is particularly relevant when it comes to examining emotional properties. Indeed, drawings might evoke forms of associated distress or, on the contrary, illustrate a sense of greatness and ineffability. This might depend for a great part on the artist's age and faith. The artist's rationale may vary along the lines of: the perception of one's inability to do so (own cognition-specific argument), a general impossibility to do so (complex notion-related argument) or more pragmatically the inability for one to draw (which may conceal a cognition-specific argument). A tendency that seems to be observed in the data is that younger children (e.g., 7-year-olds) put forth the limitations of their own cognition while older children (e.g., from 12 years-old onwards) would be more likely to justify the absence of representation through the great complexity of that concept. The emotionality of the latter may be more strongly intense as well as more positive than the former, arguably because of targeting the topic directly. It could be argued that using the human being - or a human piece of clothes - as a basis to representing God all the while not representing it (that is, underlying the mystery of God) has some emotional consonance that may be substantially different from a blank sheet of paper. The former accentuates some form of similarity with oneself while the latter shows a radical absence of representation. One is not necessarily more 'emotional' than the other, but differently, and this is an aspect that has not been considered in the previous quantitative study - i.e., how differently emotional drawings may be, at a meaning level. In the case of the former also, obvious allusions to pre-existing cultural characters may play a role in the overall emotional expression of a drawing. For example, drawing 6.1.e relies on a Simpson's-like God character, which may be appreciated for the child referred to an anime she knows and may be shared with the beholder's repertoire.

In close relation to mystery, God's absence underlined through irrepresentability can be quite poignant depending on the discourse around it. A prime example is drawing 1.4.a, which displays a cloud. The composition in itself is not particularly emotional, but the beholder may already grasp intense emotionality when considering that the child was asked to draw God (and completed the task with good understanding of it). However, there is yet another layer that is hidden in the discourse constructed by that child around her drawing. The very reason why she could not draw God, according to her written description of the drawing, is that her prayers went unheard by God and that her dad remained disabled regardless. When getting access to the big picture, the beholder may get the very strong emotional intensity that hides in that apparently 'bland' drawing.

– *God is powerful, our judge, punishing/vindictive (Old Testament themes)*

While the idea of Creation is quite widespread and commonly accessible to the general population, it is interesting that the idea of a vengeful God, which is virtually absent from the New Testament, was disseminated throughout the sample. It is known that children receiving religious schooling - especially those from a Protestant background - were familiarized with stories from the Old Testament during religious class in French-speaking Switzerland. Such familiarization seems to proceed from a typically Protestant gesture to connect back with the Scriptures, relying on one's own discernment. This aspect may be a reason why this group of children was found to depict God in a generally more negative form than children receiving Catholic schooling. Such observation pertaining to the role of their respective religious backgrounds - related to 'World' in Freeman and Sanger's (1995) model - may drive this issue of emotional expression to become much more complex, particularly when accounting for heightened exposure to religious artifacts and stories of a certain type. An aspect that has not been taken into consideration yet is how the child/artist positions themselves in relation to characterizing God as a powerful judge, for example. On the one hand, perceiving God as such might be frightening, potentially fearing some dreadful punishment and acting in a way that would help avoid penalty. On the other hand, seeing God as such may also be reassuring in thinking that misbehaviors perpetrated by other people may be punished and prevent one from undergoing misfortune. Such interpretation may strongly depend on the child/artist, but also on their specific religious and cultural backgrounds and how the notions of moral and justice are presented.

Looking at depictions of traditional religious references (themes and scenes) within that theoretical framework provides a particular insight into how relative the perception of emotionality can be. It was shown that it depends on various factors, among which the major ones are: the drawing (picture), the child (artist), the researcher (beholder) and the socio-cultural and religious context (world). In addition, time was also observed to be an important contributor, which may widely fit the 'world' component. All factors are part of a net of intentionality. An analysis of that net applied to visual artifacts relating to the religious domain is particularly useful to decode emotionality (although it is not limited to it). A more practical examination of such traditional religious references from that net's perspective will now be presented by directly commenting on some children's drawings of God taken from the current Swiss sample.

Commentaries on a Few Drawings: Religious Themes/Scenes, Emotionality and Religious Meaningfulness

Now that the main theoretical perspective has been outlined and a few examples have been provided, some drawings were commented based on that theory, for various traditional religious references. Those were selected from the N = 532 drawings composing the French-speaking Swiss sample. The selection approach was based on their prominence in a Christian context (which is characteristic of that sample), the contrast they offered with regard to emotionality or their rarity in the data. This consists in an attempt to unpack their possible relationships between those references and emotional expression and socio-demographics. Their traditional status will be recalled and examined as well.

Themes and scenes were discussed as follows:

- *The Nativity of Jesus. Drawings 5.1.a-c.*

The Nativity of Jesus holds much emotional significance to many Christian followers. It regularly occurred in the data, yet both during religious teaching and regular schooling.

Among children from the religious teaching group, such drawings appear more emotional both on positive valence and intensity. Those display a greater use of bright colors and a better balance of composition. Besides the religious reference common to all three drawings (i.e., the Nativity of Jesus), those two drawings in particular involve more emotionally loaded content: drawing 5.1.a displays a social scene with many characters, and drawing 5.1.b exhibits somewhat poignant text used to portray the drawn characters. All such aspects clearly contribute to more positive emotionality as well as emotional intensity. Intensity is also heightened in drawing 5.1.b by a use of bold lines. All three drawings manifest positive literal expression through smiles and open gestures. Drawing 5.1.c, from the regular schooling group, may be constrained in its expression of positive emotions because of the small size of the characters, which makes positive literal expression less evident.

All children having produced those drawings were female. However, there are age differences that need to be taken into account, especially for drawing 5.1.b, whose maker was considerably older. This point left unattended might bias the current interpretation. Therefore, drawings 5.1.a and 5.1.c need to be considered side by side, given that the age of their makers was more alike: respectively 9 and 10 years of age. The former belongs to the religious teaching group, and although younger, the aforementioned observations still hold relevance regarding greater positive valence and intensity. It may be assumed that receiving formal religious teaching makes one more inclined to perceive the birth of Christ as poignant, and put deep meaning in that traditional religious reference.



While this approach is careful in attempting to compare drawings based on similar socio-demographics (e.g., age), it may be argued that anchoring observations in traditional religious references radically differs from the previous quantitative. Therefore, if the current approach was to be carried out systematically on all concerned drawings, respective results would probably contrast in view of the contribution of predictor variables (i.e., age, gender and schooling). In that sense, age might bring out more intensity when using this method, unlike what findings from the quantitative study have indicated. Drawing 5.1.b, composed by an older child (13 years old), shows strong intensity of emotion through its content. It exhibits creative ideas by both relying on a very traditional scene and drawing away from the expectations it usually raises. More specifically, it distorts the canonic qualities of the representation by displaying a celestial context for the Nativity of Jesus, and depicting God who is virtually taking the place of Joseph.

The main point of this last observation is that there might be more to content than 'just' subject matter in children's expressive drawings. There is a semantic chain encompassing the wider topic (i.e., God) through traditionally known references (i.e., the Nativity of Jesus) to the specific subject matter. While the last two do overlap to some degree, the very content of a drawing, as it could be demonstrated, is open and leaves much freedom for the child to orient the emotional qualities of their drawing for similar topics and traditional references. This is a particularly important aspect to have in mind when researching on drawings using fixed topics, such as God, compared to predetermined emotions (e.g., a happy drawing). The distinction between a traditional reference and the subject matter of a drawing may be clarified as follows: two drawings might communicate a similar subject matter, say a happy social situation. The presence of a dove in only one of those two drawings would probably strongly influence the interpretation one gives of that drawing, which may also lead to very differently perceived emotionality between those drawings.

Furthermore, there might be a strong similarity between this observation and results from the quantitative study on humanness and de-anthropomorphization. It is that religious schooling might endorse the role of provider of alternative representations, offering a larger repertoire to choose from. In this case, the proposition goes one step further: more than facilitating alternatives, religious schooling may in fact stimulate the alteration of traditional representations. One possibility is to infer topic-specific creativity, in the sense that religiously socialized children may be more 'at ease' with the notion of God and may create more freely around that topic when asked to draw. Another possibility would be that being exposed to a great variety of religious references brings some confusion regarding which element belongs to which reference, leading to mixed graphic outcomes beyond creative intentions.

Lesser intensity and positivity of emotions for this specific reference among children from the regular schooling group might be due to the rather factual reproduction in their drawings of what they see during the yearly celebration of Christmas, so widespread in the West.

5.1. The Nativity of Jesus

	
<p>a. ch10_vd_f_pep_09_00_oce 9-year-old girl from Vaud, seen during regular schooling</p>	<p>b. ch16_fr_f_rec_13_03_lau 13-year-old from Fribourg, receiving Protestant teaching</p>
	
<p>c. ch10_ne_f_pcc_10_04_mel 10-year-old girl from Neuchatel, seen during regular schooling</p>	

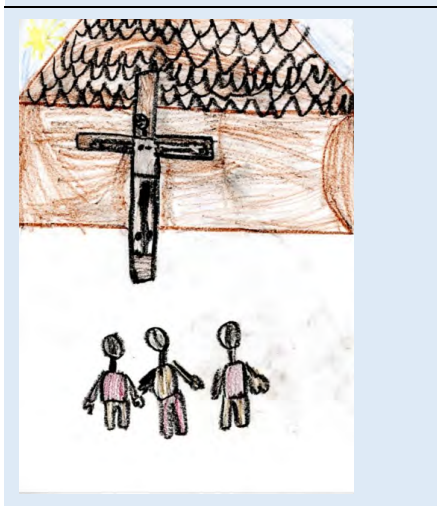

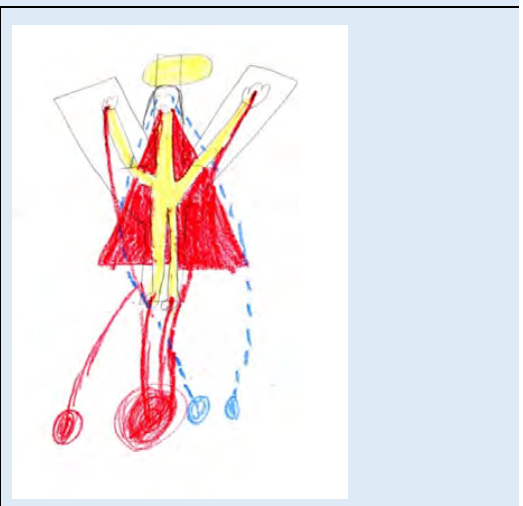
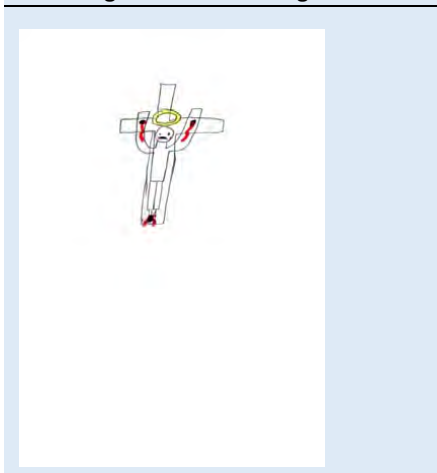
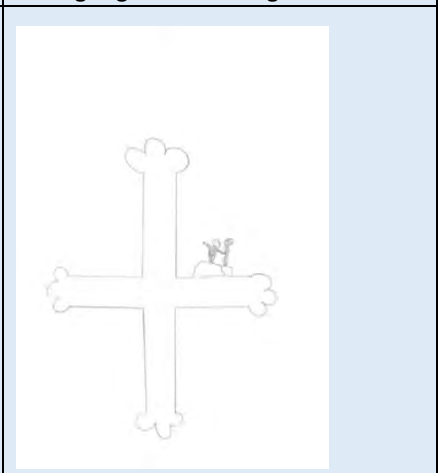
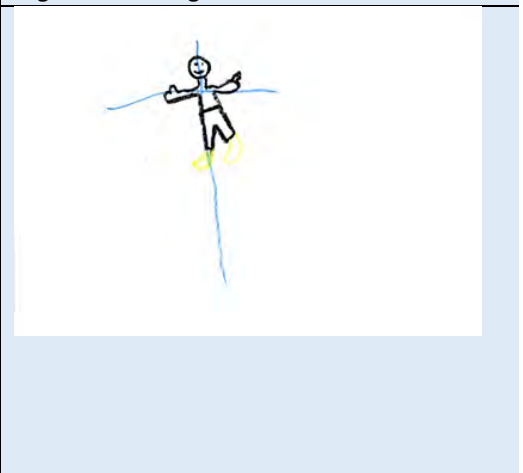
– *Crucifixion of Christ. Drawings 5.3.a-f.*

Children from the religious teaching group might approach the image of Jesus on the cross in a manner that is less emotionally negative than children from the regular teaching group. This widespread traditional Christian scene is chosen rather often compared to other religious scenes, especially among younger children. Drawing 5.3.a is particularly emotionally intense, due to bold lines, heavy colors, people watching Christ on the cross and the fact that most of the page was used to draw. A similar observation could be made of drawing 5.3.b regarding its strong emotional intensity - but for the social aspect. However, the latter display very strong negative emotionality through a substantial use of black and by showing bloody wounds on Jesus. That drawing was produced by a child from the

regular teaching group. Drawings 5.3.c and 5.3.d, although less strongly negative, also display blood and emphasize suffering in Christ. They also belong to children from that group.

Other drawings representing the crucifixion of Christ are everything but negative. Drawing 5.3.f displays bright colors and positive literal expression (a smile), making it overall positive. Drawing 5.3.e indicates an emotional valence that is neither really positive nor negative. It shows some originality of idea, lending it more emotional intensity, but it is generally rather bland: there is no use of colors apart from the gray pencil, and the character has been drawn very small. A comparison that can be made on the basis of schooling is that the former was provided in the religious teaching group, while the latter was made in the regular teaching group.

5.3. Crucifixion of Christ

		
<p>a. ch08_ge_m_rap_09_01_ale</p>	<p>b. ch10_ne_m_psr_09_02_jer</p>	<p>c. ch10_vs_f_phn_08_06_kat</p>
<p>9-year-old boy from Geneva, receiving Catholic teaching</p>	<p>9-year-old boy from Neuchatel, seen during regular schooling</p>	<p>8-year-old girl from Valais, seen during regular schooling</p>
		
<p>d. ch09_ge_m_pco_08_08_tia</p>	<p>e. ch10_ne_f_pcc_10_06_vic</p>	<p>f. ch08_ge_m_rnf_08_01_mat</p>

8-year-old boy from Geneva, seen during regular teaching	10-year-old girls from Neuchatel, seen during regular teaching	8-year-old boy from Geneva, receiving Catholic teaching
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On the whole, those observations seem to show that this traditional religious scene, when produced by children from the religious group, is displayed with an emotional valence that is either less negative - when lying on the negative side of the valence continuum - or more positive - when lying on the positive side. This supports the idea that children from the religious group get a hold of this traditional scene that is less focused on the actual suffering from the crucifixion. Instead, they seem to underline the communal and positive aspects linked with this scene. Indeed, the theological message of the crucifixion can be seen as a sign of salvation for the humankind. One principal reason that religious teaching should make any difference in that respect is that children would be more likely to hear adults' discourse about such an emotionally positive message.

– *Resurrection of Jesus. Drawing 5.4.a.*

5.4. Resurrection of Jesus



a. ch08_ge_f_rap_07_09_way

7-year-old girl from Geneva, receiving Catholic teaching

Drawing 5.4.a refers to Jesus on the cross, from the character's peculiar gesture, alongside a lush and green background. Because of this, it is suggestive of the apparition of Jesus Christ to Mary Magdalene in the Easter Garden (e.g., see John 20:11-18). The scene is generally strongly positive and very intense, so is the drawing, through the esthetic techniques employed by this child: smile (literal expression), hearts and lush nature (subject matter), bright and bold colors (formal properties). It is

not surprising that this drawing was produced in the context of religious teaching, since it may require a personal connection with the notion of God.

– *The Ascension of Christ. Drawing 5.5.a.*

5.5. *The Ascension of Christ*



a. ch09_vd_f_pbu_12_11_mar

12-year-old girl from Vaud, seen during regular schooling

Drawing 5.5.a displays a particular type of content, in the sense that God is not actually represented in that drawing. A cross was drawn in the middle of the page. That setup suggests a play on the presence-absence of Christ. The emotional valence of the drawing might be neither positive nor negative. It could be positive, based on the meaning that Christ has arisen from Earth to God, but it could also be negative, due to past suffering evoked by the cross. Nevertheless, it is very emotionally intense because of its originality of idea, leaving the viewer with doubts whether God is present in the drawing somehow, or completely absent from it. Moreover, there is a bold use of colors, for the cross in particular, which is also laid in the middle of the page, occupying most of the compositional space.

