A JOURNEY PAST THE SUN

Group Art Psychotherapy

for

People with Melanoma:

An Investigation using Narrative

and

Immunological and Psychosocial Measures

by

Marie-Christina Virago (BA, Grad Dip ATh)

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STATEMENT OF ORIGINALITY

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my thesis, when deposited in the University Library, being made available for loan and photocopying subject to the provisions of the Copyright Act 1968.

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I hereby certify that the work embodied in this Thesis is the result of original research, the greater part of which was completed subsequent to admission to candidature for the degree (except in cases where the Committee has granted approval for credit to be granted from previous candidature at another institution).

Signature: *M-Ch. Virago*..... Date: *May 15th 2008*...

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TABLE OF CONTENTS

ABSTRACT ..... **XII**

INTRODUCTION **1**

BACKGROUND 1

THE COMING-INTO-BEING OF THIS PROJECT 9

Early Experience with Cancer Research 9

Lessons from Grief 11

Art Therapy Training: Lessons from My 'Patients' 12

CHAPTER 1. ..... **19**

BROADENING 'THE MIND'; THE CONCEPT OF BODYMIND MEDICINE. **19**

EM'S STORY: THE ARCHAEOLOGY OF THE IMAGE AND BODYMIND REVEALED THROUGH ART PSYCHOTHERAPY 26

THE RITUAL OF THERAPEUTIC IMAGE MAKING AND WHOLE BEING HEALTH/WELLNESS 30

The Place of the Soul's Song *35*

CHAPTER 2 ..... **38**

INTRODUCTION TO IMMUNOLOGY AND PSYCHONEUROIMMUNOLOGY (PNI) **38**

HISTORICAL PERSPECTIVE AND THEORETICAL MODELS 38

A BRIEF DESCRIPTION OF IMMUNE FUNCTION 46

Interferon gamma (IFN-γ) Function *54*

Literature Supporting Impact of Arousal or Distress on IFN-γ Levels. 56

IMMUNOGLOBULIN ISOTYPE A (IGA) FUNCTION. 57

Literature Supporting Impact of Arousal or Distress on S-IgA levels as Measured in Saliva 60

DTH Skin Response *62*

Literature Supporting the Impact of Arousal or Distress on DTH Test Response. 64

PSYCHONEUROIMMUNOLOGY (PNI) 67

The Emergency Response Mechanism *70*

Stress, Psychosocial and Psychoncology Research 74

A Rationale for the Use of Art Psychotherapy in This Research Context. 77

CHAPTER 3 ..... **84**

INTRODUCTION TO ART PSYCHOTHERAPY **84**

Signposts *96*

CHAPTER 4 ..... **100**

METHODOLOGY, OR THE METHOD OF INVESTIGATION **100**

THE PHILOSOPHICAL UNDERPINNING OF THE METHOD OF RESEARCH 100

SCIENCE AND CULTURE, AND THE CULTURE OF SCIENCE 104
ART PSYCHOTHERAPY AS RESEARCH: WHERE DOES IT FIT? 112
CONNECTION TO FELT EXPERIENCE IN RESEARCH 115
PHENOMENOLOGY 116
HERMENEUTIC PHENOMENOLOGY AND ART PSYCHOTHERAPY 119
MIXED METHODS RESEARCH 122

CHAPTER 5 125

QUANTITATIVE METHOD 125

THE STUDY PROTOCOL 125
PARTICIPANTS (SUBJECTS) 127
Eligibility 127
Recruitment Procedure 127
DATA COLLECTION 129
QUESTIONNAIRES 130
1.The Mental Adjustment to Cancer Scale 130
2. The General Coping Strategies' Scale 131
3. The European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire: Core (EORTC.QLQ-C30) 132
4. The Hospital Anxiety and Depression' Scale 133
IMMUNOLOGICAL MEASURES 134
Salivary samples 134
ELISA for S-IgA 134
ELISA for S-IFN-γ 135
Skin Test, DTH 136
DATA ANALYSIS 136

CHAPTER 6 138

DESCRIPTION AND DISCUSSION OF QUANTITATIVE RESULTS 138

DATA MEASURES 138
DEMOGRAPHIC DATA 139
RESULTS OF RECRUITMENT PROCESS 140
Participant Denominators 142
IMMUNOLOGICAL RESULTS 144
Saliva IgA (S-IgA) Results 144
Saliva IFN-γ (S- IFN-γ) Results 156
Comparison of S-IgA and S-IFN-γ Data 168
DTH Test Results 168

PSYCHOSOCIAL RESULTS 170
1. Mental Adjustment to Cancer Scale 170
2. Hospital Anxiety and Depression Scale 171
3. The COPE Questionnaire 172
4. EORTC-QLQ-C30 175
CORRELATION BETWEEN QUESTIONNAIRES 176
DISCUSSION OF QUANTITATIVE RESULTS. 179
IMMUNOLOGICAL RESULTS 179
PSYCHOSOCIAL RESULTS 183
MAC 183
HAD 183
COPE 184
EORTC-QLQ-C30 184
CORRELATIONS BETWEEN QUESTIONNAIRES 184
CHAPTER 7 186
QUALITATIVE DATA: 186
The Story Behind the Numbers; A Journey Past the Sun 186
THE ART PSYCHOTHERAPY PROCESS: CREATION OF QUALITATIVE DATA 186
Transcription 189
The Duration of the Intervention 190
Reshaping the Protocol 190
OTHER MODALITIES USED AND EDUCATIONAL ASPECTS OF THE INTERVENTION 191
Recruitment and Group Structure 192
The Space 192
Shared Meals 193
My Self Care 194
ANALYSIS OF DATA 194
Steps in Analysis 196
i. The intuitive process: reading the transcripts in their entity 196
ii. The analytic process: 196
iii. Crystallisation: 198
iv. Description: 199
The Storylines Identified 199
1. Same/Other 200
2. Emotional/Physical 200
Analysis of Images 201
A Short Description of Session Themes, in Chronological Order 203

The Organisation of the Story Elements *206*
Verification of the Stories *207*
STORYING 208
THE NARRATIVE 214
The Question of Change and Causality *216*
The Intervention Phase; Fellow Travellers *217*
The Participants *223*
Ned, Alan, Paul, Darren, Ron M, Ron B, Jim, K, Colleen, Rose and S. 223
Alan: aged 60 224
Paul: aged 49 226
Ron B: aged 57 229
Ron M: aged 70 233
Jim: aged 67 237
Darren: aged 56 240
Colleen: aged 48 244
Rose: aged 51 246
Christina: aged 57 249
The images: all 200 or so! 249
The Core Childhood Stories *250*
THE THERAPEUTIC 'DOING' 250
DISCUSSION AND CONCLUSION 358
The objective of the study 358
THE OUTCOME OF THE STUDY. 360
MATTERS RELATING TO THE STUDY DESIGN. 361
OBSTACLES TO RECRUITMENT. 362
COMPARISON WITH OTHER STUDIES. 362
The use of questionnaires for evaluation of psychological state. 363
QUALITATIVE DATA AND PSYCHOSOCIAL MATTERS. 366
LIMITATION IN THE STUDY. 370
FURTHER RESEARCH AND POTENTIAL APPLICATIONS OF THIS RESEARCH. 372
THE IMPORTANCE OF THE INDIVIDUAL. 373
BIBLIOGRAPHY 375
APPENDICES

LIST OF FIGURES

Fig1: Immune and nervous systems cross talk.....22
Figure 2: Basic configurations of immunoglobulins (antibodies) 52
Figure 3: IFN-γ model 54
Figure 4: The dimeric IgA molecule 57
Figure 5: The triangular relationship between the therapeutic protagonists.....84
Figure 6: The Magical Mesh of the Group Communication.....91
Figure 7: Mean Post-vs- Mean Pre-session Salivary IgA 146
Figure 7a: IDI Salivary IgA.....148
Figure 7b: ID2 Salivary IgA 149
Figure 7c: ID21 Salivary IgA.....150
Figure 7d: ID 31 Salivary IgA.....151
Figure 7e: ID 71 Salivary IgA.....152
Figure 7f: ID 102 Salivary IgA 153
Figure 7g: ID 202 Salivary IgA.....154
Figure 7h: ID 302 Salivary IgA 155
Figure 8: Group Mean Post vs pre-session salivary IFN-γ 158
Figure 8b: ID2 Salivary IFN-γ 161
Figure 8c: ID_{21}Salivary IFN-γ.....162
Figure 8d: ID_{31} Salivary IFN-γ.....163
Figure 8e: ID_{71} Salivary IFN-γ.....164
Figure 8f: ID_{102} Salivary IFN-γ 165
Figure 8g: ID_{202} Salivary IFN-γ 166
Figure 8h: ID_{302} Salivary IFN-γ 167

LIST OF TABLES

Table 1: Intervention Time Points, Dates and Actions per Session. 129

Table 2: Recruitment Results 140

Table 3: ID numbers and names of completing participants. 142

Table 4: Time Points and Images Made During the Intervention 143

Table 6: S-IFN-γ Group Means Post-vs-Pre-Session Over Time Wilcoxon signed-rank test *p*=<0.05 159

Table 7: DTH test, Raw and Mean score 169

Table 8: DTH and IFN-γ Pearson Correlation: Significant at 0.05 (2-tailed) 169

Table 9: Mean scores: Mental Adjustment to Cancer Scale 171

Table10: Mental Adjustment to Cancer Scale: Wilcoxon signed-ranks test: p=<0.05 171

