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The Research Exhibition: context, interpretation, and knowledge creation

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1) Introduction: the emergence of the idea of the research exhibition

In this paper, we set out to investigate the nature, role and purpose of the research exhibition. The idea of the research exhibition was put forward some time ago with a paper by Rust and Robertson (2003) who have considered it with regard to its potential as a means of communication for research. This seemed a promising approach, but remained at a stage of initial exploration. The problem has been little developed since, yet the desire for the use of the research exhibition persists. Furthermore the use of the exhibition within research brings with it certain problems that remain as yet unresolved. For example at present, it is not clear whether, and in which way, the research exhibition is different from an ordinary exhibition, what its essential contribution to research might be, and how that contribution is to be archived and disseminated. We use this paper to address some of these problems.

We begin by examining where the interest of practitioner-researchers comes from to use the exhibition as a means of research. The interest in the research exhibition may be seen to have evolved out of the aim to use practice within research in order to make research in art and design more relevant to professional practitioners (Green and Powell 2005: 100), in particular with regard to the communication of knowledge (Niedderer 2005; Biggs forthcoming 2006). In due course, one of the means or tools that practice has brought to research is the use of the exhibition, because it is a ubiquitous and established medium of communication in art & design, which is backed by a rich literature about museums studies, collections, and curatorial practice (e.g. Pearce 1994; e.g. Greenberg, Ferguson et al. 1996) The question is, however, whether the exhibition is also an appropriate medium of communication for research, whether a transfer is possible?

The uncertainty about the value of the exhibition as a communication tool for research is evident in current arrangements concerning art and design research funding. The two principal research-funding agencies for the sector, the AHRC and the RAE, both recognise the exhibition as an important arrangement through which research in the creative disciplines is apprehended. Both view it as a



potentially valid output capable of attracting research funding. However, there are also differences between them.

For example, the AHRC (2005) requires applicants to describe a 'problem domain', and enunciate their analytical intentions and methods - procedures that require critical reflection upon process and outcomes in relation to intentions. Thus AHRC can be considered as adhering to an 'Intentional Action' model (Pakes 2004) in which the importance of manifesting the intentional agency of the researcher in ways that clarify the output as research is key, and which underpins dominant perceptions of what constitutes valid research knowledge in the academy. This has consequences for use of the exhibition within research, because it makes a distinction between an exhibition that is not worthy of funding and a 'research exhibition' that is eligible for funding.

In contrast to the AHRC, for the RAE in 2001, RAE Unit 64 criteria did not discriminate according to agent intentionality (RAE 2005) and so did not allow conflict to develop between notions of the exhibition as research and its requirement as a normal part of practice. Rather, all exhibitions were considered as potentially valid research outcomes and rankings of quality and status were based in evaluations of evidential (post-event) materials - mostly catalogues and critical reviews - checked against the panels' expert understanding of the field. Under these terms, it was perfectly feasible that the same individuals, having held a number of exhibitions in internationally recognised venues, were considered worthy of public funding as advanced 'research-active' practitioners.

This shows that criteria regarding the research status of the exhibition do not manifest consistent and "common objectively defined standards", and that the community possesses no commonly agreed criteria by which it might verify whether 'knowledge' presented within the exhibition format is cognate with research knowledge, or how it might be made explicit within the framework of such formats. Moreover, there are no broadly agreed methods of ensuring that, should such knowledge be identified, it can be made available to inspection beyond the in-situ exhibition.

In order to investigate whether the exhibition is an appropriate medium of communication for research, and which form it might have to take, in the following, we investigate the exhibition within the context of practice and research:

- What is the difference in the outcomes of practice and of research and how is each (suited to be) communicated through exhibition? I.e. what is the difference in the nature, role and purpose of the research exhibition in comparison to the 'ordinary' art/design exhibition?
- How can the research exhibition achieve unambiguous communication, i.e. what form can it take, and what criteria might we have for it?



- What can the research exhibition contribute to the communication of research outcomes, i.e. why is it needed? Is the research exhibition simply an exhibition in the context of research or is it more/generically different?