Regarding that play between absence and presence, it is reminiscent of Birgit Meyer's (2011) analysis of the use of objects mediating the spiritual presence of the divine through its evident absence. Taken from the absence end, this may tilt towards negative emotionality, underlying the death of Christ. Taken from the presence end, it may as well signify the enthusiastic view that Jesus has ascended to the kingdom of God, that the human kind is redeemed for its sins and that he is watching over us.




The child mentioned in her written description that the cross is part of God. This might be regarded as a construal of the cross that fits better the common use of the cross as an object of

remembrance or as a pendant. Not knowing which end (i.e., presence or absence - or both) the child meant underline more, this depiction still remains emotionally and symbolically intense - despite esthetic techniques poorly utilized in that regard. Interestingly, the child reported identifying as Catholic Christian.

It could be expected indeed that Catholic children - more than Protestant children - would put so much emphasis on the cross. This would be due to iconoclastic endeavors from past Protestant Reformation, discouraging the use of the cross. One has to acknowledge, however, that also children receiving Protestant teaching have represented the Christian cross in this sample, but just with less strong prominence. It would be informative in that regard to evaluate whether children become more aware with age of the religious normative pressure disposing Protestant children not to use the cross in their drawings. If so, the presence of a cross in drawings of older Protestant children may be underlay a subversive approach to representing God, which would be strongly intense emotionally. As a possible path to take in future research examining emotionality and meaning in children's drawings of God, it could be relevant to refer to forms of *iconoclash* suggested by Latour (2002). Indeed, children may defy traditional representations by altering them, but also by inserting elements that are subject to tension within a religious tradition.

– *The Holy Spirit. Drawings 5.6.a-c.*

5.6. *The Holy Spirit*

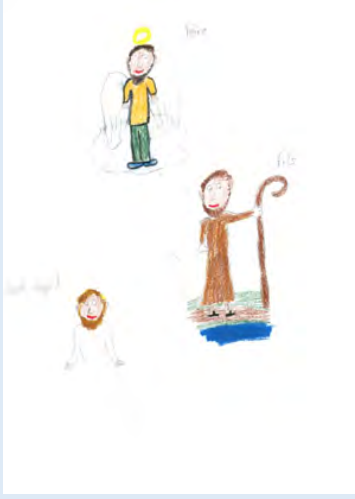
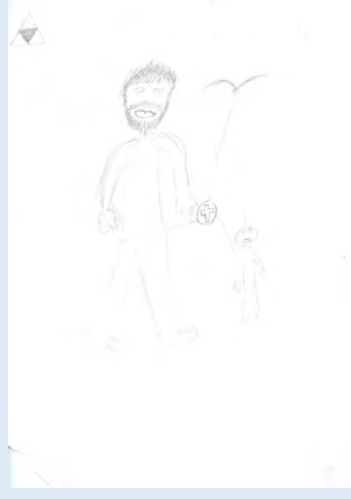
		
<p>a. ch10_ge_f_pco_11_10_mae</p>	<p>b. ch16_vd_f_rsp_10_02_jul</p>	<p>c. ch16_vd_m_rcb_13_09_arn</p>
<p>11-year-old girl from Geneva, seen during regular schooling</p>	<p>10-year-old girl from Vaud, receiving Catholic teaching</p>	<p>13-year-old boy from Vaud, receiving Catholic teaching</p>

The dove is usually referred to as a symbol of purity and innocence, and is used at weddings sealed in the Christian faith. The inclusion of a dove is all the more meaningful in the context of those drawings, because in the Christian tradition the dove may refer to the Holy Spirit, which is part of the Holy Trinity (e.g., see Matthew 28:19). All four Gospels refer to the baptism of Jesus, and the presence of the Holy Spirit in the form of a dove near Jesus is taken as a sign of holiness in Christ. In addition, it may also symbolize the descent of the Holy Spirit onto the apostles, which is celebrated in Christendom during Pentecost. In Acts 2:14-36, Peter refers to the resurrection of Jesus of Nazareth as a man approved of God, and shares his joy and hope and describes the descent of the Spirit as the accomplishment of the prophecy. Overall, the presence of the dove may act here as an emphasis of the divine presence and also communicate exaltation following its descent after the resurrection of Christ.

It is also somewhat evocative of Noah's ark and that covenant, having it that a dove came back to Noah with an olive branch, signifying that there was dry land again and this was a sign of peace with humanity from God (Genesis 8:11). Overall, the image of a dove is loaded with much positive emotionality and multiple significance.

Without assuming that children necessarily have all this information in mind when inserting a dove in their drawings of God, it surely is a symbol generally understood as very positive, and that they use to that purpose. Such positive valence is conveyed in the content of all three drawings 5.6.a-c. Drawing 5.6.a depicts a scenario where angels attend to extinguishing a fire, with a dove drawn near them. Drawing 5.6.b shows a dove near a smiling glowing God's face. Drawing 5.6.c displays a smiling God holding a dove and the Earth. Colors are generally bright, which adds to the positivity of those drawings.

In the main, the current illustrations underline the shared reception and understanding, among children from both teaching groups, of a cultural symbol that is positively connoted and is periodically associated with the divine. Inferring a direct, explicit connection with the Holy Spirit in the child's mind might require more caution. Indeed, the native to a particular socio-cultural background may happen to be somewhat "blind" to the distinct elements used in the analogical systems that compose cultural representations (Johnson, 1981; Miller, 1979). It is however not trivial for a dove to occur in drawings composed in response to the specific task of depicting God. The fact that those drawings were composed by children being 10-years old and older may signify that such analogies (in this case, peace and the Holy Spirit) become accessible to children only past a certain point in their development.

5.7. The Christian Holy Trinity	
	
a. ch15_fr_f_rbe_09_01_ail	b. ch16_vd_m_rcb_14_01_jon
9-year-old girl from Fribourg, receiving Protestant teaching	14-year-old boy from Vaud, receiving Catholic teaching

The Holy Trinity in Christendom is based on the Father, the Son and the Holy spirit. All three spiritual entities may be depicted very distinctly, like in drawing 5.7.a, or in a way that explicitly connects them together, as in drawing 5.7.b. Such drawings are somewhat emotionally positive: the former uses bright colors, and both display positive literal expression - on the characters' faces. However, they are not strongly so. Regarding emotional intensity, the content fails to exhibit sufficient originality of idea to make them particularly intense. A similar observation can be made of their formal properties: although more boldness in the use of colors and lines can be noticed from drawing 5.7.a, both drawings lack emotional intensity. The way children attend to such drawings appears to be rather factual, as though recalling a notion that was learned during class. An element that may sustain this claim is that both drawings belong to the religious teaching group. As a brief aside, it is worthwhile noticing that the Holy Spirit is not systematically drawn as a dove, as shows drawing 5.7.a.

By focusing on that factual understanding, differences emerged between both drawings, and seem to be imputable to age. While the 9-year-old child drew all three separately (see drawing 5.7.a), the 14-year-old child (see drawing 5.7.b) had grasped the idea of a divine union by directly pointing to their alliance, which has an underlay of - more conceptually complex - *consubstantiality* (that is, that they are made of the same spiritual substance, as traditionally discussed in the Christian faith). As a matter of emotionality, it appears that this Christian theme is not likely to be expressed with much emotionality in children's drawings of God. A possible explanation might be that the more cognitively

complex the less strongly emotionally conveyed. An intermediary reason for this could be that the less tangible, the less *embodied*, and the less so the less support there is for emotions to be communicated by visual means.

If abstract ideas (such as God) are usually associated with more emotions than concrete ones (Vigliocco et al., 2014), to express emotions in connection with them by visual means might require that they are embodied in representational objects. This does not necessarily involve that embodiment takes place through a human-like character. It requires that the idea is grounded in some metaphor (source) allowing mappings to the target concept (Gibbs, 1992). That metaphor needs concrete entities to grasp. The absence of representation, or the fading of representationality may therefore lead to less firm support for emotional expression.

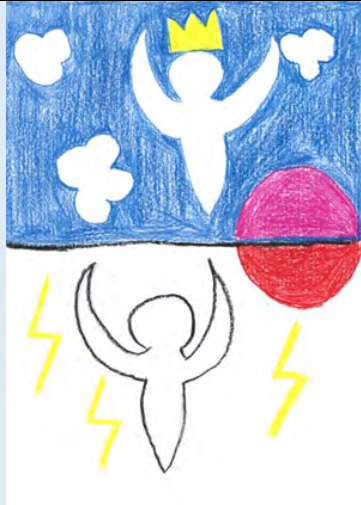
Overall, some traditional religious themes, such as the Holy Trinity, do not easily lend themselves to much emotionality of depiction and are seemingly understood as *cold* facts.

– *Christ's dual nature (hypostatic union). Drawings 5.8.a-d.*

The dual nature of God may be found in Jesus Christ, who is sometimes considered as made of both human and divine substance. This connects back into debates covered in the Nicene creed, questioning whether Jesus is fully human or fully God. The Christian notion of consubstantiality (supposing a same substance between the Father, the Son, and the Holy Spirit) is also raised, to some degree. In drawings 5.8.a-d, children have alluded to the dual nature of God by resorting to a mixed gender-typing. They operated either through a same human character, by depicting an androgynous figure (see drawings 5.8.c-d), or through several entities (see drawings 5.8.a-b). There is a shift of perspective from the interpretation of gender-typing in previous studies from the current thesis. In this case, rather than identifying sources of normative pressure (such as androcentrism, same-gender preference) it is the theological meaning conveyed by children that is at stake. Alluding to such a complex metaphysical idea may be easier to grasp for children if embodied in gender.

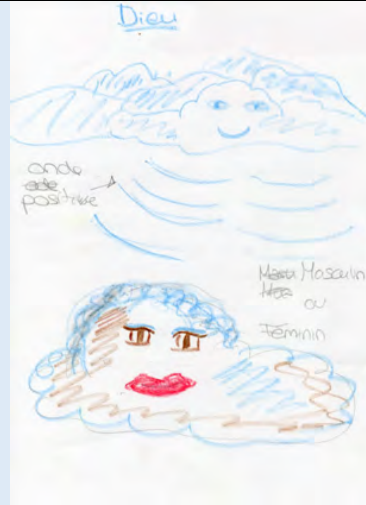
Drawings depicting this issue are overall positive, using bright colors and positive literal expression, such as smiles and open gestures. They are generally emotionally intense due to: their good balance of composition and using most of the page, their use of bright colors (drawings 5.8.a and 5.8.d) and their originality of idea. Drawing 5.8.c is somewhat less intense on account of the God figure being low down on the page and background elements being very faded and hardly visible.

5.8. Christ's dual nature (hypostatic union)



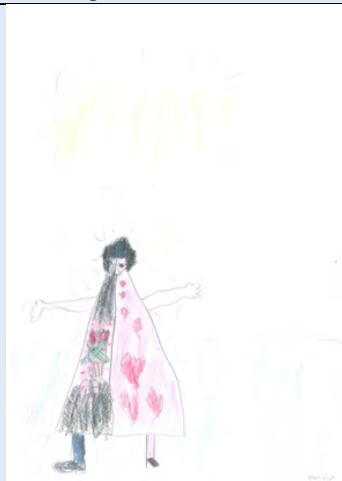
a. ch16_fr_f_rec_13_10_sar

13-year-old girl from Fribourg, receiving Protestant teaching



b. ch10_ge_f_rbc_12_11_jul

12-year-old girl from Geneva, receiving Protestant teaching



c. ch10_ge_m_pco_11_00_flo

11-year-old boy from Geneva, seen during regular schooling



d. ch10_ge_f_rbc_15_04_val

15-year-old girl from Geneva, receiving Protestant teaching

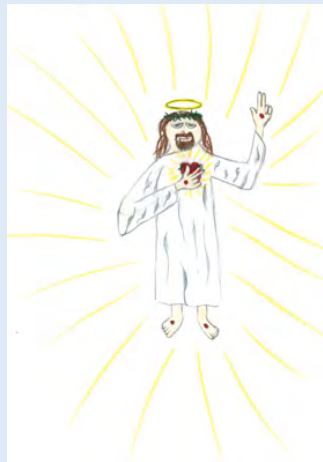
Interestingly, that drawing was composed by a child from the regular teaching group. It might be hypothesized that children from the religious teaching group are more thoroughly exposed to the notion of hypostatic union. Being repeatedly exposed to such notion may help comprehend the compelling theological ideas it entails. In view of the age of those children having produced such drawings - i.e., over 10 years old - it could be supposed that for children to wrap their head around this notion takes rather advanced cognitive abilities. Being able to symbolize it in a drawing as a fact may be achieved past a certain age (e.g., 11 years old, from drawing 5.8.c), but to depict it expressively,

with much intensity, might require even more abilities. Presumably, this necessitates for children to come to grips with the oddity as well as the deep complexity of this notion.

Another aspect to consider, is that the drawing 5.8.c was drawn by a boy, which, according to findings from the quantitative study on emotional expression provided in this thesis, should lead to anticipations about lesser emotional intensity, compared to drawings composed by girls. All three drawings 5.8.a, 5.8.b and 5.8.d were done by girls. Overall, all four drawings might be poignant to adult viewers who are familiar with this notion of hypostatic union, due to the compelling idea that is conveyed. This points to the importance of the viewer in decoding drawings representing the divine through complex theological concepts.

– *The Sacred Heart. Drawing 5.10.a.*

5.10. The Sacred Heart



a. ch16_vd_m_rcb_14_06_tan

14-year-old boy from Vaud, receiving Catholic teaching

The Sacred Heart is a well-known Christian devotion that is widespread across several cultural and geographical areas. Despite the significant evolution undergone by this devotion among European and American Catholics, both at practice and imagery levels, since the seventeenth century, central features have remained (Morgan, 2010). Marguerite-Marie Alacoque, from her mystical revelations, has supported with much energy the image of a welcoming savior, especially through the traits of forgiveness, accessibility (direct gaze, and generally androgynous appearance) and vulnerability. A piety of sympathy has developed among devotees, due largely to the direct gaze between the figure and the viewer. Although Alacoque's piety was more a piety of empathy (through her self-mortification practices), the idea of 'suffering with' is still present. The image of the Sacred Heart is strongly and deeply emotional to devotees.

Drawing 5.10.a is the only Sacred Heart found in the current sample. Interestingly, it was drawn by a child from the Catholic teaching group, and this devotion to the Sacred Heart is mostly practiced in the Roman Catholic Church. That drawing looks very similar to famous paintings of this devotion, such as the famous *Sacred Heart of Jesus* by Pompeo Batoni (1767). One surprising detail, however, is that the thorn is not only present around the Sacred Heart, but also on Jesus' head, which is more directly reminiscent of the time of his crucifixion. It will have to be left to future research to figure out whether such details in drawing away from canonic religious representations are willingly played on by children or not. If they are, this will have an undeniable impact on the overall emotionality of their drawings of God.

Yet, those subtle deviations from the reference painting are only secondary. The most important aspect, when considering the emotionality of that drawing, pertains to the aura around the Jesus figure. The figure is centered and the light radiates from it outwards to the edges of the page. That emphasis on the aura brings the drawing to a strong degree of emotional intensity. Moreover, regarding the valence of this drawing, the child has managed to convey the initial ambivalence that is part of the Sacred Heart, between benevolence and suffering. In that respect, while the crown of thorns and stigmata, as testimonies of suffering, were inserted in the composition, another, less evident feature, was added too. That is, the droopy eyes, lending negative valence to the drawing, by suggesting sadness and exhaustion.

It can be hypothesized that the age of the child (14 years old) and the fact that he is from the religious teaching group may have strongly contributed to his understanding of such an emotionally complex devotion. Accordingly, its typical ambivalence transpires in the drawing.

– *God is unknown/ ineffable/ a mystery. Drawings 6.1.a-e.*

This particular religious reference tends to be expressed, in the current sample, mainly by three types of scenarios. Firstly, the face is absent from the God figure (see drawings 6.1.a and 6.1.d). Secondly, the God figure is absent from the composition, but an element (e.g., a piece of clothing) signifies its presence (see drawing 6.1.b). Thirdly, any God representation is missing from the page (see drawings 6.1.c and 6.1.e). A bold use of colors and filling most of the page may contribute to strongly intense drawings (e.g., drawings 6.1.b and 6.1.d). However, it is mostly the originality of idea that may strike the viewer in those drawings. Children play on expectations that viewers might have about regular human characters. Firstly, they should have a face. Secondly, if they are absent, they should not be present somehow at the same time. Moreover, by adding question marks or some text explaining that God is unknown, children managed to underline the impossibility to represent God all the while they

still did. Thirdly, indicating that one does not know what God is like by resorting to no representation at all is particularly striking. While the resulting 'depiction' might be considered as rather bland - therefore not very intense, emotionally - looking at the page at a meta-level reveals to the viewer with a very powerful utilization of the medium itself.