Table 11: Mean Scores: Hospital Anxiety and Depression Scale 172

Table 12: Hospital Anxiety and Depression Scale Wilcoxon signed-ranks test: p=<0.05.....172

Table 13: Mean Scores: COPE Questionnaire 174

Table 15: Mean Scores: EORTC-QLQ-C30 Quality of Life Scale.....176

Table 16 EORTC-QLQ-C30 Quality of Life Scale 176

Table 17a: Pearson's Correlation chart for Negative correlations between Questionnaires:.....177

Table 17b Pearson's Correlation chart for Positive correlations between Questionnaires: 178

LIST OF PLATES

Plate 1: The Black Hole 13
Plate 2: The Bloody Brick Wall 15
Plate 3: The Black Rainbow 15
Plate 4: The House of Hell. 27
Plate 5: Singing the Soul's Song. 36
Plate 6: The Hermeneutic Circle Becomes the Lemniscates of Infinite Possibility 120
Plate 7: Hecate's Call 197
Plate 8: First Group Image 220
Plate 9: Allan: KFD Aged 5 yrs 225
Plate 10: Allan: KFD Present family. 225
Plate 11: Paul: KFD Aged 5 yrs. 227
Plate 12: Paul: KFD Present family 227
Plate 13: Paul: Favourite Childhood Story: Snow White & the Seven Dwarves. 228
Plate 14: Ron B:KFD Aged 5 yrs. 230
Plate 15: Ron B: KFD present family: 231
Plate 16: Ron B::Favourite Childhood Story: Little Toot 231
Plate 17: Ron M: KFD Aged 5 yrs: *Summer holidays "my brother and I were terrified of girls"* 235
Plate 18: Ron M: KFD present family: *"My wife and I like to travel"* 235
Plate 19:Ron M: Favourite Childhood Story: The Three Little Pigs 235
Plate 20: Jim: KFD Aged 5 yrs, *"My dad went off to war when I was five: we didn't see him for years"* 238
Plate 21: Jim: KFD present family: *"We're all having a bar-b-que at home"* 238
Plate 22: Jim: Favourite Childhood Story 239
Plate 23 Darren; KFD Aged 5 yrs. Darren on his rocking horse 241
Plate 24 Darren: KFD present family. Darren and his wife and combined families 242
Plate 25: Darren: Favourite Childhood Story: Little Red Riding Hood 242
Plate 26: Colleen: KFD Aged 5 yrs *"Me and my sister playing in the yard"* 245
Plate 27: Colleen: KFD present family. All sitting together watching television. 245
Plate 28: Rose: KFD Aged 5 yrs. *"Mum was a very sick lady"* 247
Plate 29 a-f: Diagnosis 257
a: Colleen 257
b: Paul 257
c: Darren 258
d: Jim 258
e: Ron B 259
f: Ron M 259
Plate 30: a-f, Bliss 260
a: Colleen 260
b: Paul 260
c: Darren 261

d: Jim 261
e: Ron B 262
f.:Ron M 262
Plate31 a-d: 'Stress' 267
a:Paul 267
b: Darren 267
c: Ron B 269
d: Ron M 270
Plate32 a-f: Colour Garden 1 275
a: Allan 275
b: Paul 276
c: Darren 277
d: Jim 278
e: Ron B 278
f: Ron M 279
a: Allan 282
b: Colleen. 283
c:Rose 283
d: Paul 284
e: Ron B 284
f:Ron M. 285
g: Darren 285
Plate 34 Jim: 286
Plate 35: a-h: Free Image 287
Plate 36: a-d: Misery and Joy 299
a: Allan Misery and Joy 299
b1:Paul: Misery 300
b2: Paul: Joy 300
c: Darren: Misery 301
d: Rose: Misery and Joy 301
Plate 37: a-h2; The Under Sea Journey 312
Plate 38 a & b: From Darren's Diary 317
Plate 39:a-f: 'I'm not Talking!' 321
Plate 40 a-f: Pain or Happiness. 323
a: Alan 323
b: Paul 323
c: Ron M 324
d: Ron B. 324
e: Jim: 324
Plate 41: a-f2: Body Outlines 325

Plate 42, a-g: A Celebration of 'Me' 333
a: Allan 333
b: Rose 333
c: Jim 334
d: Paul 334
e1& 2.: Ron B: 335
f:Ron M: 335
g: Darren 335
Plate 43,a-h: Mask 337
a: Allan 337
b1 Rose: Being naughty. 340
b2: Rose 341
c: Jim: 342
d: Ron B 343
e: Ron M 343
f: Paul 344
g Darren 344
h: Colleen. 345
Plate 44: Final Group Image 347
Plate 45, a-h. 'What I've Taken from The Group' 349
a: Colleen: 349
b: Rose 349
c: Jim: 350
d: Paul: 350
e: Ron M: 351
f 1.: Darren: 351
f2: 352
g : Ron B. 352
h: Alan: 353

Healing

I am not a mechanism, an assembly of various
sections,
And it is not because the mechanism is working
wrongly, that I am ill.
I am ill because of wounds to the soul, to the deep
Emotional self
And wounds to the soul take a long, long time,
only time cane help
And patience, and a certain difficult repentance
Long, difficult repentance, realisation of life's
mistakes, and the freeing oneself
from the endless repetition of the mistakes
which mankind at large has chosen to sanctify.
D.H. Lawrence[1].

Explanations (stories) can work on one level without reference to any other level. Be that as it may, there are those of us who are integrators. We want to find stories that work on several levels. We seek stories that explain the correlations among levels of explanation. Explanatory pluralism does not mean we must eschew multi-level explanations, but rather that no one level of discourse is inherently superior to another.
Lewis Mehl-Madrona[2]

ABSTRACT

Psychotherapeutic interventions have been used to support people with cancer for more than half a century, with continuing debate as to whether there is any impact on the disease process itself. Very few of those studies have assessed physiological impact, and although art psychotherapy[i] has been employed to assess and enhance change in quality of life, reduction in distress and increased treatment compliance amongst adults and children with cancer, in the main these studies have been qualitative. To date few studies have been published reporting the use of **art psychotherapy** in the exploration of the human being from a systems perspective, using both biological and psychosocial means of assessment of efficacy, and at the time of research, none reporting immunological changes. The advantage of art psychotherapy over purely verbal psychotherapy is in the readily accessed unconscious content, and that a relaxed meditative state is entered in making images: it gives the body voice while creating a concrete record of the process. This study, therefore, addresses a gap in both psychoneuroimmunological and psycho-oncology research.

The objective was to assess if engaging in group art psychotherapy would have a positive effect on general quality of life with a reduction of 'stress' and if this would be reflected in immunological, psychosocial, image and narrative data. The specific parameters under investigation were salivary immunoglobulin isotype A (S-IgA), salivary interferon gamma (S-IFN-γ), delayed type hypersensitivity test response, psychosocial questionnaire results, images created during art psychotherapy and the narrative of that group process.

The study utilised a mixed methods approach. The quantitative arm of the study was framed within the positivist paradigm required for the assessment of discrete physiological and psychosocial parameters, while the qualitative arm of the study was framed in the interpretive paradigm suited to the investigation of subjective experience. The dominant philosophy informing the methodology for the qualitative work was hermeneutic phenomenology.

Analysis of salivary immunoglobulin alpha (S-IgA) results indicated that there was a general upwards trend in the group mean post-vs-pre-session levels, positively correlating to sessional

[i] The term 'art therapy' is used when quoted from another author; however it is generally interchangable with the term 'art psychotherapy'.

emotional tone. The salivary interferon gamma (S-IFN-γ) results showed no such increase, although there was a correlation to emotional content in individual sessions and an overall upward trend.

There was an observable lessening of anxiety and improvement in interpersonal dynamics and participants' self report over time, not reflected in the psychosocial questionnaire results.

The study suggested that involvement in art psychotherapy does have a positive impact on immunological function, and has contributed to the understanding of a systems approach to healing, which may broaden understanding of the value of psychological support to people with cancer. This may be extrapolated to other chronic illnesses where immunological function must be optimised. The study has also demonstrated that it is possible to involve art psychotherapy in the scientific dialogue, without losing its integrity.

INTRODUCTION

Background

"…..an increase in B and T lymphocytes could be an important prelude to a participant's abilities to engage cellular or humoral response to cancer…….optimal immune function is a necessary ingredient in the fight against cancer. Psychosocial interventions may be able to provide the setting in which immunosuppressed participants can boost their immune functions and possibly improve prognosis." Glas et al.[3]

"…. *psychosocial interventions are much less likely to involve simple cause-effect relationships, and more likely to involve more complex and difficult to measure causal* ***processes*** *and dynamic relationships among variables, including synergy, positive and negative feedback loops, cascading events, curvilinear relationships and multiple contributing factors, all of which pose daunting measurement and design challenges."*
Temoshok. [4]

In April 2006 the online edition of A Cancer Journal for Clinicians[5] listed nine modifiable risk factors responsible for more than a third of the cancer deaths world wide, amongst which were alcohol and tobacco consumption (the biggest contributor to mortality) unsafe sex, air pollution, diet and obesity. 'Stress', however, was not listed, even though it is a well known contributor to all of the listed factors; indeed the toxicity of many pollutants is increased when 'stress' is an added feature[6,7]. Perhaps the researchers reporting in this journal don't recognise 'stress' as being modifiable or they consider it a ubiquitous 'given' in today's world.