2) *What is the difference in the outcomes of practice and of research and how is each (suited to be) communicated through exhibition?*

We begin our investigation by examining the difference in the aims and outcomes of practice and research, and how these outcomes are communicated usually. This is followed by an overview over the nature of different kinds of exhibitions and how the outcomes of research and practice are, or might be, communicated through exhibition.

2.1 The outcomes of research and practice

The formal aims of research with regard to both process and outcomes are defined by research funding bodies such as the AHRC (2005):

- With regard to process, AHRC has defined and stated the importance of research question(s), research context, and approach/method. [1]
- With regard to outcomes, AHRC has defined research in relation to criteria for the process of research and the communication of this process, and it highlights an advance in knowledge that is original and communicable [1], (Biggs 2002)

Similar requirements are made by the RAE (2005), and by the Arts Council England for research projects (ACE 2005). Beyond the requirement for a (original) contribution to knowledge as an outcome of research, commonly we find requirements that qualify the character and form of this outcome. Such general requirements are that of shared knowledge and that of unambiguous communication of this knowledge. Further requirements are asking for the generalisability or transferability of research findings and for answers to research problems or questions to be substantiated through evidence.

While there are guidelines and definitions for what constitutes research, there does not seem to exist an equivalent formal definition for what constitutes creative/professional practice. For example, while the Arts Council England specifies formal requirements for assessment of a proposal such as indicators for artistic development, good practice, artistic vision etc, it does not specify what these mean in detail. We have therefore collated a selective list of characteristics of professional/creative practice which seem to be commonly recognised [2]:

- practice might be a personal investigation (Schön 1991),
- practice might be an expression of personal experiences, worldviews etc. (Carroll 1999),
- practice might create an experience for the audience, user etc. (Carroll 1999),



- practice might offers a service to the audience, user, client etc. (Norman 1990 [2002]),
- (the products of) practice might be made for sale, commission etc.

These characteristics indicate that practice can offer a personal development/benefit for the practitioner or for others through (the development of) a specific product. However, there is no requirement or necessity or consequence that the (product of) practice will advance the knowledge of the practitioner and/or the audience. This indicates a crucial difference in the aims of practice and research, because research aims to understand the characteristics of practice, principles of creating it, or knowledge of something else that is mediated or represented by the outcomes of practice.

The described situation changes, however, if we try to understand practice as making a contribution to research, and thus to knowledge. Then, we have to consider whether and how practice generates and communicates knowledge. In the following, we discuss how research and practice might differ in this respect.

2.2 *Communicating the outcomes of research and practice*

The next step in our inquiry is to consider how the outcomes of research and practice constitute knowledge, i.e. how they are, or might be, communicated as such.

As discussed above, what is to be communicated in terms of research is a (original) contribution to knowledge. Of this knowledge, it is required that it is transferable and that it is communicated unambiguously in order for this knowledge to be shared. More specifically, the research is expected to provide “some form of documentation of the research process [containing research questions, methods, and context], as well as some form of textual analysis or explanation to support its position and to demonstrate critical reflection” (AHRC 2005), the aim being to elicit and understand something generic and new about the phenomenon in question, such as characteristics or principles.

In this sense, within research, knowledge usually refers to a thesis or proposition being made with the expectation for this proposition to be substantiated through evidence-based reasoning. When talking about propositions, we commonly think about them as linguistic constructions, and although language is no absolute requirement for making a proposition (Biggs 2002), it has good practical reasons. These are for example the unambiguous communication and sharing of knowledge, which is facilitated by the analytical and explicit character of language, which allows to elicit one specific meaning of any particular issue (Niedderer 2004). Language also allows for transferability, because of its potential for abstraction. Finally, the grammar and logic of language allow for the logic of argument and evidence-based reasoning. For these reasons, communication of the outcomes of research has traditionally been language-based.