6.1. God is unknown/ ineffable/ a mystery

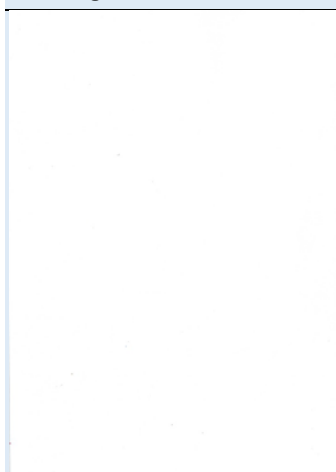


a. ch16_fr_f_rec_13_01_loa

b. ch16_fr_f_rec_12_08_nat

13-year-old girl from Fribourg, receiving Protestant teaching

12-year-old-girl from Fribourg, receiving Protestant teaching



c. ch10_vs_m_phn_07_01_m
ae-r

d. ch16_fr_f_rec_13_09_jul

e. ch10_ge_f_rbc_14_09_ca
t

10-year-old boy from Valais, seen during regular schooling

13-year-old girl from Fribourg, receiving Protestant teaching

14-year-old girl from Geneva, receiving Protestant teaching

This represents a shift of perspective from the previous quantitative study on emotional expression described in the current thesis. Indeed, the assessment of emotionality in drawings involves the viewer's subjectivity and own relation to the medium much more. The resulting perception of emotionality is also contingent on expectations, in the viewer, about the child's ability to convey complex ideas. One piece of information that is crucial (which was not accessible to the two

raters in the related quantitative study) is the age of the participant who did a specific drawing. In the case of blank sheets, the perceived intensity may result from the acknowledgment that the child meant to have a 'meta' approach to the medium. This can also be helped by the addition of a piece of text on the drawing itself by its author. Consequently, drawing 6.1.e would be a good candidate to emotionally intense drawings, as its author was 14 years old and had inserted some text explaining the difficulty to depict God. Drawing 6.1.c, however, was done by a 7-year-old, which once known by the viewer is not likely to produce the same effect, given the possible doubts about the intention of the child in that regard.

In order to conclude this section, it can be observed that identifying traditional religious references in children's drawings of God is useful for several reasons. Firstly, this helps get a better insight into the data and the sorts of symbolic references that are likely communicated in that context. This may also contribute to 'measure' one sample compared to another, potentially at equal overall data 'behavior' regarding an outcome variable - emotional expression, for example. Secondly, this has offered conceivable alternatives to previous interpretations of emotional expression, and such a work must be pursued to better understand the complex reality of drawings of God. That complexity also comes through time-related references, that is, what sort of world one child lives in today, how they handle traditional meanings of religious references, and how those two come together. Thirdly, looking into socio-demographics, even if very tentative at this point, acts as an aid to the identification of possible intermediary variables (e.g., mediators or moderators) between them and emotional expression (e.g., intensity or valence). This enabled the formulation of preliminary answers to the research question addressed in this chapter, in particular the two last parts: how could they relate to emotional expression? How could age, schooling or gender have an impact on either the choice of religious theme/scene or its relation to emotional expression? The next part of this chapter will consist in a discussion of the observations that could be made, and will put forth suggestions for further research.

Discussion

This chapter has proposed a preliminary examination of traditional religious references (themes and scenes) in relation to emotionality expressed in drawings of God. The sample used was the N = 532 drawings of God collected in French-speaking Switzerland. This follows a previous quantitative study conducted on the same sample of drawings, which assessed emotional expression through intensity and valence. Emotional expression was considered more in depth, discussing specific drawings qualitatively. This was enabled by two main elements. The first one was to center the focus on

traditional religious references (i.e., themes and scenes). The second element was to build upon the specific theoretical framework offered by Freeman and Sanger's (1995) net of intentionality. Socio-demographics associated with children were also considered (i.e., age, gender, schooling) when examining emotionality of drawings related to one particular religious reference.

Some religious references lend themselves to poor emotionality, be it for valence or intensity. It seems to be the case of God as ineffable as well as God's absence. It is interesting that those themes occur later in development, and may require advanced cognitive abilities, all the while the previous quantitative study on emotional expression has shown that both positive valence and intensity tend to increase with age. On the whole, this exploration has provided a more specific insight into emotional expression displayed in children's drawings of God, in a way that is slightly more specific to the religious domain than the quantitative study initially conducted. Moreover, some references appear to be generally depicted with less emotionality, although they might be understood by the artist or the viewer as fairly emotional. The observation that choosing some of those references might depend on certain socio-demographics concerning the child offers a different story from the quantitative approach that was previously used in the current thesis in respect of emotional expression. In fact, if some traditional religious references lend themselves to some degree of emotionality then they may act as mediators - up to some point - between socio-demographics and the emotional expression measured in the drawings.

Further Considerations and Future Research

Two main questions to consider ensue from those observations. A first question pertains to the lack of direct emotional expression in some drawings that depict strongly emotional religious references (such as God being a mystery or being absent). A second question would ask whether part of the emotionality found in some drawings of God may be moderated by children's (relatively good) understanding of the traditional religious references they portray? Those two questions will now be developed in more detail.

Regarding the first question, it would be relevant for further research to consider religious references that are often depicted by children as emotionally bland and to examine why this is so. Especially, references that are understood by the viewer to be potentially very emotional (e.g., God being a mystery) would deserve closer attention as to why such qualities tend not to transpire in drawings. One possible answer would be that the more abstract the idea the less figurative the drawing. Emotional expression might come more evidently in clearly figurative, 'embodied' representations of God. In that sense, the less embodied the God representation the less straightforward the emotional expression in children's drawings. The less straightforward that

emotionality the more meta-communicational the drawing. The more so, the more elements in the net of intentionality (Freeman & Sanger, 1995) other than the picture itself need to be taken into account - in particular, the viewer. For example, God's perceived absence might lead to very 'empty' drawings that would be judged as 'bland', according to the criteria set in the previous quantitative study. Nonetheless, the strong emotionality of such drawings may be appreciated by accounting for the potentially powerful - though subtle - effect produced on the viewer.

As for the second question, future research may need to take into consideration children's understanding of the religious themes or scenes that they communicate. This deals with the depth with which they are able to appreciate the complex emotionality of those topics as well as their own idiosyncratic interpretation of them. A main aspect to evaluate would be how the choice of religious topics varies with age and schooling (and possibly gender). A second one would be to assess the understanding a child has of the topic they communicated through their drawing of God, and the emotionality people would generally attribute to it. A final step would be to determine whether the child's understanding of the topic moderates the resulting emotional expression of the drawing. It has to be observed that not only understanding may play a role, but also how the child's attentional focus highlights specific aspects of the scene. For example, a child may concentrate on how beautiful Redemption offered by Jesus is, while another child may select a more concrete course of actions and rage over the Romans' deeds towards Jesus (a child from this sample in fact showed anger towards the Romans in relation to the Crucifixion).

Based on a similar approach, seeking cognitive contributors to emotionality, an additional element that may be brought to the forth. This may be expressed through two questions. Firstly, may the semantic vs episodic characteristics of a religious topic influence the emotionality of a drawing of God? To be semantic means here that the topic refers to a general *theme*, such as 'God the patriarch' or 'God as a guide or a friend'. To be episodic, a topic would instead refer to a specific *scene* that is described with a chronological order, be it historical or theological, such as 'Jesus Christ on the cross' or 'The Nativity of Jesus'. Secondly, if differences were found, would they depend on the contrast between the two types of topics (i.e., semantic or episodic), or would they depend on the neuropsychological correlates that are possibly dissimilar for each? The main assumption here is that topics relating to unfolding actions (e.g., Jesus Christ being brought to the cross to be crucified in redemption of our sins) may be processed differently, at an emotional level, from general qualities associated with the object of the drawing (e.g., being love, being peace). A second assumption is that this applies to religious topics. In relation to the comment about attentional focus in the previous paragraph, it could be expected that episodic topics are more inclined to great variations across



individuals than semantic ones, due to the heightened possibility to select very specific aspects among many.

Conclusion

To conclude, emotionality associated with children's drawings of God may be very relative. Firstly, it will depend on whether traditional religious references are evoked and how they are depicted. Secondly, emotionality will vary much depending on which parts of the net of intentionality are considered. For example, one traditional religious reference might be particularly emotionally loaded for a given viewer, or have a special meaning within a certain cultural background, or have personal connections for the artist (i.e., the child). This might go beyond horizontal assessments of drawings focused solely on the visual artifact itself - as in the case of the previous quantitative study. Indeed, such an approach is multiplex and constrains to the careful examination of every single drawing. While it is somewhat more complete than a horizontal quantitative inquiry, it does not answer the same types of questions. Both kinds of approaches are thus complementary.

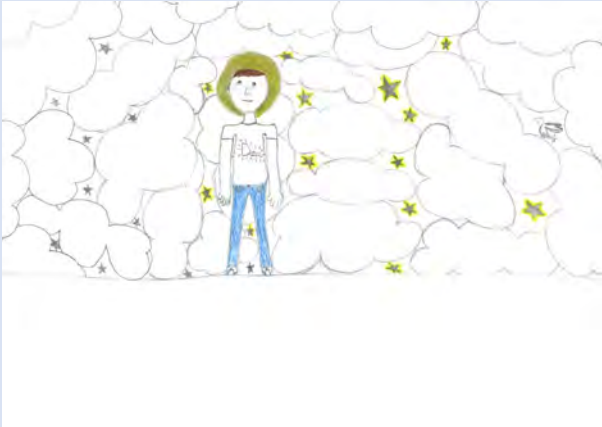
Appendices

Illustrative drawings from the N = 532 French-speaking Swiss sample were provided for each reference and are presented in similar order to Table 1.

1. Traditional Christian references	
1. Heaven and Hell	
	
<p>a. ch16_fr_m_rec_13_11_mel¹²</p>	<p>b. ch08_ge_m_rap_09_xx_tim</p>
<p>13-year-old boy from Fribourg, receiving Protestant teaching</p>	<p>9-year-old boy from Geneva, receiving Catholic teaching</p>

¹² Such unique identifiers appended to every drawing from the sample contain relevant metadata about, respectively (from left to right): the country, the year, the region, the gender of the child, the educative context, the specific group, the age of the child, and the child's name-related letters.

2. God's Paradise



a. ch16_fr_f_rec_14_02_chl

14-year-old girl from Fribourg, receiving Protestant teaching

b. ch15_fr_m_rbe_10_07_thi

10-year-old boy from Fribourg, receiving Protestant teaching



c. ch10_ne_f_psr_08_10_mar

d. ch10_vs_f_pbs_12_11_cam

8-year-old girl from Neuchatel, seen during regular schooling

12-year-old girl from Valais, seen during regular schooling

3. God's celestial court



a. ch09_vd_f_pbu_12_09_jul

b. ch08_ge_f_rap_11_00_and

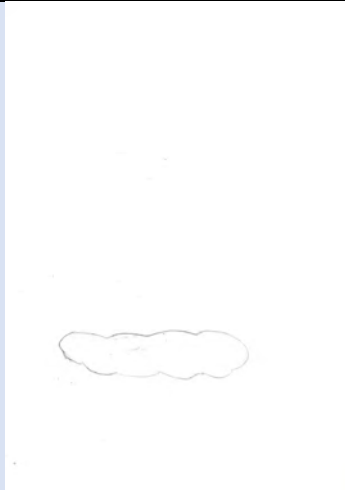
c. ch10_vs_m_pbs_13_01_dan

12-year-old girl from Vaud, seen during regular schooling

11-year-old girl from Geneva, receiving Catholic teaching

13-year-old boy from Valais, seen during regular schooling

4. God's absence



a. [ch10_vs_f_pbs_12_11_lou](#)

12-year-old girl from Vaud, seen during regular schooling

2. References taken from the Old Testament

1. God the Creator/ God's creation



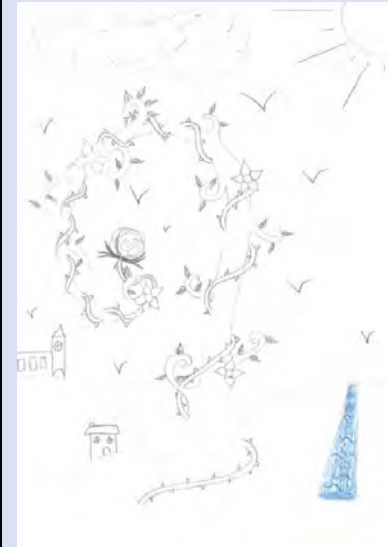
a. ch16_fr_f_rcn_10_03_sas

10-year-old girl from Fribourg, receiving Protestant teaching



b. ch08_ge_f_rap_11_01_mat

11-year-old girl from Geneva, receiving Catholic teaching



c. ch16_fr_f_rcn_12_00_all

12-year-old girl from Fribourg, receiving Protestant teaching



d. ch16_fr_f_rec_13_03_ana

13-year-old girl from Fribourg, receiving Protestant teaching



e. ch09_ge_f_rje_14_10_del

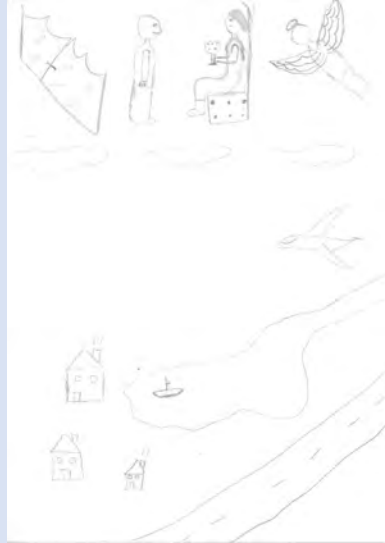
14-year-old girl from Geneva, receiving Catholic teaching

2. God the Patriarch



a. ch10_ge_f_pco_11_04_mar

11-year-old girl from Geneva, seen during regular schooling



b. ch09_vd_m_pbu_14_08_seb

14-year-old boy from Vaud, seen during regular schooling



c. ch09_vd_f_pbu_12_00_jes

12-year-old girl from Vaud, seen during regular schooling

3. God is powerful, our judge, punishing/vindictive



a. ch10_vs_m_pbs_14_08_val

b. ch16_fr_m_rec_14_08_mar

14-year-old boy from Valais, seen during regular schooling

14-year-old boy from Fribourg, receiving Protestant teaching



c. ch08_ge_f_rap_10_03_ale

10-year-old girl from Geneva, receiving Catholic teaching

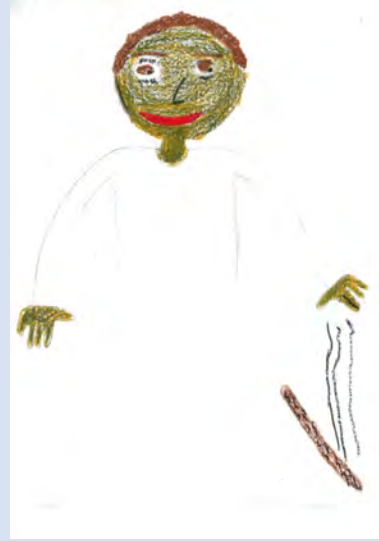
d. ch08_ge_m_rap_07_03_max

7-year-old boy from Geneva, receiving Catholic teaching

e. ch10_ge_m_pco_12_04_ale

12-year-old boy from Geneva, seen during regular schooling

4. Moses and the stick changing into a serpent



a. ch15_fr_f_rpl_08_00_emi

8-year-old girl from Fribourg, receiving Protestant teaching

b. ch16_fr_m_rlt_11_03_kyl

11-year-old boy from Fribourg, receiving Protestant teaching

5. Noahic covenant



a. ch15_fr_m_ras_08_05_nic

8-year-old boy from Fribourg, receiving Protestant teaching









b. ch16_vd_f_rsp_10_01_cap

10-year-old girl from Vaud, receiving Catholic teaching

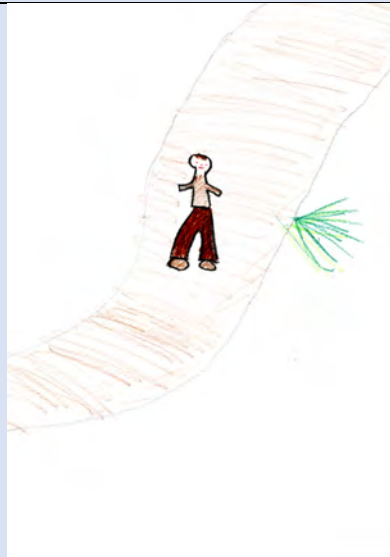
3. Subjects taken from the New Testament