Nonetheless, for at least the last six decades researchers have been investigating the correlation between 'stress', personality and/or psychosocial factors, immunity and cancer in various permutations, and it is now recognised that those who use 'Avoidance' strategies have both poorer psychosocial function and physical outcomes in illness than do those who use 'Engagement' strategies[8,9]. Further, in studies of 'exceptional patients' (those who survive beyond that which is clinically expected) repression is the single strongest predictor

of the onset of cancer, and that **any** expression of affect is, according to Katz and Epstein[10], an important prognosticator of survival. It is also recognised that humour enhances coping, reduces overall stress and assists in 're-framing'[11]: it also greatly facilitates interpersonal connection, thus reducing feelings of isolation

Glas and colleagues have made an interesting proposition, which I think has received little attention to date, in that psychosocial intervention effectiveness may depend upon cancer type, defined by the histology of the cancer cells: whether Type I (responsive to hormone treatments, but not drug or immune therapy/stimulation) and Type II (which responds well to immunostimulation and drug therapy). Melanoma, they point out, is a classic Type II cancer. The suggestion also points to the possibility of 'tailoring' psychosocial interventions to specific cancers, rather than the concept of psychotherapeutic modalities being trialled as effective or not.

Temoshok[12] points out that *"congruence matters",* speaking about the incongruity of affect and physiological response amongst those she describes as Type C personalities, however, as Glas et al. suggest, there may be other issues of congruity to address. Temoshok[13] has been researching the connection between psychosocial factors, personality types and HIV/AIDS and cutaneous malignant melanoma since the early 1980's, and in 2004 made the point that our way of researching these aspects of personal ecology must change.

Since antiquity there has been both an observed and intuitive understanding of a relationship between personality types (for example the melancholic, sanguine and phlegmatic personality types known since at least Galen's time) and also the impact of shock, isolation, despair[14] and long term distress on health. In the twentieth century this understanding was subjected to scientific scrutiny which continues with gatehring interest into this century.

In 1956 leShan[15] and his team published their propositions regarding what has become known as the 'cancer prone personality'[16,17,18], followed in 1972 by the seminal work of Solomon and Amkraut, when they proposed that there was a definite connection between emotions, stress and immunity[19], and in 1977 Achterberg, Matthews-Simonton and Simonton[20] described the personality factors which they found were prognostic of survival

beyond clinical expectation, at the same time as Bartrop et al[21] identified the impact of bereavement on lymphocyte function.

In 1979 Achterberg[22] and her team had extended the earlier work of the Simonton's[23] on visualisation, to investigate individual correlates between emotional state and immunological function amongst cancer patients. Brown et al[24] established that patients who perceived the treatment as being important to a cure of disease, who were actively involved with an understanding of their disease process and did not use avoidance as a coping strategy survived longer, results reiterated by Osborne et al[25].

Eysenck [26] went further with the personality theory to propose that there was a particular personality trait which predisposed to breast cancer, that of the 'good woman', which he seems since to have abandoned, in favour of a multifactorial approach, including genetic predisposition[27]. Temoshok[28], on the other hand has defined a similar constallation of traits, the Type C personality; those who have blunted anger response, are unable to say 'no' or defend themselves appropriately, as of relevance to melanoma and HIV Infection, in particular. Greer and Watson[29] identified a sense of hopelessness and helplessness, deep despair and lack of interest in one's life as also contributory to the 'cancer prone personality'. As a counterbalance, Lazarus[30] points out, that resilience is a predictor of resistance to the negative consequences of 'stress'. Amongst the traits associated with resilience are: constructive thinking, hardiness, learned resourcefulness, optimism, self efficacy and a sense of coherence. These traits are learned.

Osborne et al also assessed immunological function, but found no correlation between immunological function and survival. While there is still debate as to the survival value of psychological support for oncology patients, it would seem that there is almost unanimous agreement regarding the positive effect on psychosocial state. Assisting people to change how they cope in the everyday world has been the *raison d'être* of psychotherapy in all its forms for almost a century, and there is no reason to believe that this does not apply to those whose illness manifests in the physical component of the BodyMind.

It is now a little over half a century since this ground breaking research, but only recently has it gained appropriate recognition in the field of general medicine. Two areas which seem to

have been a fertile ground for these kernels of change to grow have been stress medicine and psycho-oncology; the former arising from the very lucrative sports industry and the steadily increasing unremitting psychological pressure under which the general population in the West functions and the latter from a tremendous change in attitude to end of life care; palliative medicine.

In a paper in the European Journal of Cancer, in March of 2005 Baum[31] and his collaborators go further and recognise that the study of breast cancer, and in all probability any cancer, necessitates a multi-layered approach, in essence the approach taken to investigate complex systems relying on the mathematics of chaos.

In 1989 a paper was published which has caused debate ever since. David Spiegel[32] and his team were startled when they found that there was an apparent increase in survival of an average of 18 months amongst the women with metastatic breast cancer, who took part in their 12 month psychotherapeutic intervention. The research has been challenged, declared flawed and a host of other projects have failed to replicate their results, most notably a large study in Canada by Goodwin et al.[33]. On the other hand there are several studies which have supported Spiegel's findings[34,35,36]. A review of the statistics of Spiegel's study by Fox[37] suggested that the study group had in fact not survived longer, when compared to national and regional population norms. The difference in survival was found in the control arm which was found to be shorter than the population norm, perhaps explaining the non-replicability of the study.

The study undertaken by Fawzy et al, which informed this present project[38], has consistently reported a survival advantage, as a result of their intervention, up to 10 years later[39]. The study utilised a six week structured psychiatric intervention, which appears to have been mostly psycho-educative, addressing issues such as coping strategies, relaxation and diet. Fawzy et al. reported statistically significant increases at 6 weeks post intervention in CD57 T-cells, and at 6 months post intervention this also included CD16 and CD56 T-cells, as well as natural killer cell activity (NKCA), with concomitant decrease in negative affect and increase in positive coping strategies and general quality of life. At 5 to 6 year follow-up the trend to longer survival and recurrence free time, in comparison to the control group was established, with retention of affective changes and general quality of life improvement. In

addition, factors predictive of survival were found in the Breslow depth of the original melanoma, age at diagnosis and affective state, the latter factor also being identified in Australia by Brown, Butow, Culjak, Coates and Dunn[40]. Older onset age, with a tumour on the trunk, a Breslow depth greater than 1.5mm and being male, were all prognostic of lowered survival.

The advantage of using the Fawzy et al. and Brown et al. studies as a benchmark was that the study populations in all are the same; people with a diagnosis of cutaneous malignant melanoma, treated with simple surgical excision. Different markers of immunological activity (in the case of the Brown et al. study, none) and psychosocial questionnaires, however, were used. There are additional differences in the study reported in this thesis to these studies. While the intervention in my study was a psychosocial intervention, it was not structured, ran longer (6 months) and was an intervention which engages both cognitive activity **and** creative expressive activity (art psychotherapy), and in using the qualitative data, also gave the participants a voice.

In his analysis of the Spiegel study Fox made an astute observation, suggesting that there may well have been **'an-as-yet-unidentified-difference'** between Spiegel's treatment and control groups, a difference which might well have been masked by the population size of the Goodwin study (ten time larger that Spiegel's). This difference was nonetheless important. Cunningham et al[41], have revisited the notion of the 'as-yet-unidentified differences', and like the Simontons almost forty years ago, and le Shan ten years prior to that, are investigating **'individual differences'** to gain an understanding of unexpected survival. Unlike his predecessors, and like this study, Cunningham is not using a randomised controlled study design; rather, he has recognised the necessity for a qualitative study in order to identify qualitative differences between people and the differences of existential issues and how they are confronted, before embarking on any further quantitative study. This recognition of the importance of individual difference is something which, to date, has been lacking in many of the studies investigating stress, personality factors and disease in any shape.

The experience of the illness has rarely been discussed, although it has been recognised that the linchpin on which 'stress' hangs is **appraisal mediated by coping strategies**[42]. The inclusion of the narrative and images in my study, may well prove a further source of

information regarding the 'as-yet-unidentified-differences', **as coping strategies are reported as they change in direct connection to the appraisal process as it occurs**.

Lazarus, a psychologist who has worked in this field for more than half a century, remarked[43]: *"I note, parenthetically, that psychology has for long been ambivalent about individual differences, opting for the view that its scientific task is to note invariances and develop general laws. Variations in such laws are apt to be considered errors in measurement, though they must be understood if reasonably accurate prediction is to be possible."* In assessing invariances, as Cunningham[44] noticed, the exceptional is not seen. In fact the reliance on the randomised controlled trial construct militates against this very understanding. As Lazarus points out; statistical analysis seeks the norm, and regards the variant as 'noise'. Yet it is in this noise that the song of the soul may be heard.

Individual differences in immunological results, coping strategies and response to the intervention were most certainly apparent over the time of my project, and would seem to concur with Cunningham's exploratory findings, and those of Katz and Epstein[45], Kemeny and Laudenslager[46] and Davidson[47] reinforcing the much earlier work of Lazarus et al[48].

Davidson has reported on the importance of individual differences in affective style, their neural structuring and immunological correlates, which are evident as early as an infant's first year of life. It may seem on the face of it that differences laid down so early are a set factor in the individual's life, until it is also recognised, as Davidson points out, that neural structures are plastic, that is, contrary to previous belief, these structures are amenable to change, and one way in which this can be affected is through psychotherapy or direct learning. As with Lazarus, he identifies **resilience** as a crucial factor in recovery from the impact of negatively stressful events. There is a learned component to resilience.