In contrast, the outcomes of practice are usually concrete products (e.g. artefacts, performances, services) that are expected to be consumed e.g. visually or through use, i.e. experientially. The aim to use practice within research and to present its products as part of the outcomes of research means that we have to understand the



outcomes of practice in this new context (of research) as making a contribution to knowledge. In this way, art and design research is different from many other disciplines because it does not simply use objects as evidence, but attempts to present these objects as part of, or all of, an argument for interpretation by the viewer. This implies the notion that the products of practice can embody the answer to the research problem and the question is therefore how the products of practice can embody such an answer, and how they can be used to communicate the knowledge contained.

Concerning this question, Biggs has argued previously (Biggs 2003) that while products might well embody knowledge, the communication and reception of this knowledge is decisively dependent on the context because it determines the reading and interpretation of the products presented. For example, Foucault (1970) has shown that, subject to intention, any object can be included in an infinite number of taxonomies, each implying a different interpretation. Thereby the problem with intention is that of personal pragmatics. One of the main critical objections may be summarized in the following way. The meaning of a text (in the sense used by Barthes (1968) to include non-literary varieties of artefact) is something fixed and is represented by the text. It has meaning by virtue of partaking in a sign system that has a social use. The social use determines both the correctness (syntax) of the signs and the meaning (semantics) of the signs. The author of the text is not able to determine the semantics arbitrarily. The meaning of a text may be contrasted with its significance. This is something that can vary from one individual to another. It consists of a relationship between the sign and its connotation for a particular user. This is referred to as pragmatics in semiotics. Intentionality is the attempt by an individual to impose personal pragmatics on semantics. Pragmatics also accounts for why and how it is that the meaning of a text changes over time, and that there might be several alternative interpretations of a text. If we accept the objection above, we have no reason to prefer the interpretation that the author has over the interpretation that any other reader has. However, the authorial interpretation is just what research is requiring, and if we wish to present practice as making a contribution to research, practice has to be contextualised by the author in order to clarify the authorial interpretation and transform it from a claim of significance to a claim of meaning.

What offers support for such an approach is that according to form-based semiotic theory (Barthes 1968), objects provide the 'semantic material' with intrinsic qualities which provide the basis for any potential interpretation. If we understand these intrinsic qualities as indicators for embodied experience, and interpretation as making embodied experience explicit, we find there may be different means for doing so. This is to say, often researchers think making the embodied experience explicit requires making it explicit through language, but we wish to explore whether it might also be possible to make it explicit through exhibition, i.e. by controlling the conditions of reception so that a single [authorial] interpretation is prioritised. While this is not usually what is thought desirable in a [conventional art] exhibition, which may be seen to encourage pluralistic interpretation, this approach might offer an interesting avenue for exploring the potential of the research exhibition.

In the following section we therefore investigate how the exhibition can be used to set an interpretive framework for the presentation of the products of practice and thus for it to function as a research exhibition



with the potential of unambiguously communicating the contribution to knowledge contained in these products.

2.3 *The exhibition as a means for communicating knowledge of research and of practice*

Having looked at the nature of the aims and outcomes of research and practice and their communication, we now need to understand what this means for the presentation of the respective outcomes through exhibition. Asked differently, what does the conventional format of the exhibition offer, and how can the outcomes of practice and of research be communicated unambiguously through exhibition?

Some issues arise from this question, which need addressing before launching into the discussion:

- One is that the question might imply that there is a unified concept of the exhibition, and also that there is a clear difference between the exhibition and the research exhibition. The discussion needs to deal with both assumptions in order to clarify what we mean by exhibition and to establish a set of criteria for the differentiation of exhibition and research exhibition.
- The second issue arising is the question ‘what is the purpose or benefit of employing the exhibition as a means of communication within research?’ which we will address throughout the following sections.
- Third, for the moment we are assuming that the exhibition (and also the research exhibition) is a medium for the communication of outcomes. However, later (Section 4) we shall introduce alternative considerations of using the exhibition as a research tool.