1. God is love/ God is peace

		
<p>a. ch08_ge_m_rap_08_08_ced</p>	<p>b. ch16_vd_f_rcb_14_03_giu</p>	<p>c. ch08_ge_f_rnf_11_08_lor</p>
<p>8-year-old boy from Geneva, receiving Catholic teaching</p>	<p>14-year-old girl from Vaud, receiving Catholic teaching</p>	<p>11-year-old girl from Geneva, receiving Catholic teaching</p>

		
<p>d. ch16_vd_f_rcb_14_02_mat</p>	<p>e. ch16_fr_f_rlt_10_08_jea</p>	<p>f. ch15_fr_m_rpl_06_10_jon</p>
<p>14-year-old girl from Vaud, receiving Catholic teaching</p>	<p>10-year-old girl from Fribourg, receiving Protestant teaching</p>	<p>6-year-old boy from Fribourg, receiving Protestant teaching</p>

2. *God is our friend*



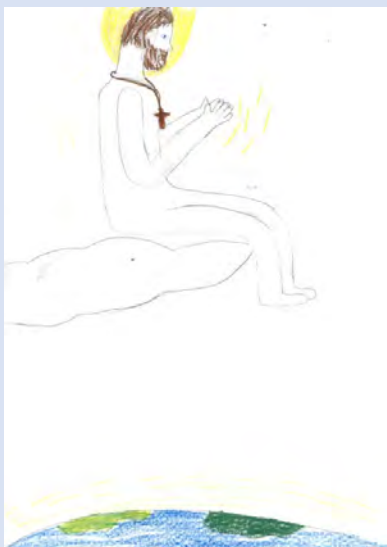
a. ch10_vs_f_phn_07_06_ine

b. ch08_ge_f_rnf_08_03_cla

7-year-old girl from Valais, seen during regular schooling

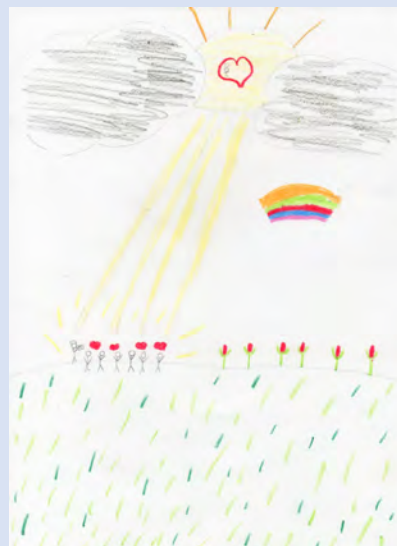
8-year-old girl from Geneva, receiving Catholic teaching

3. God is watching over us



a. ch16_vd_f_rcb_14_09_elo

14-year-old girl from Vaud, receiving Catholic teaching



b. ch10_ne_f_pfo_12_07_lea

12-year-old girl from Neuchatel, seen during regular schooling



c. ch08_ge_f_rap_09_xx_flo

9-year-old girl from Geneva, receiving Catholic teaching



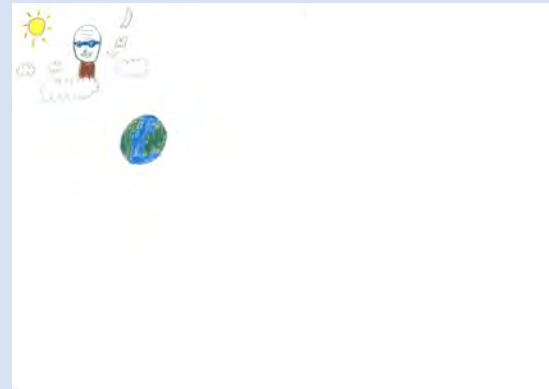
d. ch16_fr_f_rec_13_03_ali

13-year-old girl from Fribourg, receiving Protestant teaching



e. ch16_fr_f_rec_14_00_lau

14-year-old girl from Fribourg, receiving Protestant teaching



f. ch15_fr_m_rbe_10_09_raf

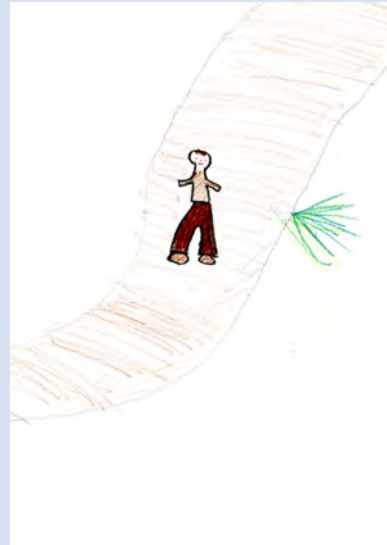
10-year-old boy from Fribourg, receiving Protestant teaching

4. *God is the light/ God is our guide/ God shows us the way*



a. ch10_ge_m_rbc_14_07_lar

14-year-old boy from Geneva, receiving Protestant teaching



b. ch08_ge_f_rnf_08_03_cla

8-year-old girl from Geneva, receiving Catholic teaching



c. ch16_fr_m_rec_12_11_cor

12-year-old boy from Fribourg, receiving Protestant teaching



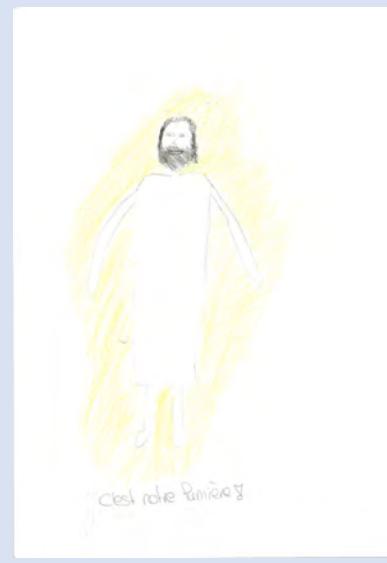
d. ch10_ge_f_rbc_15_01_noe

15-year-old girl from Geneva, receiving Protestant teaching



e. ch16_vd_m_rcb_15_02_raf

15-year-old boy from Vaud, receiving Catholic teaching

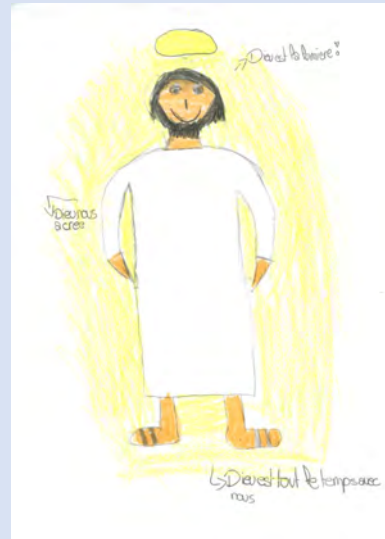


f. ch10_vs_f_pbs_13_07_jux

13-year-old girl from Valais, seen during regular schooling

4. Intricate mixes of central subjects

1. *Mix - light/guide, created man, always with us*



a. ch10_vs_f_pbs_12_10_jul

12-year-old girl from Valais, seen during regular schooling

2. *Mix - God's mystery, God's love, God's peace*



a. ch16_vd_m_rcb_13_11_gil

13-year-old boy from Vaud, receiving Catholic teaching

5. Subjects involving Jesus Christ

1. The Nativity of Jesus



a. ch10_vd_f_pep_09_00_oce

9-year-old girl from Vaud, seen during regular schooling



b. ch16_fr_f_rec_13_03_lau

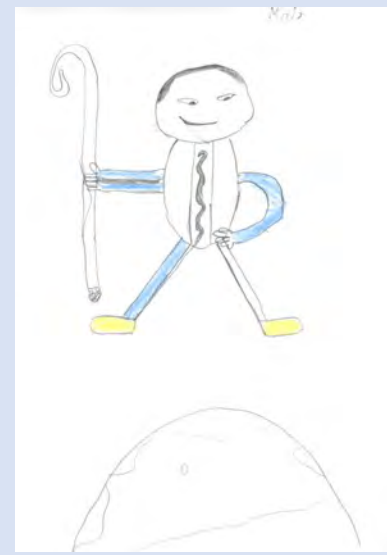
13-year-old from Fribourg, receiving Protestant teaching



c. ch10_ne_f_pcc_10_04_mel

10-year-old girl from Neuchatel, seen during regular schooling

2. Jesus the Good Shepherd



a. ch16_fr_m_rlt_11_09_luc

b. ch10_vs_m_phn_10_00_bor

c. ch10_vd_m_pep_08_08_mat

11-year-old boy from Fribourg, receiving Protestant teaching

10-year-old boy from Valais, seen during regular schooling

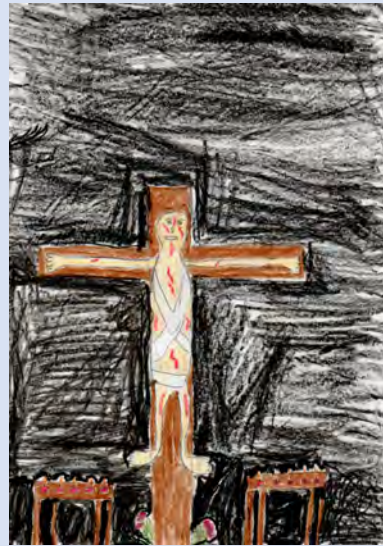
8-year-old boy from Vaud, seen during regular schooling

3. Crucifixion of Christ



a. ch08_ge_m_rap_09_01_ale

9-year-old boy from Geneva, receiving Catholic teaching




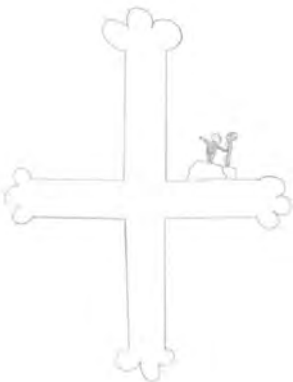

b. ch10_ne_m_psr_09_02_jer

9-year-old boy from Neuchatel, seen during regular schooling



c. ch10_vs_f_phn_08_06_kat

8-year-old girl from Valais, seen during regular schooling

		
<p>d. ch09_ge_m_pco_08_08_tia</p>	<p>e. ch10_ne_f_pcc_10_06_vic</p>	<p>f. ch08_ge_m_rnf_08_01_mat</p>
<p>8-year-old boy from Geneva, seen during regular teaching</p>	<p>10-year-old girls from Neuchatel, seen during regular teaching</p>	<p>8-year-old boy from Geneva, receiving Catholic teaching</p>

4. Resurrection of Jesus



a. ch08_ge_f_rap_07_09_way

7-year-old girl from Geneva, receiving Catholic teaching

5. *The Ascension of Christ*



a. ch09_vd_f_pbu_12_11_mar

12-year-old girl from Vaud, seen during regular schooling

6. The Holy Spirit



a. ch10_ge_f_pco_11_10_mae

b. ch16_vd_f_rsp_10_02_jul

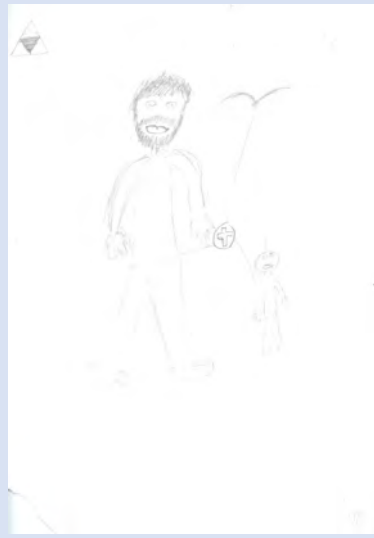
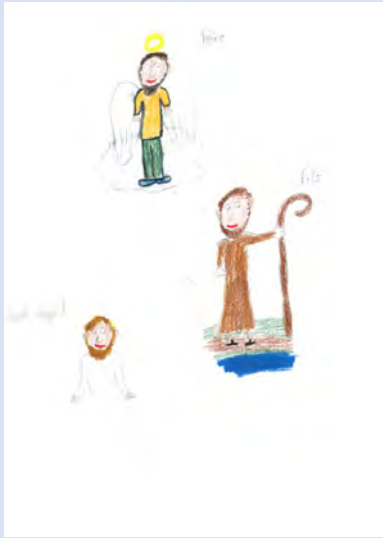
c. ch16_vd_m_rcb_13_09_arn

11-year-old girl from Geneva, seen during regular schooling

10-year-old girl from Vaud, receiving Catholic teaching

13-year-old boy from Vaud, receiving Catholic teaching

7. The Christian Holy Trinity



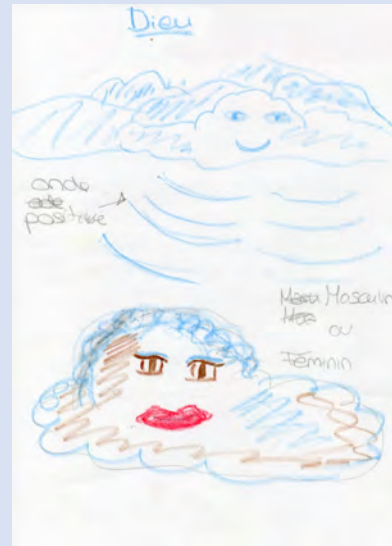
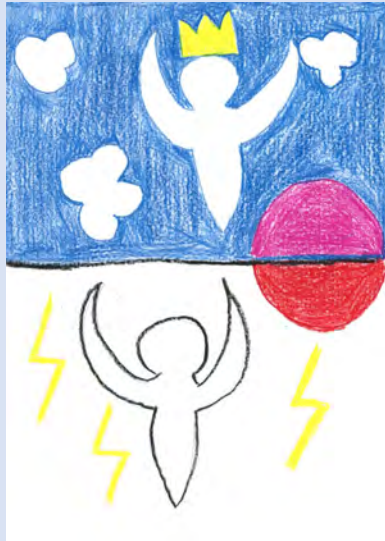
a. ch15_fr_f_rbe_09_01_ail