Katz and Epstein and Cunningham all suggest that changes in coping strategies, particularly those related to the so called 'cancer prone personality', can ameliorate distress and disease, pointing out that these changes are consistent among people who survive beyond clinical expectation: they are the invariants amongst the variants. The positive changes revolve around engaging a capacity for resilience by learning constructive thinking and resourcefulness and allowing oneself to enjoy true optimism and full engagement with life with a sense of self efficacy and coherence.

A further observation made by Katz and Epstein, and which I observed amongst the people with whom I worked in the UK, is that around two years preceding a cancer diagnosis a period was experienced of what people so diagnosed perceived as significant distress.

Neither Spiegel, in that early research, nor Goodwin, however, described individual differences, reported on preceding stressors or assessed immunological function as a facet of reduction of the 'stress' which they were aiming to ameliorate. Their reports focused only on statistically relevant psychological change; and used different ways to assess that change, which means that comparisons of psychological outcomes are difficult.

The difference of measurement tools is a confounding factor in this area of research. Undoubtedly study designs will change, according to budget constraints and in order to progress, however true comparisons are problematic if different tools are used.

With regard to the questionnaires in general use there may be an over emphasis of the 'case', rather than a recognition that a degree of anxiety 'goes with the territory' of a clinical consultation of almost any kind, let alone one in which a diagnosis of a malignancy is the crux of the consultation[49]. The dis-ease need not reach the extent of pathological anxiety or depression in order for it to be subjectively distressing to the 'patient' and family, or indeed, have a negative immunological impact[50]. *"There are many realities, rather than a single one and deviance is not necessarily pathological."*[51]

Tacón[52] also points out that the issues of attachment/loss, is to be seriously considered in the development of affective styles, and that "*the inclusion of a developmental biopsychosocial perspective is offered because the traditional organic psychosomatic dichotomy has become obsolete by recent advances in psychoneuroimmunology and behavioural medicine. Health is contextually dependent…"* Furthermore it is important to keep in the forefront of the researcher's mind that, while it is convenient and offers an **apparent** point of reference to take measurements at set times, psychological state (no less than health), is both a process[53],and context bound.[54,.55]There is now increasing recognition of the understanding that coping, in particular, is not a static function and may vary tremendously depending on the **context** and **duration**[56] of a physically or emotionally taxing experience[57,58], further discussed in Chapters 1 and 2.

Butow [59] states that results reflect benefit *"as it is defined by researchers and clinicians whose measures and questionnaires patients are asked to complete."* Holmes[60] goes on to say that *"definition and measurement at a static point may not capture the unique experience of* ***individuals***[ii].

These comments voice the concern regarding the use of instruments embedded in a positivist paradigm, while purporting to establish something which is in essence subjective, relational, context bound[61]and interpretivist. It would suggest that another way of assessing this fluid state is required. As Butow pointed out, and Strong et al.[62] also recognised, what ill people want is *"someone who cares":* a sense of care may be conveyed in conversation, and through conversation an evaluation of **psychological state** is possible.

Kosslyn et al[63]make the statement that *" Individual differences show how biological mechanisms are called into play during psychological events and how these interact…….Without question, studying individual differences can clarify what previously had been muddy waters".* They go on to say that *"...visualizing an aversive object can cause skin conductance increases like those found when one actually views the object….and memories of images are crucial for the interpretation of perceptual input…key facts about the link between psychological events and the immune system, (for example) dispositional differences in the effects of stress on the immune system, rely in part on the presence of social support."*

From my perception there was a subtlety missed in the 'personality as prognosticator of cancer' propositions, which has caused a great deal of distress, and subsequent antipathy, particularly in the 1980's an early 1990's when it resulted in a 'blame the victim' stance, rather than an understanding of the deepseatedness of coping strategies which may have **led to** the behaviours that were identified as related to cancer. We are indeed what we think. Most of what we think, however, goes on beneath the surface, subconsciously, and that is the subtle but important factor missed by the proponents of the personality theory and the vast industry of 'positive affirmations' that followed. It is, however, recognised by Tacón in her work on attachment. This subtle difference may also point to one of the factors, which has been overlooked in the short duration interventions which failed to replicate Spiegel's 1989 work[64]with a 12 month intervention. It takes time and patience to unearth and then change these modes of behaviour. It is also important to remember that we are **individuals** who are part of an environment which influences our bodyminds as much as does our thinking.

[ii] My emphasis.

As Cunningham[65] wrote more than a decade ago "*The diagnosis and treatment of cancer typically heralds a series of frightening events over which the patient has little control. Many studies, in both animal and humans, have shown that a sense of helplessness or lack of control may have profoundly negative effects on behaviour, mood and physiology*".

Psychotherapy is central to altering such behaviours and mood and presumably also the accompanying physiological correlates. Art psychotherapy is a form of psychotherapy particularly suited to such periods of fear, anxiety and perceived lack of control, in that the person need not talk directly of these fears, but can rather approach them tangentially, through the metaphore of the images she makes. In the process of this 'metaphore making' she can also become absorbed almost in an 'alteres state of consciousness, and the soothing exercise of creating something over which there is control, the individual's creative expression.

The Coming-into-Being of this Project.

Early Experience with Cancer Research

My initial contact with cancer research, as a young nurse, was with the children on a medical ward; children with leukaemia (both acute lymphoblastic and acute myeloid leukaemias) and involved in the early trials of Vincristin[iii]. Two children left indelible marks in my memory: one little girl was running around playing chasings around the ward with the other children, when her nose started to bleed. Within minutes she collapsed as she began haemorrhaging from every orifice of her body; the curtains were quickly drawn around her bed and half an hour later she was dead. The other children were hurried to the other end of the ward, where I was to keep them 'occupied'. No-body spoke of her death.

The second was a little boy of five who was battling for every breath as a raging fever claimed his life in the final phase of acute lymphoblastic leukaemia. He knew, in a non-intellectual sense, that he was dying: he had asked me to look after his teddy if he 'went away', and also if it was a long way to heaven. He wanted to know if he could he catch a

[iii] Vincristin, an alkaloid found in the Madagascar perriwinkle, is a drug used in the treatment of haematological cancers.

plane, *"like my Poppy"*[iv] to get there. We nurses were told not to speak of anything 'emotional' with him but only 'happy' things, were admonished to remain 'professional' and distant. His parents knew that he was dying, but were counselled to remain 'positive' with the child, lest they rob him of hope, at the same time as being told that there was 'nothing more' that could be done for him. There was an aching gap between the child and his parents as he died. We've come a long way since then, and it is acknowledged that even very small children have the right to appropriate emotional support when dealing with life threatening illness, as do their parents and families, and those who care for them. Art psychotherapy has been recognised as one of the media, *par excellence*[66 67] through which to deliver such support.

After I left paediatric nursing I worked in the new Electron Microscopy Unit at the University of Sydney and was a laboratory technician processing photographic plates. One of the projects on which I worked was research into melanoma. At Queensland University, in the early 1970's, I worked in the Department of Veterinary Science, again as a laboratory technician, and again on a cancer project, this time Mareck's disease, an avian variation of lymphoma, triggered by a virus. I became aware of the immunological/stress involvement in cancer as chickens low on the 'pecking order' succumbed to the viral infection and died quicker than dominant chickens. McEwen and Seeman[68], in an article discussing the mediators of 'stress' remark that hierarchical struggles amongst animals (two and four legged) are amongst the most damaging in the long term.

Back in Sydney in the mid 1970's, and at Sydney Hospital working in haematology, I assisted in bone marrow aspirations. Again, the patients suffered from acute lymphoblastic leukaemia, although they were adults and taking part in bone marrow transplant research. After a stint at the Eye Bank collecting and processing corneas I left laboratory work behind to learn about counselling drug addicts, enrolled in psychology and married a psychiatrist.

Involvement with cancer was no longer a facet of my life, I thought, as I was busy raising a brood of children and co-counselling with my husband. We attended training workshops with Stan Grof and became aware of the transpersonal movement and a profound shift in the study of consciousness. Stan had begun research in Czechoslovakia in the late 1960's into

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[iv] The child's grandfather had gone away on a holiday by plane, and had subsequently died.

perceptions of reality after LSD[v] ingestion. He recognised, within the reported altered states of consciousness of his research participants, a commonly experienced phenomenon: a feeling of 'universality' or 'one-ness', where people experienced a feeling of being at one with the 'divine', and a sense of boundarilessness. When he moved to Esalen, California, in the 1970's Groff[69], realised that a particular breathing technique that he had devised, 'Holotropic breathing' akin to controlled hyperventilation, resulted in the same types of experience. A couple of years later my husband's younger son died as a result of complications from a regimen of drugs for what had been supposed, erroneously, to be a rare neurological disorder. Our youngest daughter was born three weeks later.

It was suspected that she had an intra-laryngeal tumour. Thankfully, she had what is called a 'floppy larynx' and a heart problem associated with a genetic disorder, Noonan's Syndrome, instead.

We attended intensive workshops with Elizabeth Kübler-Ross, individually and together, to learn about, and attend to our grief. Through her I learned about the power of image making, in particular, the unconscious content, which was brought to the level of consciousness in the metaphor of imagery, as well as the process of well supported and dignified, conscious death. I had no idea that the latter was to be a guiding beacon for both of us.