We will begin the discussion of the exhibition and its potential to serve as a means of unambiguous communication with the consideration about what we mean by ‘exhibition’ in order to set the frame for the discussion. We have indicated that this use of the term ‘exhibition’ might imply that there is a unified concept of the exhibition. We therefore want to make explicit the recognition that ‘the exhibition’ is not a unified concept or practice. Rather, the ‘exhibition’ might be seen as a continuum of concepts/practices that reaches from the conventional, ‘pure’ art exhibition, where the work is exhibited without further information and is left ‘to speak for itself’ to e.g. historical, anthropological, or archaeological exhibitions, which use a variety of [textual] means to explain the work and context of the work exhibited. Vergo (1989: 48) has made a similar distinction between ‘aesthetic’ exhibitions and ‘contextual’ exhibitions. In his understanding, aesthetic exhibitions have little additional information other than the artefacts themselves, and the process of understanding them is largely experiential. In contextual exhibitions the artefacts are complementary to some accompanying ‘informative, comparative and explicatory’ material, which determines their reading and interpretation. This distinction may suggest that the latter kind of exhibition may be suited to, or even be seen as the form of the research exhibition. However, Vergo critically examines both formats of the exhibition thus raising questions about their purpose as well as about the role of the artefacts within them.

While Vergo (1989) recognises the intrinsic role of the artefact or artwork in the aesthetic exhibition, (e.g. if a specific work is not available for a certain exhibition, then it cannot just be replaced by any other without altering the narrative of that exhibition), at the same time he is critical of the aesthetic view wherein artefacts



putatively embody knowledge. This is not least because viewers may not share the same social and cultural background on which the interpretation of the artefacts depends. More importantly, what one knows contextually about the artefact, or what one is told, affects one's reading or interpretation of it. Therefore, being told nothing is not a neutral stance, but simply allows the viewer to project his or her preconceptions onto the artefact. In aesthetic exhibitions the author therefore has no control over the artefact's reception. If the aim of research is to communicate knowledge or understanding then reception cannot be an uncontrolled process. The interpretation of embodied knowledge presented in a decontextualised way is an uncontrolled process.

In contrast, the contextual exhibition tries to control the process of interpretation through contextual materials that make explicit the desired interpretation. Vergo (1989: 51) uses the example of a small medieval prayer book. Being small, fragile, susceptible to light, and of precious materials, the book would have to be exhibited at low light levels, possibly in an armoured glass case, out of reach of the viewer so that the viewer can at best read the two open pages, unable to turn any pages and to appreciate the full intellectual and sensuous qualities of the book. In this situation, contextual material might be used to provide both additional informative material, such as photographs of additional pages of the book and transcriptions and translations of the medieval Latin text, as well as an interpretive framework, e.g. about the history and context of the book, its author, and the time it was created. Vergo concludes that in this context, i.e. the context of the contextual exhibition, the artefact is reduced to a token, which may be appreciated in the light of the interpretation supplied through the contextual material, but which has no 'voice' of its own any longer.

Having looked at two extremes of existing approaches to exhibition, we need to consider now which one might be most suitable to the aims of the research exhibition. On the one hand, we have the aesthetic art exhibition which we found has problems in creating a single interpretation and therefore in communicating any knowledge unambiguously. On the other hand, we have looked at the contextual exhibition, which is suited to communicate the findings of research unambiguously, but in which the artefact is reduced to a token. This raises the question as to what distinguishes the communication of research through contextual exhibition from that through a written paper or thesis, and whether the effort of creating an exhibition is at all justified, i.e. whether it offers anything beyond what a well-written and illustrated research paper has to offer. While this is an important question, its discussion is beyond the scope of this paper, in which we want to focus instead on alternative approaches to exhibition.