b. ch16_vd_m_rcb_14_01_jon

9-year-old girl from Fribourg, receiving Protestant teaching

14-year-old boy from Vaud, receiving Catholic teaching

8. Christ's dual nature (hypostatic union)

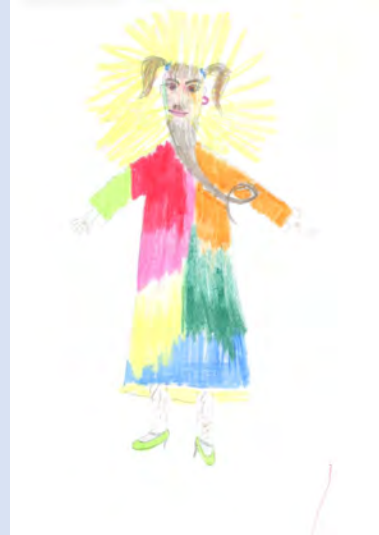


a. ch16_fr_f_rec_13_10_sar

b. ch10_ge_f_rbc_12_11_jul

13-year-old girl from Fribourg, receiving Protestant teaching

12-year-old girl from Geneva, receiving Protestant teaching



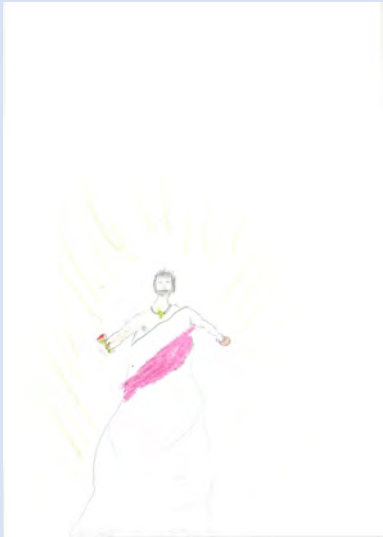
c. ch10_ge_m_pco_11_00_flo

d. ch10_ge_f_rbc_15_04_val

11-year-old boy from Geneva, seen during regular schooling

15-year-old girl from Geneva, receiving Protestant teaching

9. The Eucharist



a. ch09_vd_m_pbu_12_03_don

b. ch09_ge_m_rje_11_08_ant

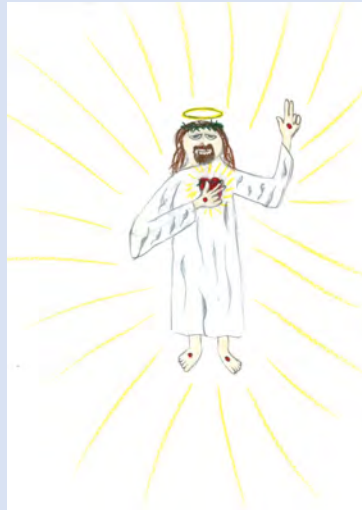
c. ch09_vd_f_pbu_12_01_jes

12-year-old boy from Vaud, seen during regular schooling

11-year-old boy from Geneva, receiving Catholic schooling

12-year-old boy from Vaud, seen during regular schooling

10. *The Sacred Heart*



a. ch16_vd_m_rcb_14_06_tan

14-year-old boy from Vaud, receiving Catholic teaching

6. Subjects widespread across Abrahamic religions

1. *God is unknown/ ineffable/ a mystery*




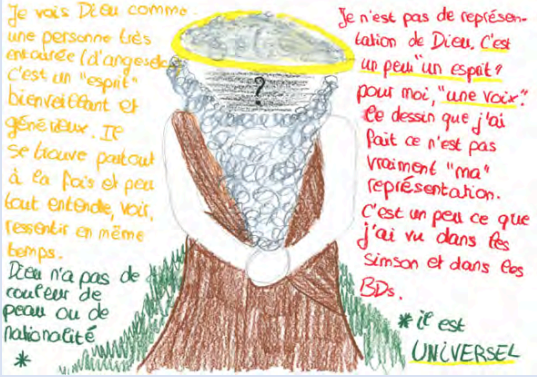
a. ch16_fr_f_rec_13_01_loa

13-year-old girl from Fribourg, receiving Protestant teaching

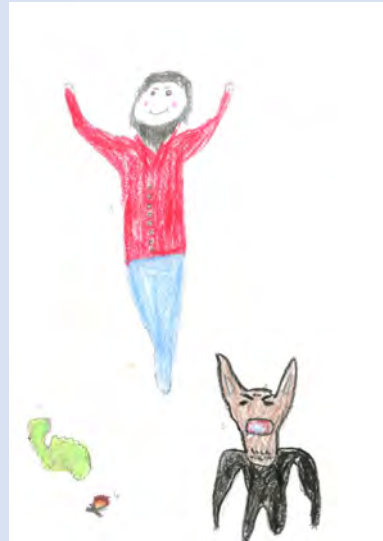


b. ch16_fr_f_rec_12_08_nat

12-year-old-girl from Fribourg, receiving Protestant teaching

	 <p>Je vois Dieu comme une personne très entourée (d'anges) c'est un "esprit" bienveillant et généreux. Il se trouve partout à la fois et peut tout entendre, voir, ressentir en même temps. Dieu n'a pas de couleur de peau ou de nationalité *</p> <p>Je n'est pas de représentation de Dieu, c'est un peu "un esprit" pour moi, "une voix". Le dessin que j'ai fait ce n'est pas vraiment "ma" représentation. C'est un peu ce que j'ai vu dans les Sims et dans les BDs. * il est UNIVERSEL</p>	<p>Je n'ai pas dessiné car je ne sais pas dessiner et que je n'imagine pas comment est Dieu!!!</p>
<p>c. ch10_vs_m_phn_07_01_mae-r</p>	<p>d. ch16_fr_f_rec_13_09_jul</p>	<p>e. ch10_ge_f_rbc_14_09_cat</p>
<p>10-year-old boy from Valais, seen during regular schooling</p>	<p>13-year-old girl from Fribourg, receiving Protestant teaching</p>	<p>14-year-old girl from Geneva, receiving Protestant teaching</p>

2. *God can manifest to humans through several forms*



a. ch10_vs_m_pbs_13_07_luc

13-year-old boy from Valais, seen during regular teaching

3. God is in every one of us

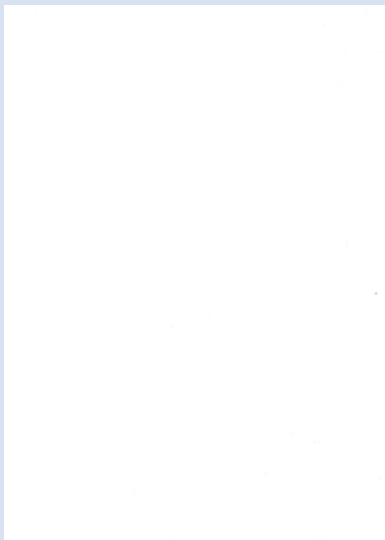



a. ch10_ge_f_rbc_14_10_aur

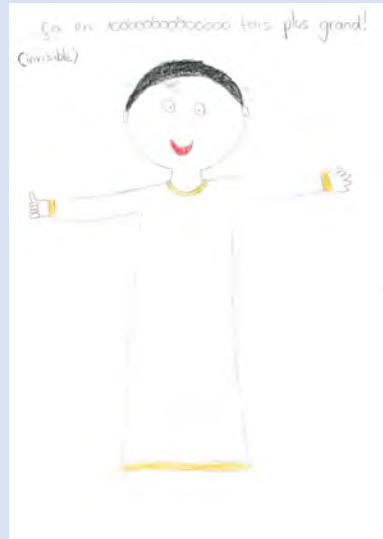
b. ch10_ge_m_rbc_13_04_arn

14-year-old girl from Geneva, receiving Protestant teaching

13-year-old boy from Geneva, receiving Protestant teaching

	
<p>c. ch16_fr_m_rec_14_08_sim</p>	<p>d. ch16_vd_m_rsp_11_00_gab</p>
<p>14-year-old boy from Fribourg, receiving Protestant teaching</p>	<p>11-year-old boy from Vaud, receiving Catholic teaching</p>

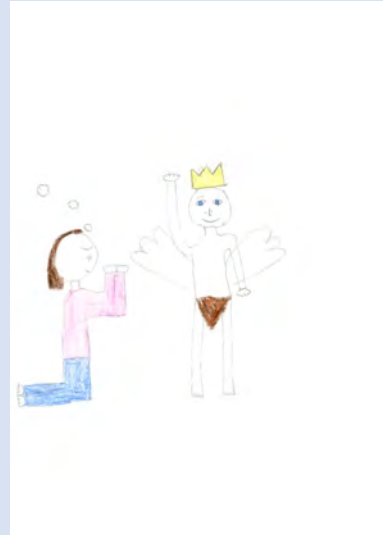
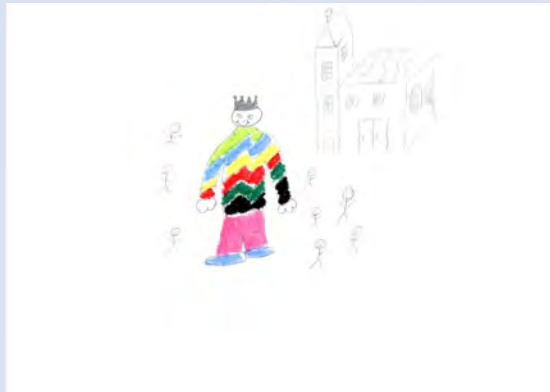
4. *God is big/infinite*



a. ch16_fr_f_rcn_11_11_mon

11-year-old girl from Fribourg, receiving Protestant teaching

5. *God is a king*



a. ch09_vd_m_pbu_13_09_yan

b. ch09_ge_f_pco_10_07_ano

13-year-old boy from Vaud, seen during regular schooling

10-year-old girl from Geneva, seen during regular schooling



c. ch10_ne_m_pcc_10_05_enz

d. ch10_ne_f_psr_08_05_ama

10-year-old boy from Neuchatel, seen during regular schooling

8-year-old girl from Neuchatel, seen during regular schooling

Section Summary - Emotional Expression in Relation to God Representations

The current section has proceeded from a slightly different approach to the two previous ones, and particularly the one addressing humanness and non-humanness. Rather than considering God representations in children as 'cold' or intellectual depictions of the divine, it was decided to appreciate children's drawings of God as potentially reflecting a 'hot' concept. As it has been shown throughout this thesis thus far, God representations were not conceptualized as of strictly one type or another. Instead, they have been contemplated for several theoretical frameworks from which they may be regarded. The current one pertains to how emotional God representations can be. In fact, the beholder cannot but see the obvious presence of emotional expression in most children's drawings of God. As past research has particularly poorly developed on this issue, this section has consisted mainly in constructing new assessment methods, rather than inquiring further into already existing issues.

Exploring the emotionality of God representations in children has pointed to a consistent contribution of religious schooling and gender in the first study. An unexpected result was that emotional expression is not a main contributor. One possible path to take could be to re-assess emotionality as somehow normative. In fact, since the current research on humanness and non-humanness has shown that religious education may be a provider of alternatives to the human being, that is, a sort of repertoire enhancer, so to speak, it could be expected that its role is similar on this emotionality issue. More precisely, by receiving religious education, children are exposed to a series of religious representations potentially exhibiting a great variety of forms at different levels. This may translate into a proclivity to use some of those representations that are not anthropomorphic at all. Similarly, it may also translate into highly emotional representations by a form of reproduction of what one was exposed to. In that regard, and given that other religiosity variables were not found significant, religious education may act either as a variety provider or as a variety limiter, depending on the issue. The common quality between both is being influenced through exposure to representations. It can be assumed that children from this sample were mostly exposed to intense and positive representations of the divine during religious schooling. In the main, this pertains to local norms - hence religious education being called normative. In addition, it could be assumed that being particularly familiar with a concept (e.g., God) through education has the effect to get individuals invest more into it emotionally.

It would be tempting to draw the same normative conclusion about gender. Indeed, girls and boys may be brought up in quite different conditions, in this highly gendered world. Boys might be

less encouraged than girls to express intense or positive emotions, and this may directly reflect on their drawings of God. However, it could also be assumed that girls are more emotionally responsive from biological differences. Without delving into such debates here, it can be estimated that gender in relation to emotional expression is a contributor that acts through non-domain-specific influence.

Along the work carried out for this thesis, it is the second time that religious schooling plays a significant role. The first time occurred with the production of non-anthropomorphic God representations. It is not impossible that there is a connection between its two significant contributions. While analyses on emotional expression did not provide more detailed information about the specific use of esthetic devices (i.e., literal expression, subject matter and formal/abstract properties) some assumptions can be made. Regarding subject matter, the originality of idea could make a drawing particularly intense, for example. There might be a relationship between a God representation being completely non-anthropomorphic and it being emotionally intense. The link is not ineluctably direct, but it might partly explain some commonality. A possible common underlying influence between the facilitation of religious education on the use of non-anthropomorphic representations - as shown in a previous chapter of this thesis, as well as in Hanisch (1996) and Brandt et al. (2009) - and on emotionality may be construed as a matter of personal investment. More specifically, social commitment to the understanding and sharing about a particular concept (e.g., God) may lead to both cognitive and emotional investment. Children being more invested (e.g., through religious education) may find it easier and less cognitively demanding (Barrett & Keil, 1996) to come up with non-anthropomorphic ideas about God alongside feeling more deeply about it. This nuance from the mere socio-cultural exposure effect mentioned above has to be taken with a grain of salt, especially given that other religiosity measures - of which prayer practice could have been expected to tie in with more emotional commitment - were not significantly associated with emotionality.

Additionally, the reception and re-appropriation of traditional religious subjects should receive more attention in future research. Although emotionality can be examined almost independently from the topic at stake, an approach that proposes highly topic-specific measurements has the advantage to take into consideration the possible means of acculturation by which an individual has come to make sense of a concept and various related notions. This may lead, as suggested in the second study, to consider children's understanding of certain subjects on which they operate in their drawings as the vector to the ensuing emotionality that is expressed. It might thus be that, just like the egg and the chicken, one part of the story deals with emotionality as a consequence of what is evoked and assumed to be, next to the possibility that the particular subject is chosen in order to convey some specific emotional expression. Only time will tell. Nevertheless, this is a door

that has been open and that research will have to tackle, with its underlying 'instigator': intentionality in children's drawings.

GENERAL DISCUSSION

This section will present a summary of the current research, its main contributions to the scientific literature and the understanding of children's God representations, as well as a few possible lines of inquiry for future research. After those sections have been addressed, a general conclusion about the entire work will be proposed.

Summary of the Current Research

The current thesis has addressed a series of issues in children's drawings of God collected in French-speaking Switzerland, among participants coming mostly from a Christian (predominantly Protestant or Catholic) background. Participants were girls and boys, aged 5 to 17 years old, who were seen either during religious teaching or during regular schooling. Children provided answers to questions addressing their own religiosity (e.g., i.e., religious schooling, religious affiliation and prayer). Potential relationships between the dimensions measured and socio-demographics - such as age, gender and religiosity - were assessed for each line of inquiry.

Main Findings and Relation to the Scientific Literature

The three main lines of inquiry were: humanness and non-humanness; gender-typing; emotional expression. Each issue took the form of a main line of inquiry, and will be briefly discussed below in regard to: current findings, past research and consistency/discrepancies. A quantitative and a qualitative study was systematically proposed for each one. For more details, the reader is invited to seek information in the relative chapters within this thesis.

Humanness and Non-Humanness

Previous research has opposed a series of terms to anthropomorphic God representations (Barrett & Keil, 1996; Goodman & Manierre, 2008; Hanisch, 1996; Pitts, 1976; Rizzuto, 1979). This line of inquiry was meant to bring more clarity in the use of various terms. Through the construction of a model, clarification could be made about some types of God representations in relation to previous studies. One example deals with the figurativeness of representations, which was addressed in Dandarova (2013). This has helped characterizing children's drawings of God in a more comprehensive fashion and has allowed to relate types of drawings that had not been considered in relation to each other before - e.g., non-figurative and non-anthropomorphic, which contrast with one another.

The current research could replicate a previously observed developmental trend showing an increase in the frequency of non-anthropomorphic God representations (Brandt, Kagata Spitteler, & Gillieron Paléologue, 2009; Hanisch, 1996). Similar to past findings, both age and religious schooling showed a positive relationship with the occurrence of non-anthropomorphic God figures.

However, its main aim was to move beyond exclusive binaries such as anthropomorphic vs non-anthropomorphic. Therefore, human-based God figures were examined for how they may also exhibit non-humanness simultaneously with their humanness. A series of strategies were identified, and fell under the general name of *de-anthropomorphization*, requiring an alteration of the basic humanness of the figure. Age was the only significant predictor, having a positive effect on the occurrence of de-anthropomorphization strategies as well as on the complexity of use (as a matter of co-occurring strategies).

Nevertheless, it could be observed that strategies finer than de-anthropomorphization could be at work in order to emphasize the non-ordinary nature of God representations drawn as human characters. This will need to be addressed in future research. Moreover, although this concerns the majority of God representations from the current data, other types of drawings yet need to be examined in detail in relation to socio-demographic variables.

An additional qualitative study has shown that children may combine *sameness* with *otherness* (Guthrie, 1993) - respectively, humanness with non-humanness - in their drawings of God through fine esthetic techniques, involving formal/abstract properties. The notion of spatiality appeared to be prominent, that is: within the compositional space as well as by emphasizing the materiality of the page.

On the whole, God appears to be a notion that ineluctably draws upon the human being early in one's development. Rather than 'outgrowing' anthropomorphism, children seem to rely on humanness in God with more complexity as they grow older, by combining it with non-humanness. Without benefitting from real-life referents, God representations are ontologically intricate notions that may undergo conceptual change across development (Carey & Spelke, 1994) without totally depart from the human being. A possible conceptualization of such representations might be that God is a hybrid concept (Vicente & Martínez Manrique, 2016) that depends on several other concepts and may exhibit different parts at different points in time.

Gender-Typing

Addressing gender-typing naturally follows from analyzing anthropomorphic God figures. It comes as a logical complement to the study of humanness and non-humanness. However, it has its own salience as an issue and presumably taps into more norm-dependent aspects of such representations, while the first issue seemed to be more ontology-relevant and to reflect deep conceptual changes.

Consistent with previous research (Foster & Keating, 1992) androcentrism of God representations appeared to be prominent. What the current developmental account could show more precisely is that this tendency towards more masculinity (as a matter of frequency as well as intensity) is a function of age: the older the more masculine. Similar to drawings of a person (Arteche, Bandeira, & Hutz, 2010) same-gender preference could also be observed. Altogether, this means that androcentrism was more marked among boys. The addition of a cross-cultural study has confirmed the presence of three main normative sources of influence, which are: hegemonic masculinities (Connell & Messerschmidt, 2005) in large socio-cultural contexts; androcentrism in the Christian religion; same-gender preference.

Emotional Expression

This line of inquiry on emotional expression associated with God came from an attempt to apprehend drawings of God differently than mostly through their representative qualities. Although some aspects corresponding to other properties than the content of composition had been examined in the qualitative study of sameness-otherness in a smaller sample of drawings, this account of emotionality would go one step further and employ methods borrowed from the area of expressive drawings in developmental psychology. Particularly the quantitative study, has shown that a drawing of God could be considered as a whole, without focusing exclusively on the God figure. On top of that, compared to the two previous lines of research, this approach has consisted in the examination of a more 'hot' - vs 'cold' - facet of children's God representations.