Six months following the workshops, cancer came back into my life, and this time walked close by my side, when my husband was diagnosed with inoperable bowel cancer. A year later he was dead. During that year he often used the techniques of picture making learned at Elizabeth Kübler-Ross' workshop.

Lessons from Grief

I recognised that there was both something I needed to learn about grief and the dying process, and something that I apparently had to offer, and joined a palliative care support training group. With the reality of having to support my four children I decided to explore

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[v] LSD: lysergic acid diethylamide: a hallucinogenic drug, used in the 1960's and 1970's in the study of consciousness, also used a s a medication in psychiatry until the mid 1980's when it fell out of favour: an illicit 'recreational'drug.

my artistic abilities and enrolled in Visual Art at University of Newcastle (the then College of Advanced Education), as well as a course in naturopathy in order that I would be able to create an income at home, because our younger two children were only 3 and 4 years old at the time. Shortly afterwards I began to explore my inner process with a Jungian therapist who had trained with Kübler-Ross. I couldn't balance the three processes as well as parenting, so dropped naturopathy and failed my second year of visual arts, moved to Sydney to train in Waldorf education[vi] and then heard of the first conference of the Australian Art Therapy Association.

I attended the conference and my passion was fired!

I could see the relevance of what I had recognised as the recurring theme in my work life and understood what I had to offer. This required, however, that I go either to Perth where the first Australian post graduate course in art therapy had recently been set up, or to the UK to train. In the UK art therapy training was very well established. I applied to, and was accepted by, Sheffield University, and so the two younger children and I moved to Sheffield where we lived while I trained and eventually set up a pilot project as a part of a higher degree research project. The children had the wonderful opportunity of attending an ethnically diverse primary school close to the University.

Art Therapy Training: Lessons from My 'Patients'

Unlike my classmates, I requested a *practicum*[vii] placement in the local oncology hospital because I wanted to take what I had learned from Kübler-Ross, and my husband's and step-son's processes, and see whether it could be applied in a hospital setting. I had an idea that if people were engaged in visualisation, as the Simonton's[70] suggested, and then enabled to externalise the visualisation through art therapy, the force of the visualisation would be potentiated, in a sense, made more focused, particularised and therefore more powerful; I had a hunch that the act of externalising that which had remained 'secret' and unscrutinised; sharing it with a trusted 'other', would unlock a source of previously unrecognised power or energy. With the image created by the patient sharing, as a third participant in an exchange, it

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[vi] Waldorf education was devised by Rudolf Steiner at the end of the 19th century.

[vii] *Practicum:* The supervised, practical component of training, in a designated clinical placement.

would be possible to clarify any potentially negative or paradoxical content in the imagery, hopefully thereby transforming it to maximise the individual's innate capacity of attaining 'wholeness'. An excellent example to illustrate this point is that of Barbara, who was suffering from non-Hodgkin's lymphoma when she was referred for art therapy sessions.

Plate 1: The Black Hole

When I'd asked her to describe her cancer, she referred to it as a black hole, sucking all goodness into it, however, as she made an image of what she had described, she started with a small, intense black circle, **out** of which spiralled elegant lines of pure rainbow colours. Through the subsequent discussion, she explored what her cancer had **given** her, the **colour** that she had **gained** from it in her life and eventually her relationship to her father and her God, and how that was all at odds with her desire to live and give to her community as a lay preacher.

Unfortunately for my plans, while there were patients willing to engage in art psychotherapy, during my *practicum,* none of them had ever heard of visualisation, and I learned one of the most important lessons about the art psychotherapy process; I **followed and accompanied** the 'patients', **learning to listen intently to cues** for paradoxes (such as that described

above), or points of tension which would be clarified by the making of an externalised image, always trusting in their organic process of self healing.

What transpired was exciting stuff. Each one of the patients with whom I worked identified a major life event within a halo of between two and five years preceding their diagnosis, **and which they identified as being of significance to the onset of their cancer**. The identification occurred **only** through the image making and exploration of those images, suggesting that it is not simply the creative process in itself which is of importance, as is often suggested, particularly in British art psychotherapy. Another thing that was often revealed was an apparently unconscious 'knowing' of their disease process; something that I had learned about in workshops with Elizabeth Kübler-Ross, and one of her students, Greg Furth.

After my graduation I set up a pilot project, with the help of Professor Eric Wilkes of the Trent Palliative Care Centre, one of the pioneers in palliative care in the UK, to further research this amongst surgical oncology patients, and to test whether engaging in art psychotherapy had a positive impact on their disease process. The same pattern emerged. Unfortunately however, the project was abandoned after three months as the funding had been diverted to another project. I formed the participants into a group and worked with them for a further three months, unpaid, as I felt strongly that to engage people in a project in which they had agreed to participate for **twelve** months, and then terminate it without adequate explanation after such a short period, was unethical. The following two images state more strongly than I could in words, how two of the participants felt about the termination of the project. The first was made by a young woman whose mother had also been enrolled in a clinical trial, which had been 'canned' too. She had died of her breast cancer. Rachel, however, worked on her feelings of abandonment and anger, eventually marrying, having two children and becoming a teacher. The second was made by Di, who had recovered from surgery for her ovarian cancer, and saw the cancellation of the art psychotherapy project as a brick wall which removed the colour from her rainbow of hope. Di had experienced abuse both as a child, and then by the system on which she relied for care. She died 56 weeks after the termination of the group (there are 56 dividing marks on the blocking wall, through which the 'pac men' cannot chew).

Plate 2: The Bloody Brick Wall

Plate 3: The Black Rainbow

The surgeon was shocked at the impact of the cancellation of the project, when he saw her painting, but was powerless to change the allocation of funds required for the project to continue.

Without the funding I wasn't able to stay in the UK. I had been granted a student's visa, and I was reliant on the funding for the University fees and our livelihood, so I cancelled my enrolment, and we returned to Australia.

I set up a private practice in the Hunter Valley in NSW, working mainly with issues surrounding grief, psychological, physical and sexual abuse and children with attention deficit disorder (ADD), concurrently making several applications to continue my research, but the time was not ripe. Art psychotherapy was still in its infancy here in Australia, and only minimally recognised, even in the mental health setting.

In 1998 I lost my hearing as the result of a medical accident, and closed my practice. I 'went bush' to come to terms with the loss of a vital component of my existence, drew, painted and renovated a house. A friend in Sociology eventually teased me out of my self-imposed exile, when she suggested that I apply to the University of Newcastle to undertake research.

The then head of Fine Art (now The Conservatorium School of Drama, Fine Art and Music), Professor Anne Graham had the foresight to recognise the potential for art psychotherapy in BodyMind health and accepted my application. I constructed a protocol to explore the use of image making as a mnemonic in healing. Eventually I was introduced to Assoc. Prof Afaf Girgis, who had gained her own PhD researching the immunology and stress interface amongst university students. I showed her the mnemonic protocol, and another, which by sheer serendipity I had found while printing out the former. It was one of the proposals that I had created to examine the connections between immunological function, psychosocial function and cancer, shortly after my return from the UK ten years previously. She found it interesting and took me on as a research student. I was finally able to continue the research I had commenced in the UK.

I proposed that by involving participants in art psychotherapy their capacity for coping in the world would be improved as a result of the deep exploratory process fostered by art psychotherapy, and that this process would also unlock much destructive tension, leading to an improvement in both psychosocial and immunological function. The study population in the UK had been heterogeneous, but such a group presented difficulties from the immunological perspective. We decided, after a study of the literature, particularly the research of Fawzy et al.[71], and consultation with various clinicians, that the best population of potential participants would be those with non-metastatic malignant cutaneous melanoma, which is a significant health issue, particularly in coastal Australia This disease is treated initially with simple surgical excision, therefore eliminating a major source of

'contamination' of immunological results; chemotherapy and radiotherapy. We chose to assess fluctuations in immunoglobulin isotype alpha (IgA) and interferon gamma (IFN-γ), collected and isolated from whole saliva as a non-invasive test and a series of delayed hypersensitivity tests, to assess reactivity to an injected antigen, as measures of immunological 'memory'. This was to be coupled with a battery of four psychosocial questionnaires to establish direction of shift over time in psychosocial strategies.

The project, which had been in gestation for a decade, came to maturity at the University of Newcastle.

The process, however, was far from smooth.

There were several supervisory changes, a long period without adequate supervision, and it finally reached fruition in the Faculty of Health under the excellent supervision of Dr. Margaret Dunkley, Conjoint Associate Professor in the School of Biomedical Sciences, my final primary supervisor. Margaret provided quantitative supervision and Professor Michael Hazelton, Head of School, School of Nursing and Midwifery supervised the qualitative arm of the study. He was enlisted a week after I'd fallen and broken my arm, moments following a phone call during which I had been told that no supervisor could be found to enable me to complete the write-up of my thesis.

I have experienced the duration of my enrolment as a research student as a profoundly deep process of personal 'initiation'. During the time of this project I walked the path of death with nine people; one a friend of many years managing to come back a dramatically changed man for the encounter, and the closest three being my grandmother, who I nursed at the same time as I was recruiting participants, my son, who attempted suicide as I began writing up the results, and finally my sister, who was diagnosed with breast cancer within weeks of completing the draft of all but the discussion. I drove to Brisbane with a boot full of papers, books and my computer, and wrote while caring for and being with her through recovery from surgery and subsequent radiotherapy: death and transformation on many fronts.