In order to progress the argument at this stage it may therefore be useful to reconsider the aims of art and design research to use objects not simply as [token] evidence, but to present these objects as part of, or all of, an argument for interpretation by the viewer. This has raised the question how the products of practice can embody such an answer, and how the exhibition can be used to communicate the knowledge contained in them unambiguously through non-verbal means. Vergo calls for such a direction as part of the conclusion of his discussion of the two types of exhibition. He explains that one of the problems is

a persistent belief that elucidation must necessarily take the form of words. The same fusty arguments are trotted out again and again, about people not being willing to read anything more than the shortest



introductory texts, and about texts generally getting in the way of our aesthetic experience of objects. Even where the designer's imagination stretches beyond the conventional use of wall texts or information panels to embrace such explicatory devices as acousti-guides, audiovisual displays or the much-used *petit journal*, it has to be remembered that these, too, rely largely on verbal means, and are thus exposed to the same objections. Yet rarely is much consideration given, as far as I can see, to the possibility of employing other kinds of visual material, other resources in order to make the same points more vividly, more economically, less intrusively. (Vergo 1989: 53)

Vergo's call for non-verbal contextual presentation raises the important question what means there are, or might be, that can be employed for this purpose. He also makes some suggestions for what these might be. He suggests that

There are a number of such types of predominantly non-verbal material that one can use, ranging from maps and diagrams, the ephemera of daily life, illustrations and photographs, to slides and films showing, for example, an implement in use, as opposed to in a showcase, or the techniques employed in the creation of the objects or works of art on display. (Vergo 1989: 53)

While Vergo considers a number of different means for use as non-verbal contextual materials, it is also necessary to consider how the contextualization of the actual exhibits through these materials may be achieved. Two things have to be considered here. Firstly, we have to consider how artefacts can be used to explain artefacts, as opposed to how text can explain artefacts, i.e. we have to consider the difference in reception between experiential or tacit knowledge and cognitive or explicit knowledge in relation to the aims of research. Secondly, in exploring how artefacts can be 'explained' through artefacts, we have to consider the semantics, syntactics, and pragmatics of the display within and through which the artefacts etc. might be presented and through which unambiguous communication might be achieved. For example, beyond the means that Vergo suggests (e.g. maps, diagrams, ephemera of daily life, illustrations, photographs, slides, films), Jordanova (1989) talks about three different taxonomies that we [are used to] find in museums and exhibitions and which guide our expectations of what to find where and accordingly of how to read and interpret the exhibits. These are taxonomies that operate on the level of the institution, of interior organization, and of individual labels of exhibits. Further, Ferguson (1996) details some of the means that underpin such taxonomies, such as the politics of architectural construction, the psychology of wall colour and lighting, the didactic of labels, the structuring through and ideology of artistic exclusions etc. Finally, Meijers (1996) considers the thematic ordering and juxtaposition of exhibits to evoke certain readings, which suggests that perhaps principles of pattern recognition could be used to guide singular interpretation of an exhibition.

If we assume for the moment that all these means could be employed [successfully] for the communication of knowledge, we need to consider how the different medium might effect and affect the communication of knowledge and satisfy the currently given requirements of research. As discussed above, these requirements are seen to prioritise linguistic means and thus explicit or cognitive knowledge, while the knowledge gained from artefacts through acquaintance and/or perception is mainly experiential and tacit and thus elusive to verbalisation. In a narrow sense of research, this might be seen as a weakness. In a broader sense it may be perceived as strength, because it allows for a richer picture due to the fact that "we can know more than we can tell" (Polanyi 1966: 4). Polanyi uses the example of facial recognition which escapes articulation through language. Another example might be that by Wood (2004) who looks at methods such as video-observation to



help capture knowledge-in-action of a crafts person which, compared with verbal accounts of that person, shows that explicit knowledge is often not accurate, because it may be based on what that person thinks s/he does or what s/he has learnt that s/he ought to be doing rather than on what s/he is actually doing.