It was revealed that gender and schooling were consistent predictors of emotional expression, both for intensity and valence. More specifically, being a girl and receiving schooling were positively associated with stronger intensity and more positive valence. Age was only found to play a minor role in emotional valence, having a positive effect: the older the more positive the drawing.

The minor contribution of age was overall surprising, especially when looking at the scientific literature on children's expressive drawings, expecting an overall age-incremental effect on emotionality (Jolley, Barlow, Rotenberg, & Cox, 2016). This has pointed to two main possible interpretations, which could be concurrent. One such interpretation might be that the religious domain 'behaves' differently from other domains when it comes to emotionality, which deals with the

topic of the task. Another possible interpretation could be that two opposite trends in the data cancelled each other out: the older children, who are supposedly more skilled at drawing, could mean to express less emotionality, and younger children may be willing to communicate much of it without really managing to. This would lead to a 'flat' developmental pattern. However, from a methodological viewpoint, there are major differences between the 'free' task of drawing God as one images and drawing an emotion or an entity experiencing a specific emotion. The former does not necessarily entail much emotionality - even though the topic would naturally lend itself to it - and the latter consists mainly in performing in response to a task specifically targeting emotionality.

On the whole, if emotional expression in drawings of God is not primarily developmental, it seems to depend much on the context one lives in - through the social organization of gender or education. One may still argue that gender differences reflect psycho-biological differences between females and males. It is not possible, at this stage, to conclude more precisely about the psycho-bio-social underpinnings of emotional expression in this context.

Regarding religious education more specifically, its effect may be found in two different places. Firstly, education might mean more exposure to certain forms of representation. Keeping in mind the contrasted effect it had on the use of non-anthropomorphic figures and de-anthropomorphization strategies, it could be assumed here that religious education provides forms that become part of the child's repertoire of God representations. If those representations are predominantly positive and intense therefore it is more likely that the child will reproduce similar qualities. Secondly, another type of interpretation might contend that religious education, through time, personal and social commitment, comes with acute familiarity with the topic at stake - in this case: God. More familiarity with that topic may entail personal investment and thus much emotionality - meaning more particularly intense emotions.

Both interpretations might have their part of truth to different degrees of contribution to the resulting emotionality in drawings of God. One caveat, however, comes with the second one based on three observations. One first observation is that while it might be convenient to explain intensity of emotions, it is not best suited to account for positive emotionality in drawings. Indeed, investing personally into a particular topic - such as God - does not automatically imply that the strong connection will be positive. A second observation is that while theories of socio-cultural exposure might well integrate the fact that religious education had a positive effect on intensity and valence, no other religiosity measure (i.e., religious affiliation and prayer practice) did. Personal investment into a concept appears less able to explain this aspect, especially since it would rather suppose that prayer practice in particular - being maybe more 'relational' to the notion in question - would bear an effect, if an effect of religiosity should be expected. Now, it could be argued that the related measure

was not refined enough. It is a question that cannot be resolved as for now and should be tackled in future research. Eventually, a third observation deals with the general results from the current thesis, suggesting that religious education might be a provider of possible God representations, as shown in the case of choosing non-anthropomorphic representations.

Nevertheless, it is not necessarily the case that religious education has a similar type of effect (e.g., socio-cultural exposure, personal investment) on all issues. The case of gender-typing is a prime example, and the absence of significant effect in that regard - at least in the French-speaking Swiss sample using dimensional measures - hardly supports either interpretations here. In fact, if it were only a source of exposure, then gender-typing should logically be fostered towards more masculinity from early on. As for personal investment, same-gender preference should be heightened in the context of religious education, given that same-gender brings more perceived closeness (Eshleman et al., 1999). Yet, no effect could be observed. This brief reference to gender-typing is relevant to show that the reality of religious education might be even more complex than 'just' having to decide between two kinds of influences. Still for the reasons laid out above, the preferred stance in the current work draws mostly on a socio-cultural effect.

Leading back more specifically to emotional expression, it was also suggested to depend on the religious subjects that are actually depicted and on the understanding or interpretation the child has of them. This was observed through a qualitative analysis carried out on a sub-set from the large sample of drawings. In addition to the main findings, this exploratory analysis has shown that emotionality may be shaped around complex topic-specific content, which brings possible mediators (e.g., idiosyncratic understanding of religious subjects, religious denomination-dependent interpretations of such subjects, point of focus in the composition).

From a Broader Perspective

Overall, the three main issues addressed in the current work seem to tap nicely into different parts of the concept of God and to highlight the respective roles of socio-demographics. Together, they give a more comprehensible picture of God representations in children. Ontological belonging (e.g., humanness/non-humanness) seems to be eminently developmental, and its relationship with age likely reflects cognitive development. Gender-typing depends also on age, but it could be argued that in this case this reflect socio-normative awareness as well as gendered education and socialization. Such socialization is expressed also through gender differences between participants, while it is not the case for ontological belonging. Moreover, religious schooling has an impact on the choice of alternatives to the human being (i.e., completely non-anthropomorphic representations) but it does not affect gender-typing. Therefore, gender-typing may depend on broader socio-normative

influences than the choice for ontologically determined representations. Emotional expression appears to depend mostly on gender and schooling but hardly on age. This means that emotionality associated with God may be more relational and depend much on one's socio-cultural background. From this perspective, the effect of schooling may be more to act as a main source of cultural exposure. In the case of ontologically determined representations, religious education could be a provider of multifold possible representations but mostly positive and intense ones. Additionally, the influence of schooling may also be to make one relate to God more closely, which should logically lead to a similar effect on emotionality (i.e., intense and positive).

Religious affiliation and prayer practice were never significant. One possible explanation for this is that identifying according to a specific religious tradition or denomination is not always very clear to children and the younger ones often get confused what to choose when answering the religiosity questionnaire. As for prayer practice, its assessment was mostly likely too broad, and again, some children do not systematically associate the action 'to pray' with what it actually means.

Why Other Issues Were not Addressed

Other issues could have been addressed in this thesis, and among these: children's utilization of colors - and especially yellow - in relation to the divine; spatial position and dimension of the figures; the amount of drawing esthetic models. There could have been much more topic to go with. The reason for the three main lines of inquiry to be addressed, among many other possible ones, is threefold. Firstly, anthropomorphism-related research and gender-typing had already been developed in previous studies, and it was important for the current work to be in the lineage of what past research had done, by expanding previous findings. Secondly, emotionality is an issue that has been addressed tentatively in previous research of drawings of God and could be expanded properly. Moreover, research on God representations outside the area of drawings had also been initiated, which could be related to. Thirdly, those three issues worked well together, with humanness/non-humanness tapping into 'cold' aspects of representations and emotionality addressing 'hot' ones. Gender-typing followed naturally from human-like representations and constitutes a socially crucial issue nowadays, maybe more than ever. All three issues seemed to tap into sensibly different part of God concepts. Furthermore, they should be differently influenced by socio-demographic variables, which was confirmed through the results.

Scientific Contribution

Besides the main findings and their relation to the area of children's drawings of God, the section below will attempt to put them into perspective in relation to their contribution to the wider scientific literature.

Co-Existence of 'Opposites'

Ambivalence

This is a term that has been used by Hanneke Schaap-Jonker and Hanneke Muthert (Netherlands) in a workshop organized in May 2018 with several teams from the international project 'Drawings of gods'. They used it in reference to preliminary findings based on attachment measures. 'Ambivalence' generally refers to an in-between state, be it for emotional attachment or other issues. The co-occurring two states are endorsed to an extent that does not necessarily lie some point in-between, but may display them both to a fair extent. This is particularly true when two dimensions are measured in parallel. In other words, one may consider a bipolar scale with two poles indicating a specific characteristic each - for example, one may consider black and white on a bipolar scale - or instead use two continua to measure semi-orthogonal dimensions - for example, levels of black and levels of white. In the series of studies carried out for the current research, the former can be found in the use of an emotional valence scale. Positive emotionality represented one end of the continuum and the other end was taken by negative emotionality. The utilization of two scales for femininity and masculinity, respectively, is an example of the latter, adopting two continua and therefore not determining in advance that a drawing could not reach extreme scores on each aspect. Both methods are closely related to what the aforementioned researchers have spotted on their own about 'ambivalence'. Although they have made that observation from using a categorical system, the epistemic foundations are reasonably similar.

Elaborating on such foundations, this contradicts the notion of *bivalence* for example. In logic, a system based on bivalence would posit that there are only two possible truths. Adopting a Boolean approach reflects such logic system. The current research has strived to tap into ambivalence, in the sense of co-existence of notions that would generally be held as opposites, as much as possible. The main incentive to do so is that researchers can even subjectively perceive the recurrent co-occurrence of apparently conflicting aspects. This was proven to be true in the current work through: human-non-human, feminine-masculine, and negative-positive.

These thoughts do not stand against the use of a binary system per se. In fact, a classification system based on a Boolean decision-making can be found in the quantitative study addressing

humanness and non-humanness. Without denying its relevance, still reaching out for more flexible approaches throughout the current work was motivated mostly from the apparent intricate nature of God representations, as it has been shown on each of the main issues being addressed.

Ambivalence Being More Marked on Certain Issues

Throughout the current work, it could be noticed that the co-occurrence of apparently contrasting qualities was not evenly represented across each of the main issues. Where it was the most prominent is in the coexistence of humanness/sameness and non-humanness/otherness, on the one hand, and in femininity-masculinity, on the other hand. Emotional valence was predominantly positive, and contrary to expectations ambivalence (i.e., 'of equal valence') was not particularly spread across the sample.

It is important to begin this reflection having in mind the similarities that were previously drawn between the three main issues. If gender-typing and emotional expression may be understood as especially liable to one's socio-cultural environment - including education - gender-typing and ontological belonging appeared to depend strongly on one's development. While emotional valence was slightly influenced by age, emotionality overall was not found to be primarily developmental. A resulting assumption may be that frank ambivalence lies more likely within qualities of the divine that are strongly developmental. This may reflect basic differences in the apprehension of each 'camp' of issues. Conceiving of God along the lines of humanness and non-humanness, or attributing some gender(s) to God presumably deals with basic conceptual foundations that one constructs about this notion. However, the emotionality associated with the notion of God may involve a more in-context perspective - for example, God in relation with the world - and the attribution of general emotional traits appears rather stable across time. Such stability, maybe logically, may not lend itself to ambivalence. In fact, ambivalence seems resolve itself on the gender-typing issue, with a tendency towards greater masculinity and lesser femininity with age. It is only in the case of ontological belonging that ambivalence appears to increase with age - and as suggested before, the idea of a resolution of that ambivalence through non-anthropomorphic figures is most likely wrong.

Another aspect to take into account is that gender-typing and ontological belonging both focus on the God figure itself, while emotional expression was measure on each drawing as a whole. Yet another element to bring up is that ambivalence was not observed to a great extent for emotional valence, which is the only line of inquiry that did consider all drawings at a same level. In that regard, it did not focus exclusively on anthropomorphic God representations, unlike the two other issues. This is close to the previous argument, but it targets the nature of the God figures that were analyzed, rather than the question of whether or not the entire drawing is examined. Those two arguments tap

mainly into methodological decisions that may have produced such divergence in the resulting ambivalence between some of the main issues.

On the whole, beginning by pointing to emotional expression as an 'odd' to ambivalence, it has turned out that it might actually be the case of ontological belonging, through a consistent increase of humanness and non-humanness with age. Consequently, it may be argued that ambivalence is not likely to come to some resolution when deeply conceptual qualities of God representations are considered. In addition, this issue stands out from the other two by not depending on other variables (from the ones measured) than age. This may suggest that ambivalence in that context is mere complexity, rather than 'indecision'.

What is a 'Mature' God Representation?

Drawing Upon the Case of Anthropomorphism

If there was anything controversial about the status of various God representations it is their level of so-called 'maturity'. Different researchers with a background in Christian theology have suggested that religious education may contribute to children developing more advanced representations of God (Bucher, 1992; Hanisch, 1996; Siegenthaler, 1980). Classically, such an assumption has found ground in Hanisch (1996), whose results pointed to a similar influence of religious socialization and age on children's drawings. More particularly, older children drew God as non-anthropomorphic more often, so did children being acculturated to religion (in this case, the Christian tradition). In addition, religious children appeared to use non-anthropomorphic representations earlier than non-religious children. Consequently, if any variable goes in the same direction as age, it should mean that it leads to a better grown output - or more 'mature'. At least, it is what has been claimed.

The current research however does not support this interpretation. Findings on the use of humanness and non-humanness have shown that the majority of drawings of God made by children remain somewhat anthropomorphic, although there is an increased co-occurrence of non-humanness with age. As for drawings depicting God as non-anthropomorphic, those also became more frequent with age. Now, the problematic result for researchers who have put forth their 'maturity' effect assumptions about religious socialization/education comes from one particular observation in the current data: religious education only had a positive effect on the occurrence of non-anthropomorphic God representations but not on the increase of non-humanness in human-like God figures. This was central in teasing apart the roles of cognitive development and religiosity. Religiosity, as religious education, was instead suggested to be a provider of diversity of representations, as extending one's repertoire of possible depictions in answer to this domain-specific task.

An additional result that must help shed even more light on the maturity-assumption can be found in the current findings showing that God figures appear to follow a rather normative course to gender. More precisely, older children, both girls and boys, are more likely to draw God with exacerbated masculinity and decreased femininity. Nowadays, one would have a hard time claiming that masculine God figures stand as an endpoint towards which all children should be guided. This would be downright outrageous.

It is understandable, at a theological level, why researchers find it tempting to deem representations of the divine from which humanness is absent more mature. This underlines a mere difference between God and the human being. However, empirical research in psychology does not back up this view. Firstly, the role of the human being, as a concept, was revealed as essential to the development of the God concept throughout childhood in the current work. The mention of “throughout” childhood is important here, as it emphasizes that children do not necessarily ‘grow out of’ basic anthropomorphic figures, but draw upon them.

Rather than speaking about more advanced God representations, it may be more accurate to focus on their level of differentiation from the human being, at a conceptual level. This of course draws away from the mainly theological concerns brought up by the aforementioned researchers. Indeed, the essence of the current work was psychological, and more specifically developmental. Following the same line of thought, it could generally be contended that even anthropomorphic God figures need to be understood from the child’s perspective, which often involves great levels of reflection and complexity, as captured during qualitative interviews.

Adaptive God Representations

The considerations above do not imply that the question of maturity should be discarded from the study of God representations, only that it might lie elsewhere than God’s ontological belonging. From a clinical point of view, maturity in the religious domain may pertain to the one of relations with God, just like with one’s parents (Rizzuto, 1979). Along the same line of thought, it has been shown that depending on the particular individual and their particular relation to God both anthropomorphic and non-anthropomorphic God representation can be maladaptive and have a harmful effect on one’s psycho-social functioning (Goodman & Manierre, 2008). This relates to a study conducted among individuals diagnosed with borderline personality disorder. In that regard, a so-called ‘abstract’ God figure (i.e., a sun) can leave the person distraught from the ungraspable and unrelatable divine while a very tangible human-like God figure may appear awfully judgmental, leaving one overwhelmed and prostrated.

The essence of the current thesis did not lie in clinical practice, and therefore did not attempt to assess the level of adaptiveness of God representations. It is not impossible that the notions of ontological belonging and gender for example play a part, but it seems like no direct link should be drawn, as this implies the complex analysis of individuals involved in many different situations and relations, with their own worldviews. The same goes for emotionality, although the connection with clinical aspects may be slightly more obvious. For example, associating the divine with strongly negative emotions or ambivalent ones may be problematic. But once again, this all depends on the particular person concerned, as someone who is not religious at all may see an easier outcome to such view than someone to whom God is important.

Cognitive Development and Culture as a Provider of Representations

Referring to Traditional Representations to Create

It has been suggested in the current work that children may rely on traditional representations that they know in order to respond to the task of drawing God. This can belong to the religious domain to which children have been exposed. This point was emphasized when addressing the possible relationships between religious subjects and emotionality in the qualitative and exploratory analysis of the French-speaking Swiss sample. What is certain is that children do not only duplicate what they have seen, but they produce creative and original compositions resulting from their own understanding of the symbols and religious references they make. On the issue of emotionality, it could be seen that originality of idea clearly contributes to the perception of intense emotional expression. For this, children bring forth a usual depiction of God or match together ideas that would usually not go together. In order to achieve that, they manipulate symbols borrowed from various domains, including the religious domain. A striking illustration of a creative drawing of God is the one of Santa Claus sitting on a cloud with a halo over his head. Originality of idea may also come from a reference made to a specific - apparently non-relevant to the task - domain without mixing it with anything else. Such an example lies in the utilization of the character Link, from the video game *Zelda*, playing the ocarina.