I have been homeless for short times and yet have presented papers at two international conferences, all the while dealing with porphyria[viii] and still accommodating to a severely restricted hearing capacity.

I have learned more about my strengths and the 'meant-ness' about this project than I could ever have envisaged. Each time I was ready to 'chuck it in', something was presented to remind me that this was not an actual option; like the connections with both my last supervisors, and a fortuitous 'windfall' of funds, unexpectedly sourced from the School budget, which enabled me to travel to Venice to present the findings at the International Psycho-oncology Conference in 2006, a book of van Manen's and paper of Lewis Mehl-Madrona's which crossed my desk at a crucial phase of my writing, restoring my passion for phenomenological analysis, and lastly a godsend in the form of a modest grant-in-aid.

This project then, came into being, almost, it seems, in spite of my intended plans, although it most certainly is consistent with a thread which has woven through my whole work history; the experiences and research associated with cancer, supported by the weft of bodymind and consciousness studies and flecked with spangles of creative expression.

[viii] A genetic, metabolic disorder where porphyrins are not metabolised, Acute Intermittent Porphyria (AIP) is characterised by intense abdominal and low back pain, multiple chemical sensitivity, confusion, anxiety and depression.

CHAPTER 1.

Broadening 'The Mind'; the Concept of BodyMind Medicine.

"The Mind is not just in the brain, but is part of a communication network throughout the brain and body."

Pert.[72]

This statement of Candice Pert's[73] is of tremendous significance to the present endeavour; that of bringing the whole person into view in the medical setting through an integration of the influence of aesthetics, psychotherapeutic practices, social issues and 'environmental' factors on the well-being of those members of our community who experience illness. These people are dependent upon more than medical practitioners have been trained to provide; that is, more than the eradication of disease or rectification of malfunction, as this disease is a reflection of dis-ease requiring an existential improvement in their lives.

The statement recognizes a different reality from that which accompanied and supported the Industrial Revolution and which shaped modern scientific investigation[74,75;] that of mechanistic reductionism through which 'reason/rational thought' (housed in the brain and distinct from simply 'mind') would find the ultimate solutions to all impediments to social progress; social progress being measured quantitatively by benchmarks inevitably pinned to financial gain[76]. Within this framework each member of the community is defined as a productive unit[77], where illness becomes an industry and paradoxically unacceptable[78,79]. It is a reality within which Freud was able to 'demonstrate' that psychic energy was contained in a closed cerebral system, akin to a hydraulic system, whereby 'id', 'ego', and 'superego', sluiced, altering in dominance according to any given situation[80]. True, there appeared to be holes in this system, which Freud explored in his earlier work on hysteria, where the psyche had a observable effect on the body to the point of apparent paralysis, through 'hysterical conversion' [81].

The shift, recognized in Pert's statement quoted above, was heralded at the beginning of the twentieth century by quantum physics, changing the constraints of accepted wisdom: part of the shift in the basic post Cartesian/Newtonian paradigm of scientific thought. Remarkably, the medical sector of the scientific community, in the main, still clings tenaciously to the positivist paradigm, wherein a 'patient' is viewed as an agglomeration of 'systems'[ix] [82,83]and symptoms, which, if investigated in finer and ever finer detail, now down to the molecular, will reveal essential causes and 'cures', with the aim being the eradication of disease[84,,85]. Undoubtedly, the potential for increased general health and life expectancy has resulted from such enquiry, but has the 'person', as a member of a society embedded in a culture, been lost in this quest, and has the possible role of illness been obscured[86,87,88]as has the role of aging[89]? Is this a reflection of our society's culture of 'perfection'? In some societies illness is accepted as a bringer of new understanding[90]. I know from my own experience that I have gained a great deal of insight from my periods of illness. I have also survived to bring four children into the world and watched my youngest daughter attain far increased activity, as a result of the practices based on this scientific enquiry. On the other hand I have suffered when it went wrong.

The 'new' paradigm allows the possibility of accommodating the experiences (not necessarily replicable) of spontaneous remission from disease state and cure of illness through prayer[91,92] and the so-called hallucinogenic experiences of the oneness of life accepted as the norm by all preliterate societies. It also encompasses out-of-body experiences such as those described by Colleen later in the narrative of the group art psychotherapy process (Plate 41 f1&2).

A case study which illustrates the concept of bodymind, and is a testament to the power of the mind to effect healing and harming, is a case described in the 1950's Dr. Bruno Klopfer[93] who was the attending physician for a fellow believed to be in the final phase of advanced lymphoma. The man was not expected to live more than a couple of weeks. A new drug, Krebiozen, was being experimentally trialed, and

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[ix] According to von Bertalanffy, a system is not an entity, as such, but a conceptual model created to allow understanding of an arbitrarily defined aspect of our environment.

Dr.Klopfer decided to administer an injection of the drug, and was utterly amazed at the man's response! When given the drug the man had been so weak that he couldn't get out of bed, was running a fever and gasping for air. Within a few days he was happily walking around the ward and his tumour masses had *"melted like snow"*. Ten days after his one and only injection of Krebiozen he was almost disease free. The drug was then criticized in the press. Unfortunately for Dr.Klopfer's patient, he read this, and quickly relapsed. Intrigued by his patient's response Klopfer told him to ignore this bad press and that he had a new *"super-refined, double-strength"* variety of the drug. What he administered, however, was some sterile, red coloured water. Again the man recovered dramatically and for two months was disease free. It was then announced that the drug should be withdrawn as it was thought to be worthless. Within two days of hearing this news the man succumbed to his final relapse of disease.

During the making of a series of television programmes exploring the reflection of the mind in the body, Bill Moyers interviewed David Felten[94,95], Professor of Neurobiology and Anatomy at the University of Rochester School of Medicine. David Felten relates his astonishment at discovering neuronal structures, where they were previously thought not to exist. *"I started looking at blood vessels and some of the surrounding areas in the spleen. And there, sitting in the middle of a vast field of cells of the immune system, was a bunch of nerve fibres. I looked at them and thought, what's this? Nerve fibres aren't supposed to talk to cells of the immune system. What are they doing here? So we cut some more sections, and looked……and there they were again….We and others eventually discovered nerve fibres going virtually into every organ of the immune system and forming direct contacts with the immune system cells.…The (study of the) two systems (immunology and the neurosciences) grew up ignoring one another… they clearly do not exist in isolation."*[96]

In a similar vein to Pert, Felten went on to explain that there was 'overwhelming evidence' that there is a regulatory interrelationship between neuropeptides, hormones, the immune system and the brain. *"They've found that one factor contributing to a diminished immune response is whether or not an individual is in control of the situation; another factor is whether or not the individual feels lonely."*[97] Research over the last twenty years has expanded on this theme and there is now even a suggestion, and research supporting the proposition, that there is an 'addictive' relationship between the release of neuropeptides and the emotions thus experienced[98,99,100,101]. Within the group of

participants to the research described in this thesis a sense of diminished control, particularly in work life, was a theme that was articulated (both verbally and in images) and explored throughout the duration of the art psychotherapy intervention. This sense of 'helplessness', as described in the Introduction, has been associated with a lowered health status.

"So here we have this great ***defence system***[x]*, which has a wonderful memory, and can generate responses to past insults that have come in again. And we have the brain with its wonderful memory of past experiences. We had thought these two great memory systems were independent. Now it turns out they're not ------- they talk to each other extensively."*[102]

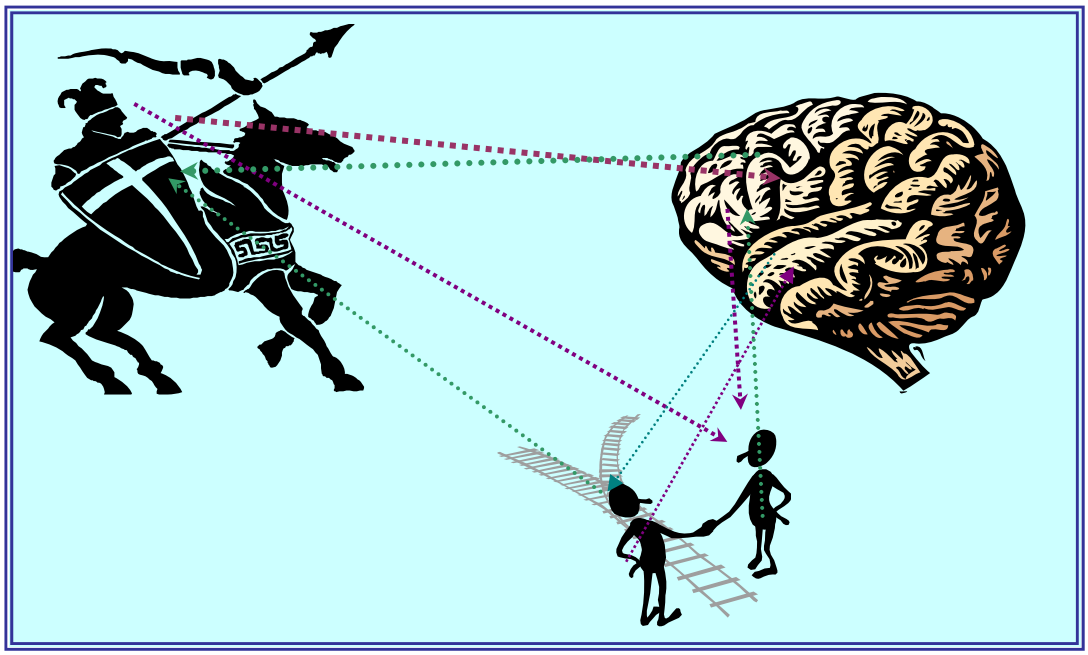

Figure1: Immune and nervous systems cross talk

The immune system, here represented by a mounted knight, communicates bi-directionally with the brain, while the two small people, representing cytokines and hormones, cooperate to send and receive signals to and from both, in a model of the immune system as a defence system. This model is now questioned, in favour of a multi-dimensional communication system maintaining allostasis (homeostasis in flux) as is discussed further in Chapter 4.