Nevertheless, if the exhibition/exhibits are to be recognised as a valid contribution to research, they have to satisfy the requirements of research despite of the differences of communication and reception of knowledge. It may be worthwhile to remind ourselves here that this contribution is a contribution to knowledge, which is to be transferable, and the unambiguous communication of which is to be shared with the audience. Concentrating for the moment on the aspect of unambiguous communication, above, we have introduced the idea that the curator has a number of means that might be suitably used to achieve this goal. However, the goal of 'unambiguous communication' is quite general which causes some difficulties in relating the concrete means to it. It might therefore be helpful to use the criteria that are available through the AHRC (i.e. problem, context, finding, and result) to provide more specific points of reference. For example, if we expect a research exhibition (or exhibit) to convey these four aspects, we begin to have a concrete framework within which to construct a grammar of visual (semiotic) language. In the following, we discuss how the different curatorial means might be used to construct a grammar of visual language within this framework of requirements.

3) *Establishing form and criteria of the research exhibition*

On the basis of the above discussion, we propose that the research exhibition must take the form of the contextual exhibition. However, whether the context has to be created by verbal means or non-verbal means is open to discussion. While the contextual exhibition using verbal means is well established with (and despite of) its obvious weaknesses, the non-verbal variation of the contextual exhibition has received little attention. In the following, we therefore explore the potential of the contextual exhibition to communicate the outcomes of research unambiguously through non-verbal means. The aim is to establish a set of criteria for this kind of research exhibition as a framework that can provide the basis for future exploration and testing of the idea within and through practical application. For this purpose, we investigate what and how non-verbal means can be used to create an interpretive framework for the presentation of artefacts and thus for the contextual exhibition to function as a research exhibition with the potential of unambiguously communicating the contribution to knowledge contained in the artefacts.

Using non-verbal means, we have touched upon three aspects that might help us establish the desired criteria. One is the concrete means of communication as noted by Vergo, Meijers, and others. The second are the four AHRC requirements, and the third is the recognition of the form-based semiotic system that may be used to create a 'visual language' (and possibly a sensual language). In this sense, the idea of visual language is based on the general concept of semiotics using syntactics and semantics to establish a meaningful sequence of signs. As a result it will be important that the combination of semantics and syntactics is robust enough to determine or guide personal pragmatics. Accordingly, a 'visual language' might employ aspects such as ordering, repetition, or juxtaposition (syntactic elements) to structure the reading of artefacts (semantic material) and thus to create a 'visual grammar' that provides the cue to a singular interpretation. In this way, the concept of semiotics may



be understood to operate on a meta-level while the means that Vergo, Jordanova, and others suggest become the practical tools to determine and build the language of the exhibition. The four AHRC requirements can serve to provide an organisational structure for structuring the content of the exhibition internally as well as communicating its function as a research exhibition to the outside (which may be seen equivalent to Jordanova's second taxonomy of interior organisation and Meijers' thematic ordering of exhibits. - In this context, an interesting approach might be to draw on theories and mechanisms of pattern recognition to help develop such a visual grammar. The problem then becomes one of how new visual grammars are created and learned, moving from form-based to social semiotics. The discussion of this approach is beyond the scope of this paper but is the subject of on-going research in the tVAD-group at the University of Hertfordshire.

We want to conclude this discussion by providing a diagram that relates the three aforementioned aspects for building and structuring a research exhibition through non-verbal means and which includes a list of means or tools for structuring the exhibition. We also provide one hypothetical example as an illustration of the potential application of this framework.



Research Exhibition
i.e. non-verbal contextual exhibition using visual/sensual language based on semiotic framework