As it has been observed, marking non-humanness in humanness (e.g., through de-anthropomorphization) happens to take place by including religious symbols and scenarios that indicate the God figure does not entirely belong to the human category. The most prominent ones are halos and auras, as symbols, and skies and clouds, as scenarios into which the figure is put. This also happens through central human characteristics lacking from the God figure, which involves de-anthropomorphization within humanness.

On the whole, mobilizing traditional representations does not inevitably imply the absence of creativity, and even if not always greatly creative, drawings of God are certainly individual and reflect one's own subjectivity.

That subjectivity is important and in an ideal world, researchers would systematically have the time and resources to investigate deeply into that part of the data, even for quantitative studies. This would grant access to the reception processes involved in the understanding of God. More precisely, accounting for images of all sorts that bear influence on the end product that is a drawing of God made by a child would be highly beneficial. Unfortunately, the reality is often else.

Exposure to Cultural Artifacts and Copying

Moving on from this point to children's exposure to cultural artifacts, such as religious paintings, animes or comic strips, an alternative interpretative system will be suggested. It will consist in a radical reinterpretation of the results, and should be mostly considered a challenge for future inquiries. Mainly as a thought experiment, it could be contended that all findings from the current research reflect cultural exposure more than anything else. Going along that line, the positive effect of age on increased non-humanness in human-like God figures could signify that children grow more aware of common religious references that most of the time imply a non-human nature, and export them to the context of their drawing. This would mean that creativity is not theoretically discarded from the game, but that mere cultural reproduction does produce a major impact on the outcome that is left for interpretation. From this perspective, combined sameness-otherness would not in itself reflect conceptual complexity of God figures, but only awareness of what is communicated in one's cultural background. The same applies to gender, and the observation that most visual representations as well as textual descriptions of the divine in the Christian tradition are male. Becoming more conscious of this with age would likely lead to drawing more masculine figures, which was observed in the current data. Similar to this is the case of emotional expression, through intensity and valence. Most visual depictions of the divine in a Christian context are both compelling and very often positive. If the data were to the greatest extent by mere inspiration of what the children-artists see around them, an almost exclusive imputation to cultural exposure would have to be made.

However, it is not sensible to impute resulting drawings of God uniquely to a bland and unreflected reproduction of what children have seen. Their keen assessment of the divine and the deep thought they can put in such drawings is supported by observations made during qualitative interviews that were conducted during the development of this doctoral work. Qualitative interviews will be discussed further on below.

Furthermore, such a view would struggle to explain differences based on the participants' gender, which could hardly find ground in acute awareness to one's surrounding.

In the main, this rather provocative thought experiment has the merit to bring to the forth a source of influence that is only poorly understood on this topic yet. By cultural exposure, the reader may be willing to also gather the following potential contributors: the local sub-culture reigning in the classroom during religious teaching, the parental education and how religions are discussed (if at all) at home, what the nowadays' discourses about religions are, for example in the news. Overall, it taps into all variables that may have a substantial impact on children's representations of God through mere mimicking. Of course, it is not entailed that pure copying would be at work in the absence of all reflection, but it suggests that such sources of influence could be sufficient for the subjects to attend to answer the task of drawing God.

A General Trend Towards Shared/Conventional Cultural Forms?

A tentative developmental observation may be that children are progressively growing to produce more conventional forms of God depictions. Without disregarding original ideas that children put into such graphic compositions, this observation is general. It is also based on the resulting outcome for the dimensions being measured. For this, the content of relatively traditional representations is not strictly involved. There is in fact a fine, non-contradictory, nuance between this stance and the one advocated in the following sub-section above: 'Referring to traditional representations to create'. Differences will be explained throughout this argument.

In accordance with findings from the current thesis, this was upheld through all three main lines of inquiry, up to some point: masculine gender-typing, mixed humanness-non-humanness, and positive emotional valence. Such qualities attributed to God are fairly evocative of God representations being communicated in social environments mainly influenced by Christianity.

The actual difference with the previous position on traditional vs original representations lies in a content vs properties distinction. Original representations may be considered for their very content - for example, whether a drawn God figure has a beard and is seated in a throne as a patriarch. Considering the properties of God representations instead, the actual content may not matter that much, besides the ideas that are conveyed. For example, if a Santa Claus-like figure may be used to depict God in a drawing, although such a gesture presents a certain degree of creativity, it may bear properties conventionally attributed to the Christian God: it may have a beard (standing for masculinity), be a human-like celestial being (humanness-non-humanness) and be positively connoted (positive valence). Despite sharing properties with conventional representations of God, it could be argued that this closely fits the image of Santa Claus otherwise. This is in line with the current

argument. Why Santa Claus and not any other cultural representation? Analogical thinking presumably plays an important role in this graphic gesture. While Santa would otherwise be expected to carry such traits, those being presented in the context of a drawing of God are not trivial. There is a leap being made from one type representation to another all the while maintaining those core characteristics.

If cultural (including religious) representations are *semi-propositional* (Sperber, 1975, 1996), social affordances permit (or not) to adapt certain forms to be used as shared *cultural analogies* (Kaufman & Clément, 2007). In that respect, a developmental progression towards more conventionalism at a properties level (vs content) would presuppose that children get to master cultural codes and are better able to use socially shared representations for the topic at stake (in this case, God). Moreover, it is expected that children become more aware of adults' testimonies about various types of ontologies, including beings such as God (Harris & Koenig, 2006; Harris, Pasquini, Duke, Asscher, & Pons, 2006).

From the observation of growing conventionalism regarding the properties that were examined in the current work (i.e., gender, humanness and emotionality), one may contend that resulting God representations are in any case deeply metaphorical. Children may proceed to drawing analogies without meaning that their drawings have to be taken literally. This will be further nuanced in the below section reporting on exploratory qualitative interviews. In any case, employing analogies permits to create connections between domains and to acquire knowledge about a new conceptual system (Vosniadou, 1989). Knowledge acquisition of complex concepts may also be supported by the utilization of multiple analogies (Spiro, 1988), like it is likely the case of God. The analogies being used should deeply influence the concept at stake. For example, drawing parallels between an atom and the solar system will inevitably orient the way one conceives of atoms - e.g., adopting a mechanistic view. Similar to this, imagining God as a man that also endorses non-human qualities plausibly indicates deeper conceptual relations between and within domains (e.g., human and non-human beings, intentional beings, and so on). Despite the potentially metaphorical nature of God representations being depicted in children's drawings, those conceptual relations may be a common denominator to many different metaphors. Therefore, analogies may be worth examining insofar as they testify for such conceptual characteristics of God representations.

It has been shown that the metaphorical nature of cultural representations can happen to be socially forgotten (Johnson, 1981; Miller, 1979). This means that a given representation comes as a whole, that is, a standing specifically for the concept at stake, without disconnecting the different parts it is made of. An important conclusion from the current thesis, in that regard, was that while this might be

true of adult individuals, children may need to first develop a sufficiently precise understanding of each part that analogies are made of in order to utilize cultural analogies in their drawings of God.

Finally, children may reproduce cultural analogies because of acculturation to predominant forms provided in their socio-cultural environment. This does not restrain them from attaching various perspectives to similar - shared - forms. For example, for God being a light, several participants may affix radically different meanings: one may think of God as a guide, and another one may consider God as light to symbolize purity. Such idiosyncrasies will be discussed in more detail in the section below.

Image Understanding and Discourse about Drawings

Image understanding is an important point that may have been measured, should time and resources have permitted. This point stands at the crossroads between the previous one on exposure to cultural artifacts and idea, on the one hand, and how children make sense of what they draw (see the section about qualitative interviews below), on the other hand. Although examining the development of children's drawings is already quite complex, researchers should ideally assess how children's understanding of pictures evolves with age. A well-known account of this can be found in Parsons (Parsons, 1987), who describes how children make sense of images they see and what they tend to focus on at different ages. He has proposed a stage theory of the understanding of pictures, which may be useful to examine the production of pictures (e.g., drawings) more accurately. Similar to an aspect that has been underlined above: the use of certain features may proceed from a radically different approach depending on the child's age or religious background, for example. The understanding of esthetics may be a major factor here, based on one's cognitive development or familiarity with how certain symbols are connoted in a particular context about a particular topic (e.g., God). An illustration of this may be the use of a dove, which to some children represents the mainstream acknowledgment of peace, and to others refers specifically to the descent of the Holy Spirit in the Christian tradition.

Exploratory Qualitative Interviews

In total, five interviews were conducted individually with children participants one year after they had taken part in the quantitative research on drawings of God. Participants were: a 10-year-old boy, an 11-year-old girl, an 11-year-old boy, a 15-year-old girl, and a 15-year-old boy. Additionally, a religious educator, who was 23 years old, could be interviewed as well. All participants had been seen during religious schooling when taking part in the larger quantitative study one year earlier. The aim was twofold: firstly, to understand how children make sense of their own drawings of God as well as of other participants'; secondly, to trace individual development using a longitudinal framework (one

year apart). It is the first part that will be helpful to the current argumentation. It is also worthwhile for the reader to notice that this work is intended to be submitted for publication in the future, but could not, in the context of this thesis, be analyzed sufficiently in depth to lead to an actual study.

Research questions were similar to each of the three main lines of inquiry that constitute the current thesis. However, a central interest lay in the interpretation that children would give about those drawings according on all three lines. A semi-structured interview scheme was adopted and interviews took place over two sessions (respectively addressing one part of the aim and the other). It is worthwhile that the small number of interviewees is due to a very low response rate. It is likely due mostly to both the time taken by the interviews (two times about 30-45 min.), previous participation in the (quantitative) study already, and immersion of the researcher in their homes for the time of the interview sessions.

Given the small space that can be given to findings from those interviews in this chapter, only essential observations were reported. There are three of them.

One first central aspect that came out of the interviews was that children may mobilize symbols that give a certain story when looked at from the common daily perspective that they would usually be considered, even though they append specific meanings that only them know about. Those meanings are not made visible in their drawings. This points to possible discrepancies between the graphic outcome (i.e., the drawing) and the ideas around it, and those contrasts may change depending on the participant considered. It is only through the child's discourse that the researcher happens to properly endorse an *emic* perspective. This was particularly striking regarding two of the three issues: gender-typing and humanness/non-humanness. A girl who was 15 years old at the time clarified that her use of obvious masculinity, through the inclusion of a beard, was meant to refer to wisdom, and not the idea that God would be male. In fact, to her own understanding God was greatly wise, and this could be underlined through the inclusion of a beard on God's face. Concerning humanness/non-humanness, several children have mentioned that it appeared easier to them to draw God like that, for example to point to its presence near them, but also insisted that they 'knew' God was not like that. However, when asked further, they could not provide a clear idea, and seemed out of word to explain. This metaphorical use of the human being was also supported by some descriptive texts of drawings collected for the quantitative study.

As a general rule, for two drawings of God looking very similar, it is not impossible that children come about to explaining them differently at different points in development or based on their respective religious backgrounds. Producing a completely human God figure may not have the same significance for a 7-year-old who is rather distantiated from religious matters or for a 17-year-

old who has done his confirmation in the Catholic church. If this research has produced accounts of how specific dimensions in children's drawings of God may show variations mainly at a cohort level, it may benefit in the future from the addition of children's idiosyncratic understanding of their own productions in more details than short descriptive (often mechanistic) texts. Indeed, while broad trends could be highlighted on specific issues, this does not mean that all participants showed a similar tendency at an individual subjective level. The underlying interest deals with the identification of variations where there are no apparent differences, given that all changes do not inevitably express themselves through drawings. This consists in making a difference between a phenotype, which is the drawing, and the genotype, which is the subjectivity that has produced it with relative intentionality. In that regard, intentionality is also an underlying notion to such considerations.

A second central aspect, which is closely linked to the previous one, pertains to the distinction between metaphorical and representational uses of symbols by children in their drawings. A 15-year-old boy had drawn God as a round source of light during the interview (as well as one year before that). When asked more precisely about the meaning behind that light, he emphasized that he actually perceived God as such, as a beautiful light that shines. Symbolizing God as a light can be regularly seen or even heard, as it is 'showing us the way' for example. However, in this specific case, after further questioning, the interviewee seemed to hold on to the actual representational status to give to his drawing. This is a major observation for a series of reasons. This confirms the current endeavors to discard the idea of labeling some drawings of God as abstract or symbolic. The notion of the divine can be abstract if appraised as something of which no one has a real-life example to refer to - apart from cultural productions. Characterizing a drawing of God as abstract is problematic because it usually refers to abstraction abilities, which cannot be accounted for in a drawing meant to make concrete, through the use of marks, a given notion - which itself may be considered abstract although it would not reach consensus and would require to be specific about the religious tradition that is concerned. Symbolic is problematic too, and this case is an excellent example. Light would generally in the scientific literature on God representations be defined as 'symbolic' or 'abstract' (Goodman & Manierre, 2008; Harms, 1944; Pitts, 1976; Rizzuto, 1979). From this point on, after reflecting upon this case, no research could then claim again that a class of elements is abstract or symbolic more than others without acknowledging of the specific meaning the child-artist had affixed to it. Abstract may instead be used in relation to the arts, which is acceptable, but has not to be confused with the theoretical psychological significance. Therefore, one should be cautious when examining drawings of God not to go beyond that which can be assessed. The notions of subjectivity and intentionality are particularly important for this argumentation.

A third central aspect is that towards the end of the second interview session, children were suggested that a blank sheet may be used as a drawing of God. In fact, such cases were found in the larger sample, but none of the interviewees had resorted to such a method. The older participants appeared to welcome the idea without too much struggle, although this was not systematically the case of younger ones. One case was particularly striking because the participant accepted the idea by mentioning that this would be her best representation of God. Her reasons were that God is everywhere, which can be captured by a blank sheet of paper, and that no one really knows what it looks like, which an absence of representation underlines best. There are two main interpretations that could be helpful to future research. The first one is that all scenarios and approaches delivered by children in drawings of God are not necessarily comprehensible to all children. The second one is that when a particular approach is cognitively accessible to a child, it does not mean that it has already occurred to them that it would be an option to use. On the whole, one should consider cognitive abilities associated with certain types of representations, on the one hand, and the child's growing repertoire in regard to how to depict God by visual means, on the other hand.

In summary, those preliminary findings suggest that the use of mixed-methods (qualitative-quantitative) would be necessary to further our understanding of how children conceive of God. Discrepancies seemingly emerge from confronting results from the quantitative study and the preliminary observations made during those interviews. These may classically pertain to differences between the etic views of the researcher and the emic understanding of participants. They may also underline the highly complex nature of God representations and that the production of meaning in that respect is multiplex. This second possible reason does not necessarily suggest a trench between what the research might think and how children represent the divine. In the main, how children represent the divine might be enriched by how they *live* their own representations of God. This entails that they reflect about it on many levels and possibly make connections with other notions. It appears that the way children symbolize in their drawings is not only dependent on their socio-cultural background, but may constitute a specific individual (idiosyncratic) case for each participant taking part in the study once the degree of detail is broadened (as it was during interviews, compared to the quantitative collection of drawings in groups of participants).

Future Research

A few suggestions will be made about possible paths that future research could follow in the area of God representations in children, and particularly research using visual data, such as drawings.

A first possible path would entail more neuropsychological measures to compare with dimensions assessed in drawings of God in order to tap into what cognitive and praxis abilities exactly enable the realization of certain properties observed in drawings. Generally, the following skills may be involved in a variety of dimensions in drawings of God: representational drawing skills, working memory, executive functions such as planning, flexibility and inhibition, divergent thinking. In closer connection to expressivity in drawings, visual metaphor comprehension and emotional comprehension may be important as well. Finally, in relation to exposure to cultural artifacts, it is possible that retrieval in long-term memory would play a role in the specific inclusion of symbols, for example. In the case of this last factor potentially influencing the production of drawings of God, one hypothesis would be that without affecting the general trends observed at a group level, memories may play a role in the content of the composition. One illustration may be that for two de-anthropomorphized God figures in two respective drawings, one presents features usually associated with the divine (e.g., wings) while the other uses elements belonging to a non-human but not particularly divine-associated (e.g., the head of a chicken). De-anthropomorphization strategies would still be similar (i.e., through the figure - attached), but the content would not be the same. The former would arguably rely more on memories of visual artifacts previously seen by the child while the latter would show some degree of divergent thinking.

The possible interplay between long-term memory and divergent thinking would be particularly important in helping define the influence of religious education better. Does it have an impact by reminding children of what is possible to use for answering the task of drawing God? Does it help children think 'outside the box' by showing them a multitude of such possible representations? While it certainly has an exposure effect by providing children with visual (and other types of) representations of the divine, what is its normative contribution?