In these early days of scientific research into the 'mind-body connection' there was surprise and exhilaration to discover that indeed there was a scientifically acceptable

[x] My emphasis: the notion of a 'defence system' is further explored in Chapter 4

means by which this communication could be elucidated, and which appeared to belie the concept that we are a conglomerate of disparate systems controlled by the brain alone; that there was scientific support to age old wisdom which states that a despairing youth may well die of a 'broken heart', and that a grieving widow must be protected from further shock lest she also die. It was empirical evidence of what Tuke[103] and Beard[104] had postulated more than a hundred years previously, when they recognised the effect of how people **perceived** their circumstances, the occurrences of illness, and recovery from some afflictions. In the mid twentieth century this was intimately experienced by Victor Frankl[105], an unwilling participant in a heinous mass experiment in the human tolerance for extreme duress and privation, when he recognised that those of his fellow prisoners in the concentration camps who felt completely betrayed, not only by their compatriots and the world at large, but also by God, succumbed to the 'Musselman syndrome'. They turned their faces to the wall, and died. It became obvious to him that mere physical distress was not sufficient to kill a man. There was a psychological aspect to survival; the need for hope and more importantly, a need for meaning to both the event, and the person's life.

The early research of Bartrop et al. referred to in the Introduction, identifying a correlation between bereavement and lowered lymphocyte count following spousal bereavement, heralded the nascent field of human psychophysiological crosstalk. The ramification of this research was that there appeared to be a **quantifiable** reason for the increase in illness and death of recently bereaved widows and widowers, and thus also a path into the woods of psychoneuroimmunology. Blalock and Smith[106] demonstrated that lymphocytes synthesize adrenocorticotrophic hormone (ACTH, previously only thought to be secreted by the adrenal glands) and beta-endorphin, thus demonstrating that the immune system is actually capable of hormonal regulation, not simply a system for the monitoring of 'Self or Not-Self' cells. It was also recognised that it is a part of a regulatory communication system which is as intricately woven as a Celtic knot, with no one part independent of the others; part of the human hologram.

It was appreciated, as Klopfer had so convincingly reported, that the unidentifiable part of the mammalian bodymind hologram which thinks thoughts, creates dreams and makes judgments about its surroundings, the mind, both conscious and

unconscious, has an impact on the biological function of the material component of that same hologram. Also *vice versa*, as I have often experienced with episodes of porphyria, when malfunction of that material component of my holographic being influences how and what I think.

In the years following Felten's discovery that there is neuronal involvement in hormonal regulation it became apparent that:

- Neuropeptides[xi] and their receptors mediate intercellular communication.
- Neuropeptides and their receptors are the biochemicals of emotion[107].
- Emotions mediate between thought and physical response[108,109,110].
- There are endorphin receptors (the 'feel-good' and trauma management neuropeptide) in both the brain **and** the immune system[111], and they are phylogenetically ancient, being involved in feeding and thermoregulatory behaviour in molluscs and arthropods[112,113].
- Immune cells have receptors for all neuropeptides found in the central nervous system (CNS) and also **secrete** these same peptides[114,115].
- Macrophages have an important function in innate immunity and antigen presentation to promote adaptive immune response, pathogen phagocytosis, debris scavenging and tissue repair and wound healing. They secrete IL-1[xii], a cytokine[116] (small secreted peptides which act in concert with a second messenger to modulate immune and inflammatory responses) which is involved in leukocyte migration; the cytokine is involved in re-setting thermoregulation through their effect on the hypothalamus to produce fever; the upregulation stimulates the release of ACTH[xiii] which results in a flood of corticosteroids (cortisol), whose action is to suppress
- Inflammation and pain receptors, which in turn leads to a downturn in interleukin 1(IL-1) secretion: an elegant feedback control system[117].

[xi] Neuropeptides are chains of amino acids

[xii] IL refers to Interleukin(IL- followed by a number of identification): any class of glycoproteins produced by leucocytes for regulating immune responses OED

[xiii] Adrenocorticotrophic hormone

This feedback loop was conceptualised, although not illuminated, by Hans Selye[118] in the 1930's as the hypothalamic-pituitary-adrenal axis when he observed that a stressor, either positive (eustress) or negative (distress), perturbed homeostasis, while recognizing that fear, anxiety and fatigue engaged the hypothalamic adrenal (HPA) axis and relaxation occurred when the stressor was mitigated or removed[xiv]. For example there is a difference between the pleasant glowing palpitatory anticipation of the arrival of a lover, and the dry mouthed, gut torsioning anxiety of the furore accompanying discovery of an illicit teenage tryst, by the untimely return of parents, engaging a total fight /flight response. Both perturb homeostasis, however the former floods the body with endorphins while the latter with, amongst other chemicals, cortisol, adrenalin and noradrenalin: it is the latter which is experienced as distress and has an immediate upregulatory immunological response, in anticipation of physical injury. If, however, there is no resolution to the immediate distress, and it becomes a constant background noise it has serious deleterious physiological effect by the dampening of appropriate immunological and psychological response[119]. An important extension to this proposition was added by Lazarus and his team[120,121]'when it was recognised that there is a fundamental difference between the physiological response to physical and psychological stressors, and that perception and appraisal were pivotal mediators between the stressor and physiological (stress) response in both cases. Only distress, particularly if it is prolonged, and exertion to the point of meaningless exhaustion, has a negative impact on immunological function. This appears to be a point often missed in research addressing the impact of **physical stress,** *per se,* on immunological function, and will be discussed further in Chapter 2. Psychophysiological, neuroimmunological, neuro-psycho-immunological and psycho-oncology research has been a burgeoning area since Selye's early work on the physiology of 'stress', and has produced much exciting, challenging and at times controversial data.

[xiv] explored further in Chapter 2 Psychoneuroimmunology (PNI).

Em's Story: The Archaeology of the Image and BodyMind Revealed Through Art Psychotherapy

This project had its conception prior to (and informed my decision to undertake) my training in art psychotherapy, during the final phase of my husband's life, as he unwillingly and yet inevitably relinquished his active involvement in our lives. The impulse had been guided by work with Elizabeth Kübler-Ross. Some time before the diagnosis of his cancer we had both been introduced to the way in which she worked with the pictures created by patients with cancer, grieving relatives, and those involved in her workshops. The reflection of long held, and often suppressed trauma, and illness in the pictures was uncanny, particularly the connection between major life events and the onset of cancer. The project germinated as I trained in Sheffield and worked with oncology patients and eventually, after graduation, ran a pilot project to explore the effects of art psychotherapy with surgical oncology patients. The results served to reaffirmed Kübler-Ross' contention regarding unresolved distress and cancer.[122] The results also demonstrated reduction in pain perception, greater relaxation, improved communication, evidence of an unconscious understanding of disease process and progress amongst those with whom I worked, as well as survival moderately beyond medical expectation for three patients.

One patient illustrated several of these points most profoundly. Em was a woman in her seventies and what transpired through our work together had a great influence on my future research. Em was admitted to hospital for the insertion of a cesium implant. She had a diagnosis of cervical cancer, the treatment of which necessitated the implantation of a radioactive pessary[xv] (cesium), and a period of supine, immobile rest and isolation of 24 hours.

Below is one of her images, which well illustrates many strengths of art psychotherapy: the revelation of unconscious content, so called 'hysterical symptom conversion' and emotional release followed by relaxation and improved communication, and perhaps

[xv] Pessary: a small medicinal or contraceptive soluble block inserted into the vagina. OED.

most important in psychotherapy the capacity to cross intellectual and linguistic boundaries.

Plate 4: The House of Hell.

Em's treatment was being delayed because she had an intractable cough; she could not be placed in the required position if it continued. It was imperative that she remain as quiet and still as possible. There was an obvious risk that she may choke. No apparent organic reason for the cough could be found and at the Friday staff meeting it was decided that she would require sedation. Her hospitalization could not be prolonged any further. The treatment deadline was the following Tuesday. The House Officer[xvi] suggested that I see Em prior to sedation, and the team agreed.

During our first meeting it became apparent that Em was very anxious about the prospect of immobility, lying on her back **after** an anaesthetic. We discussed her experiences of anaesthesia, which was restricted to the memory of having been lined up with a bunch of other school children to have mass routine tonsillectomies, with ether anaesthetic. I commiserated with her, as I had also experienced ether

[xvi] 'House Officer' is the position of junior medical officers referred to as 'Resident' in Australia and "Intern" in the US.

anaesthetics as a child, which reduced me to a vomiting, miserable mess! I explained to her that anaesthesia was now far more sophisticated, and assured her that she would not be left nauseous. The cough, however, did not abate. On the following day she told me a little of her childhood in a Yorkshire mining town. At 14 she was responsible for the care of her siblings and at 15 the primary breadwinner, as her father succumbed to the miners' torment, emphysema. Her sole source of joy had been Sunday walks out in the meadows surrounding the village, to pick wild flowers or go on frugal picnics. Em's first image was a rudimentary map of her village and the fields in which the picnics were enjoyed with her siblings.