<i>Structuring of exhibits</i> [Syntactics of visual/sensual language according to the taxonomies suggested by Jordanova and Meijers]				<i>Types of exhibits</i> [Semantics of visual/sensual language relating to artefacts as identified by Vergo]	
<p>1) Institutional taxonomy (e.g. fine art, design, history, ethnography, geology, etc.):</p> <p>The choice will determine which preconceptions the audience brings to the exhibition.</p> <p>It might be of interest to consider whether we have specific institutions where we expect the exhibition of research [e.g. an art research gallery)?</p>	<p>2) Thematic structuring of exhibits (e.g. artists/schools, periods, countries, functions, historical, a-historical...)</p> <p>For the research exhibition, this thematic might be subdivided or replaced by the organisation of materials according to the 4 AHRC criteria for research question/ problem, context, method, and outcome/ finding.</p>	<p>3) Relational structuring of exhibits (e.g. ordering, sequencing, repetition, juxtaposition etc.)</p> <p>All/any of these may be used to express and elicit the 4 AHRC criteria for the research exhibition. E.g. juxta-position might help to show contradictions that may point towards the research problem.</p> <p>An intelligent sequencing of (documentary) exhibits may be useful to explain research context and methods.</p>	<p>4) Taxonomy of Labelling</p> <p>No labels (or hardly any). They are replaced by a variety of explanatory exhibits which complement the main exhibits and facilitate communication of the contribution to knowledge.</p>	<p>A) Variety of exhibits (can be anything; should be the research outcome or embody knowledge about the research outcome in some way)</p>	<p>B) Variety of explanatory exhibits including documentary materials such as</p> <ul style="list-style-type: none"> - maps and diagrams - the ephemera of daily life - illustrations and photographs - slides and films showing the creation and/or use of exhibits
<p>Contextual means that underpin, and have influence on, the reading of these taxonomies (according to Ferguson):</p> <ul style="list-style-type: none"> - politics of architectural construction, - the psychology of wall colour and lighting, - the didactic of labels, - the structuring through artistic/curatorial exclusion - etc. 					



Example of an art exhibition: Harald Szeemann "A-Historische Klanken", Museum Boymans-van Beuningen, Rotterdam 1988 (Meijers 1996)					
Art Gallery	<p>Theme: three exhibition rooms exhibit three neo-Brueghelian parables:</p> <ul style="list-style-type: none"> - spiritual confusion, suffering and death, - cryptic silence of emptiness and monochrome, - the sacral elevation of the trivial 	<p>All three themes are approached through an a-historical juxtaposition of a variety of kinds of exhibits from art, craft, and design, such as paintings, sculpture, furniture etc.</p> <p>The themes are thought to become clear, because they provide the only link between the disparate variety of exhibits.</p>	The objects are unlabeled.		<p>Variety of exhibits, that are deemed to be self-explanatory through the juxtaposition in which they are exhibited.</p> <p>None</p>
Example of an art research exhibition: fictional					
Art exhibition space (Art research gallery?)	<p>Let us assume the research exhibition has the same theme as the art exhibition so as to compare what might change:</p> <p>three exhibition rooms exhibit three neo-Brueghelian parables:</p> <ul style="list-style-type: none"> - spiritual confusion, suffering and death, - cryptic silence of emptiness and monochrome, - the sacral elevation of the trivial 	<p>While the research exhibition might use similar juxtapositions to elicit the themes, it would also have to make clear what the contribution of this exhibition is to current knowledge.</p> <p>Here it might be helpful to employ a thematic sub-division of each room into the 4 AHRC criteria (problem, context, methods, findings/insight) which could be elicited through appropriate ordering, juxtaposition etc of exhibits, which might then also include 'explanatory artefacts'.</p>	<p>The objects are complemented by explanatory artefacts.</p> <p>(a minimal use of Verbal/written labels might be useful e.g. to indicate the 4 AHRC themes to guide the reading of each section).</p>		<p>Variety of exhibits that communicate the theme through their juxtaposition.</p> <p>Variety of explanatory exhibits which complement the main exhibits and facilitate communication of the contribution to knowledge.</p>



To draw the discussion to a close, we want to add five points in explanation of the diagram and in reflections on the proposed framework.

- Firstly, the lists provided in the diagram are by no means exclusive or comprehensive.
- Secondly, while such an exhibition might use a majority of non-verbal contextual material, it may not be sensible to exclude a minor use of linguistic means such as for names etc.
- Thirdly, clarification may be needed as to how the main exhibit can be distinguished from surrounding documentary or explanatory materials.
- Fourthly, one question that arises is that the example considered here is that of an entire exhibition. Consideration will need to be given to how this format can be transferred onto the case where we have a number of (singular) research exhibits of different researchers in a research exhibition.
- Fifth, tests will have to be conducted as to whether the choice and design of semantic material and syntactics of the exhibition are sufficient to determine and guide the personal pragmatics of a varied audience towards the authorial, i.e. intended, interpretation.