In order to use again the abovementioned illustration about two children's drawings of God, an essential aspect of children's life to take into account would be their daily cultural background, beyond what is connected to the religious domain. In the case presented, one may initially think that divergent thinking would underlie the production of very unusual representations in response to this task. However, it might be that the child has witnessed the utilization of the exact same (human-chicken) figure before in a comic-strip for example, and maybe even in relation to God. The interpretation would then go back to long-term memory. However, if the child had in fact taken that figure outside the context of religious representations, the explanation would shift back again to divergent thinking and imply so higher levels of creativity. Now, if the child had created that mixed figure apparently 'out of the blue', this gesture would have an impact on how researchers apprehend the drawing, and would lead them to consider Representational Redescription (Karmiloff-Smith, 1990;

Karmiloff-Smith, 1992). All such possible outcomes would ideally be taken into account in future research, and benefit from the current exploratory work. A similar line of thought could be followed concerning the potential effect of priming that children may get from their socio-cultural environment prior to the task. However, the same strategy-content differentiation that was proposed above may stand in this situation as well.

A second possible path deals with cross-topic comparisons. Indeed, the analysis of children's drawings of God has thus far implied only those drawings, as though they 'responded' to themselves. One exception can be found in Pitts (1976), who has considered drawings of the human being, next to drawings of God. A rather spontaneous reaction is of course to require a 'control' drawing to compare the drawing of God with. If the human being sounds valid, at least at a representational level, the 'control' question is not that obvious when one thinks about the many possible characteristics on which to match a drawing of God. Is God always represented as a human being? No. How could other topics relate to the divine? Should religious topics be selected to be compared with? One possible answer may be to choose topics that do not benefit from direct real-life referents, such as death, love, hope, the future. For those, children have access to cultural artifacts or social situations that are associated with them, just like with God, but have never 'seen' them directly.

A third possible path pertains to the socio-cultural environment of the child and the sources of influence leading to a drawing of God. It may be essential to understand children's drawings of God in relation to the social-political and historical context they emerged from and within, which could imply an approach based on visual culture (Duncum, 2001). Moreover, the specific influence of schooling should be explained further. There may be broad directions for teaching, which may even be written out in books referred to by the teachers. Yet, the application of schooling programs may vary greatly depending on the religious teachers and the relative importance they give to various religious aspects with divergent teaching styles and methods. This has certainly been observed in art classes and drawing education in the UK, where methods differed substantially within several teaching systems (e.g., Steiner, Montessori) and not only between them (Rose, Jolley, & Charman, 2012). Therefore, it might be necessary to immerse oneself, as a researcher, into children's educative worlds and observe what is in fact happening and how they may be influenced into producing certain types of drawings of God. Adding to this, art classes could actually be taken into account when exploring drawings of God: the utilization of esthetic techniques may depend partially on the drawing culture in the participants' art classes. More generally, this comment taps into the various sources of influence coming from a child's socio-cultural environment. Besides catechism or art classes, children's drawings of God may be affected by the religious culture at home, by their parents' background as well as how religious matters are discussed, if at all. It would also be important in that regard to inventory the

types of representations they are mostly exposed to. For example, there might be paintings, pictures or book that children have often access to in their homes and that could have a priming effect on their drawings of God. Such cultural productions may even be about other issues than God, yet still bear influence.

A fourth path for future research to take would naturally consist in expanding the study of children's God representations as much as possible. This may involve more cross-cultural and inter-faith comparisons of drawings of God, which has been initiated in this work and will be pursued within the larger project that this doctoral thesis is part of. Longitudinal inquiries are also crucially needed to understand specific courses of development in relation to central issues - such as the three main issues addressed in this work. Closely related to longitudinal studies, it would be helpful to 'exhaust' one's repertoire at different ages and to ask to draw God several times, which may provide researchers with a better idea of what is mobilized by the child and where their limits are. Indeed, it would be naïve to think that a drawing of God corresponds to a single God representation. As suggested in the psychology of religion (Gibson, 2008), an individual might have a multitude of God representations, which happen to enter one's working memory at different points in time and depending on the situation. Eventually, there should be an attempt to replicate the current findings in other samples.

General Conclusion

The current thesis has shown that God representations in children can be assessed on various aspects, which might depend to different degrees on age, gender and religiosity. Such representations might be regarded as 'hot' (fairly emotional) or 'cold' (rather intellectual), and both types of quality may be encountered within single God representations. Generally, a suitable approach seems to be inevitably multidimensional, and further, there is often a high degree of intricacy within a same dimension. This means that aspects that would usually be regarded as opposite to each other can be found co-occurring. This was the case especially for humanness/non-humanness (i.e., ontological belonging) and femininity/masculinity (i.e., gender) of God representations. In close relation to this, it was suggested that the idea of 'mature' God representations should be undermined, as it does not appear to have an empirical reality among children. As for predictor variables, age showed an effect mainly through two types of influence. Firstly, conceptual complexity found in children's drawings presumably reflects cognitive development. Secondly, major age-tendencies in gender-typing seem to underline growing socio-normative awareness. Differences observed based on the participants' gender were either topic specific (as in the case of gender-typing) or more general (as for emotionality). Religious education appeared to have a central role among several religiosity measures,

speaking for an important influence of the child's socio-cultural environment. This lead to think that - at least in the context of the current investigation - God representations might be less identity-based (as in the case of affiliation) or relational (e.g., prayer practice) but more socio-constructed, which draws attention to how children are taught or generally socialized on the topic of God. Overall, results are consistent with a rather recent perspective in the psychology of religion that has emphasized the existence of several God representations, or *schemas*, within a same individual, underlying the fact that a particular representation called forth at one specific point in time corresponds to a *working god-schema*, which is brought to one's consciousness depending on different possible factors (Gibson, 2008). The current work adds to this the fact that a single representation being evoked in a particular moment is likely to be composite, especially when accounting for its humanness or its gender - and to some extent to its emotionality. This points to the suggestion, based on Vicente and Martínez Manrique (2016) who were addressing other domains, that the concept of God is a hybrid concept and can be contingent.

Research on children's representations of the divine deserves to be continued and expanded. It presents substantial advantages over other approaches, up to some point. As it has been underlined throughout this thesis, without making the apology of the drawing method, developmental research addressing religion and spirituality could benefit from combining various methods including this one.

This field of developmental research has yet to be expanded way further than current achievements. Nowadays' data collection trends are essentially based on experiments or qualitative interviews with the youth. Taking advantage of visual methods, including drawings, as part of a production process (similar to the main approach used in this thesis) or of a reception process (as was employed in the individual interviews with a few participants from the French-speaking sample). The discourse around visual artifacts may be greatly valuable to grasp how children of different ages react to representations of God - either through individual meetings or through focus groups. What they perceive in them, how they would copy them and what the main qualities about them are (e.g., nice aesthetics, fits one's idea about the divine, lack a particular property such as more femininity) should certainly be gauged in future research about the religious domain.

If there is one piece of traditional thinking that the current work has striven to undermine it is the idea that verbal answers provided by subjects bear a higher epistemic status compared to visual ones. Especially, drawings are often taken less serious than children's words, and this can be deduced from trends in science and considerations about their validity, on the one hand, and it is confirmed by some interactions with peers who are not trained in this area, on the other hand. One possible explanation for this may stem from the differentiation based on *emic* and *etic* viewpoints in observing a phenomenon. Verbal answers may appear somewhat more direct as though they reflected the very

thoughts of the child (i.e., emic), while this would not be the case of visual answers, upon which the researcher's re-interpretations would be applied. In fact, such a view denies the importance of nuancing the production of words by subjects and the mere importance of understanding them as part of a discourse that will always be relative and approximate in its mastery.

Besides such general considerations about the use of visual data, it can be observed that the current thesis has helped move children's drawings of God one step further: firstly, by prolonging the work initiated in previous research (i.e., anthropomorphic vs non-anthropomorphic; gender-typing); secondly, by systematically striving to exceed binaries; thirdly, by attempting to provide innovative methods and possibly a ground-breaking account of emotionality in such data; fourthly, by conducting some cross-cultural research. In addition, a more general contribution pertains to the use of a large French-speaking Swiss sample, which had never been reported in the scientific literature - apart from a small exploratory sample collected by Brandt (Brandt, 2002).

Based on the current findings, a few possible paths could be proposed for future research addressing children's representations of the divine. In line with the contrasts that have imbued this work based on the supposedly radically different areas of God representations, researchers may want to - at least - discriminate between the following: deep conceptual, socio-normative and exposure-based. Respectively, these refer to the three main lines of inquiry composing this work: humanness and non-humanness, gender-typing and emotional expression. While such a distinction may appear a bit harsh in regard to the issues that were explored, it is still useful to acknowledge of their fundamentally different nature. There are of course overlaps, and based on the current results, it is clear that emotionality does not equate with mere replication of what a child has seen. This is supported by the gender differences observed, which may suggest particular liability to socio-normative influence. Similarly, depicting God as human-like or merely non-human up to some degree depends on education, which may involve a great deal of socio-cultural exposure to alternative forms. Therefore, boundaries should not delineate unsurmountable correspondence between several areas concerning God representations, but they should be taken into account to reasonably compare likes and likes.

If there had to be only one aspect that the reader should take home from this thesis, it is that the series of studies that has been conducted has pointed to a profoundly intricate nature of God representations, not only for the existence of various areas, but mostly for the co-occurrence of several, apparently opposing, qualities pertaining to a same area. This is something that cannot be unseen, and future research, if decently acknowledging of the current work, will have to deal with co-existing opposites and use as much as possible a multi-dimensional approach to God representations, be it in children or in adults.

References

GENERAL INTRODUCTION

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FIRST SECTION - Humanness and Non-Humanness in God Representations

Chapter 1 - Children's God Representations: Are Anthropomorphic God Figures *Only* Human?

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Chapter 2 - Humanness and Non-Humanness in Children's Drawings of God: A Case Study from French-Speaking Switzerland

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Chapter 3 - From Fine Esthetic Techniques to a Sense of Combined Sameness-Otherness: A Qualitative Analysis of Children’s Drawings of God

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Section Summary - Humanness and Non-humanness in God Representations

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SECOND SECTION - Gender-Typing God Representations

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Chapter 5 - Construction and Transgression of Gender Categories in Representations of Divine Figures: Cross-Cultural Study of Children's Drawings

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Chapter 6 - Emotional Expression in Children's Drawings of God as a Function of Age, Gender and Religiosity

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Chapter 7 - Emotionality in Children's Drawings of God: Traditional Religious References, Significance and Intentionality

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Section Summary - Emotional Expression in Relation to God

Representations

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GENERAL DISCUSSION

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Disclosure

My journey up to doing a PhD in religious studies might come off as somewhat unusual. I got a BA and an MA in psychology from the University of Liège (Belgium). My MA specialization was in clinical neuropsychology and cognitive and behavioral therapies (CBT). This was part of a larger program focusing on development and impairments.

My MA dissertation explored the respective contributions of emotional regulation strategies and past adverse events on proneness to display psychotic-like experiences in a sample of adult participants from the general population.

In the ensuing years, I remained research assistant to Frank Larøi and worked on some projects addressing neuropsychological and emotional aspects in relation to psychotic and psychotic-like experiences. After that phase, I moved to Switzerland and decided to keep away from research for a while. This time has certainly allowed me to later take a fresh look on it.

Upon my comeback, in Spring 2015, there happened to be a shift of field, and possibly of approach, in career. I used to work mostly on adulthood. I would then investigate among children participants. Religion used to hide somewhere on the PDI (Peters et al.'s Delusion Inventory) scale, but it was now the main topic I would be fully investigating.

One may wonder what the common denominator of those two phases of my scientific endeavors could be. Had there been a complete shift leading to two mountains having no connection with each other at all. No. There was actually a pass in-between both. Both fields challenged the idea of universals and had to strongly rely on inter-cultural awareness. They also dealt with something people are far from always ready to talk about when it concerns them one way or another, but would without fail ignite long debates when considered at a social or societal level. A main difference however: the topic I would then be investigating about (i.e., God) concerned about 98% of the worldwide population, and no more that striking minority to whom psychotic-like experiences are actually relevant.

Overall, it was still an entirely fresh trip I was going on. It would entail loads of reflections, self-training, formal training and a few headaches. The journey up to my PhD had started.

At the level of scientific literature references, this has represented quite a lot of reading, basically like doing another MA. I have had to catch up on basic reads in the psychology of religion and more generally in the scientific study of religion, with a particular focus on developmental research. It also entailed specializing in each main area of research addressed in the current work, respectively:

gender studies, gender-typing and gender development; conceptual development and more recent findings from the cognitive science of religion (CSR); the children's expressive drawings literature as well as children's drawings in general.

At a research methods level, it has involved learning how to process raw visual data and apply grids of analysis, as well as handling inter-rater methodology. It has also been the opportunity for me to get trained on qualitative methods, both through formal training and by exposure to a related scientific discourse being produced in the institute to which I have been institutionally affiliated (i.e., Institute for the Scientific Study of Religions).

Throughout my doctoral research, however, I have been able to draw upon my previous contributions to research in the field of cognitive psychopathology. In the main, it has marked me with the possibility - if not, the necessity - to inquire into a given phenomenon by taking advantage of a non-exclusive type of methodology, when it is feasible. This point may be illustrated by the exploration of psychotic-like experiences in the general population, as a matter of frequency or intensity for example (that is according to a specified dimension), rather than dividing individuals based on the diagnosis of schizophrenia or a related psychotic disorder. Proceeding as such often allows for spotting more diversity and showing more sensitivity to slight variations that may occur in the data.

This might apply to the current research topic by accounting for several dimensions - or more generally measures - in a way that does not draw too sharp distinctions within the data. For example, one such way of doing would be to proceed essentially to rough classifications that would divide between data - similarly to categorizing an individual as suffering from schizophrenia vs not. Instead, a specific phenomenon can be examined according to variations within rather than same vs different.

This was best illustrated in the current thesis in relation to gender-typing and emotional expression. For those two issues, some dimensional measures (in the sense of continuous, here) have been mostly applied to the data, leading to consider how those respective phenomena are present in the data and how they 'behave', so to speak, rather than characterizing the data as whether concerned or not. Referring to cognitive psychopathology, this may equate with measures of proneness to hallucinations or delusions. Similarly, as the reader may have noticed, scales of femininity and masculinity, or scales of emotional intensity or valence proceed from the same logic. This is a scientific endeavor that can be observed in the current work, thus it needs to be recognized as one main underlying methodological approach.

Then, one's stance on the topic evaluated (in this case, representations of God) seems to always matter when doing research in the human and social sciences.

In that regard, every researcher should probably be aware of their own affiliation(s), beliefs and main sources of influence, as if not acknowledged they might otherwise frankly bias the way one conducts research. One should have the right to believe and to be religiously affiliated, which should not affect one's activity in scientific research as long as scientific methods and critical assessment are employed.

It seems sound to abide to the rule of reflexivity, as a researcher, and to acknowledge of personal constituents that may influence the perspectives I am likely to adopt on my research data. This might be particularly relevant for a domain such as religions and God representations, about which everyone seems to have an idea.

In that respect, I am very curious about religions and spirituality and am constantly progressing through that trip - and will most likely never retire from it. I was born to a Catholic family in Belgian, although I was myself never baptized, idea upheld by my mother who wished to preserve my right to decide 'what I *want* to be' when the time would be opportune. Being raised mostly by her, I have nevertheless been exposed to all sorts of religious systems and spiritualities through her own travel. I would be particularly influenced by Buddhist ideas. Through my own evolution, and probably also influenced by the field of psychology as it is taught in Belgium somehow, I would grow to be an atheist around my mid-twenties. Now, years later, I would be defined by most people as an agnostic, although my own beliefs seem to borrow from a variety of religious systems and spiritual thinking, which may be the result of 'browsing'.

From this account, a few expectations could be formulated prior to my own research, and it was important to be aware of them as much as possible in order not to bias my studies.

Firstly, coming mainly from a Catholic background and similarly growing up in a predominantly Christian environment, basic assumptions regarding one's way to apprehend the notion of God might be strongly affected by my own life experiences. In the case of the current research, investigating - for most of it - in an environment that is predominantly Christian, such sensibility might however come in handy at times, up to some degree and with some caution.

Secondly, having faced a strong influence of what could be called some form of religious and spiritual syncretism as a child, some misjudgments may occur under the name of a particular tradition's referents. However, such awareness, when accounted for, can become a strength. Indeed, it makes the search for external information all the more necessary in order to verify one's impressions and intuitions regarding symbols children may use in the drawings.

Thirdly, standing away from a fixed or even a main affiliation with regard to beliefs, instead, following a progressive flow and constantly evolving understanding might make self-awareness all the

more necessary. While this represents much work, it has also become a form of drill that should generally connect with critically questioning one's own take on phenomena that are profoundly culturally relative. This also seems to automatically orient the main focus on clear rationales based on the past scientific literature.

On the whole, I have, however, no particular agenda other than scientific with regard to religions and no particular set of assumptions about them is driving the outcome of my analyses. Instead, my interest is broad and open-minded.