4) *Summary and Conclusion: What contribution does the research exhibition make to the communication of research outcomes, i.e. why is it needed?*

In this paper, we have investigated the differences in the outcomes of research and practice and in their communication with regard to their communication through exhibition in general, and further through the research exhibition in particular. From this investigation, we have concluded that if practice is to contribute to research, it also has to adhere to the requirements of research, i.e. it has to make a contribution to knowledge. While conventionally this contribution is expressed by linguistic means, e.g. research paper or indeed the contextual exhibition using an array of verbal materials, it is also possible to conceive of the communication of the research contribution through the contextual exhibition using non-verbal means. We have duly developed an initial framework for a non-verbal contextual exhibition outlining some of the parameters and criteria for its realisation.

Beyond the question of how to realise such an exhibition, the question of why such an exhibition would be desirable has also been of interest. Tentatively, we can say that it might allow for a richer communication, especially of certain aspects where verbalisation is not sufficient for their complete understanding, and that might be communicated through empathy based on direct experience. For example, certain aspects of aesthetics or of the communication of processes might fall into this category. However, further work may be required to show that this kind of exhibition can be successfully realised in practice and that it has justifiable benefits.

Future research may therefore be concerned with

- the testing of the proposed framework through practical application;
- exploring the details of the realisation and know-how of the contextual, non-verbal research exhibition;



- the use of insights from pattern recognition to guide semiotic design of the contextual, non-verbal research exhibition.

Finally, the testing of the research exhibition within and through practice suggests that the research exhibition may be used not only as a means for presenting the outcomes of research, but also as a tool for research inquiry. For example, it can become a research tool for investigation into its own phenomenon, or it could be used as a research tool for a wide range of inquiries, such as the reception of art in the art gallery (or other exhibition space), or the relationship between artist/designer/curator and audience. These questions are currently under investigation as part of The Experiential Knowledge Project at the University of Hertfordshire.

Endnotes

[1] AHRC definition of research 2004-5. *The UK Arts and Humanities Research Council, Guidance notes*. URL: <<http://www.ahrc.ac.uk>>:

1. The Board's definition of research is primarily concerned with the definition of research processes, rather than outputs. This definition is built around three key features and your application must fully address all of these in order to be considered eligible for support:

- it must define a series of research questions or problems that will be addressed in the course of the research. It must also define its objectives in terms of seeking to enhance knowledge and understanding relating to the questions or problems to be addressed
- it must specify a research context for the questions or problems to be addressed. You must specify why it is important that these particular questions or problems should be addressed; what other research is being or has been conducted in this area; and what particular contribution this project will make to the advancement of creativity, insights, knowledge and understanding in this area
- it must specify the research methods for addressing and answering the research questions or problems. You must state how, in the course of the research project, you will seek to answer the questions, or advance available knowledge and understanding of the problems. You should also explain the rationale for your chosen research methods and why you think they provide the most appropriate means by which to answer the research questions.

2. This definition of research provides a distinction between research and practice per se. Creative output can be produced, or practice undertaken, as an integral part of a research process as defined above. The Board would expect, however, this practice to be accompanied by some form of documentation of the research process, as well as some form of textual analysis or explanation to support its position and to demonstrate critical reflection. Equally, creativity or practice may involve no such process at all, in which case they would be ineligible for funding from the Board.

[2] some general definitions of practice can be found e.g. in

Wordsmyth. 2001. Wordsmyth. *The Educational Dictionary*. Wordsmyth Collaboratory. Robert Parks, ed. ARTFL (Project for American and French Research on the Treasury of the French Language). Chicago: Divisions of the Humanities, University of Chicago. URL: <http://www.wordsmyth.net/>. Date accessed: 2001 February 2.



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