When the War broke out she worked in a munitions factory in Sheffield and had a doomed affair with a young officer. He was killed, leaving her unmarried and pregnant. A village boy, with whom she had grown up, suggested that they marry and he would bring up the child as his own. I asked her to make me a drawing of the house in which they had lived, and the picture above (Plate 4) was produced after protestations that she'd not drawn since childhood.

There were several things, which immediately drew my attention.

1. the dark ground which abuts the house, and into which it appears to be sinking
2. the bare and stark trees
3. the 'spotty' appearance of the house, and it's 'list to starboard'; a sick house?
4. the heavy clouds hanging over the house, and finally
5. the black little outhouse in center front.

I enquired if she could tell me about the history of the marriage. Her husband had punished her from the day that they had married and barely recognized the child, a daughter (represented as the small red flowers at the base of the left hand tree), when she was born. His treatment of Em's daughter deteriorated as each successive child, all sons (yellow flowers on the right hand side of the tree) were born, until at 16 her daughter left to move as far away as she could from him; to New Zealand.

This left Em alone with her husband and sons.

I asked her to tell me about the little black outhouse.

Em told me that it was where her husband had died of self-inflicted asphyxiation while sniffing aerosol cans. Her sons blamed her for his death.

There seemed to be a possible connection to the cough, so I asked what basis there was for her sons' accusation. Apparently her husband had told them that he 'had to' sniff the aerosols because their mother denied him 'his conjugal rights'.

Em then disclosed for the first time in her life what had been a practice she had had to endure until she could bear it no longer, and had withdrawn from the marriage bed. Her husband was a coprophile[xvii], that is, he achieved sexual stimulation and release only if he was able to defecate on his wife; and his place of choice was on her face. I quietly said, *"No wonder you're coughing"* as she released her pain in heaving sobs.

The following morning we had a session with her daughter, who had arrived from New Zealand, and she was able to tell her story to one of her children.

The cough disappeared.

The connection between her marital experience and the procedure she was to undergo are not difficult to see. Em was to be, in her perception, restrained, on her back, and helpless, much as she had been by her abusive husband. The fear of this was sufficient to produce a hysterical conversion, in the shape of the cough, which was resolved when she was finally able to explore this horror in a supportive environment, where she was able to 'get it off her chest' and 'tell' without initially using any words at all: she made a picture.

On the Monday morning rounds her progress was discussed and she was pronounced ready for theatre for Tuesday. The Consultant said that he was glad that the valium had worked, whereupon the House Officers said, *"No, it was actually art therapy",* and I was asked to tell as much of the story as I had been given permission to share. A short

[xvii] Coprophile: one who takes an abnormal interest and pleasure in faeces and defaecation. OED

shocked silence fell amongst the team, which was finally broken by the Consultant when he said *"Well, PRN paintbrush then!"*[xviii]

The information that I was able to pass on to the other members of the team also ensured that Em was dealt with in a compassionate and more caring manner, rather than the exasperation that had been mounting.

The Ritual of Therapeutic Image Making and Whole Being[xix] Health/Wellness

In all pre-literate/pre-industrialised societies the enactment of rituals provides a social context for rites of passage, marking significant life transitions, and the making of images is related to the mythic and mystical thus embodied[123]. The story is held in the image. It is the mnemonic of 'Being'. The image is used as a mnemonic in myth telling, in the magic of healing and harming and the propitiation of generative forces to maintain and sustain life. The power of the image is both its connection to, and reflection of, the archetypes of human consciousness, and the reverence accorded the image: image and ritual are the concretisation and enactment of the sacred.

Prior to the twentieth century, illness, healing, death, mourning and all other major life events were contained within set and recognised rituals[124,125,126,127]. With the mass mobilisation and education of populations of Western societies, accompanying the efflorescence of industry and technology, the connection to place and ritual has been eroded. One of the costs of increased urbanisation accompanying industrialisation is individuals bereft of recognised and recognisable social structures within which to negotiate and ascribe meaning to all important life events[128,129].

With the peak of western political imperialism in the early twentieth century there was a fascination with 'primitive' cultures, particularly ritual life[130]. The emphasis, however, was on the presumed lack of 'civilisation' that this represented (the people of these

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[xviii]PRN: pro re nata: L. 'for the thing born' but used in medicine to denote 'as needed' or 'when required'.

[xix] Being: I have used title case in order to define the whole person as an entity in a constantly present process.

cultures were 'savages'), reinforcing the concept of Western (white) superiority[131]. Many rituals associated with rites of passage were repressed, or devalued, regarded as remnants of 'primitive' behaviour, anathema, at the time, to civilisation[132]; the loss of connection to place also played a part in this process. Consistent with the ethos of colonialism, and by extension, elitism, Freud regarded the use of ritual as regressive, and therefore pathological. In the last 25 years, however, it has become evident that ritual[133] is important to social and psychological health, that is, the **sacralisation of an event**, which lends it the weight of tradition and the non-ordinary[xx].

Anthropologists have found evidence of the transformation of many previously recognised rituals, which have been 'de-contextualised', for example, the medicalisation of childbirth. This biological function has been the exclusive province of women for millennia, accompanied and guarded by rituals sacred to women. With the ascendance of male dominated medicine in our culture it was transformed into a highly technological ritual, devoid of the recognition of those rituals and root of the gender segregation[134], resulting in the disempowerment of women in a quintessentially female activity. This situation is now actively challenged, and women are creating their own rituals, taking back control of the birthing of their infants, even to the point of returning to home birthing. Bearing in mind the benefits of increased maternal and infant survival[xxi], through medicalised support of this natural process[135] (which, indeed, can go horribly 'wrong'), hospital based birthing has changed considerably in response to this voiced need, giving recognition to the primacy of the woman's role, and **her** need for ritual, including music, water, massage, female support and the presence of various members of her family. Another transformation is the post high school final exam 'booze up'[xxii] and acquisition of a driver's licence, functioning as signifiers of newly won adulthood[136,137,138,139], supplanting recognised rituals of the attainment of adulthood where the young person must undergo separation, learn sacred lore, prove his value to his community and accept adult responsibility. There is also a resurgence of adherence to communities recognising formalised ritual religious observance.

[xx] In this context, ritual does not refer to the pathological repetition of a particular activity in a particular way and space as seen in individually expressed obsessive pathology, the pathological state to which "ritual" was demoted by early twentieth century psychiatry.

[xxi] These perceived benefits are consistent with the place of medical intervention in our society, however, are not necessarily translatable to other cultures with a different perspective to the 'value' of life.

[xxii] Booze up refers to a social gathering the express aim of which it is to attain a state of inebriation.

Furthermore, research has established that the 'placebo effect' owes much of its power to the actual ritual involved in the administration of the medication or sham intervention.[140]

With the secular exploration of human consciousness during the last century and a half, has come a growing realisation that the articulation of the inherent human creative impulse, in its many manifestations, in a setting ascribed as therapeutic, is conducive to both psychological and physical health[141].

Only since the Renaissance has 'art' been used in Western[xxiii] cultures for the sake principally of pleasing the eye or ear, and in the process has been transformed into a commodity. The acquisition of articles considered pieces of 'Art' reflects wealth and therefore status. Art has also been used to make both clearly personal and political statements and in the manipulation of the mind of the beholder, seen most particularly in the fields of film and advertising. Notwithstanding the commodification of 'art', created by those in our society recognised as 'artists', it remains a source of primal expression.

Unfortunately, in our society, which is increasingly governed by the intellect and technology, this impulse is repressed. It is not recognised as either a response to or stimulation for, inspiration; that nebulous entity responsible for countless scientific breakthroughs. In the last half century this repression has also been recognised as deleterious to emotional health, 'creativity' remaining the domain of the equally repressed 'inner child'. Creativity is, therefore, afforded a sense of respectability when articulated in the psychotherapeutic setting and associated with emotional healing. It has again become a part of what is, in essence, a healing ritual. Accompanying this re-awakening to the power of creativity, expressed in such activities as image making, musical composition and playing, drama and writing, is the recognition of a loss of connection to, and profound need for, formalised and structured practices within a defined context, in short, rituals, within which to enact this impulse. The proliferation of all manner of 'ancient' and 'indigenous' rituals for healing and regaining inner

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[xxiii] Western Culture here refers to the predominantly capitalist culture which has evolved around the Atlantic and Mediterranean basins, and been exported through both cultural and political imperialism.

power[142,143144] bear witness to this deep need. Further, the use of individually created visual mnemonics, in such a setting, is being recognised specifically as having the capacity for healing[145,146] not only the psyche[147], as traditionally accepted, but also the material aspect of the individual, the body ____ each being contiguous with the other; the 'BodyMind'. The healing effects are recognised by changes in physiological and psychological measures, elevations of which are associated with greater susceptibility to disease[148]. Amongst these measures are, reduced anxiety[149,150,151], lowered blood pressure[152,153], reduced pain perception[154,155], reduction in serum cortisol levels[156], and, as described in this study, improved immunological function[157], general subjective improvement[158] of interpersonal relations[159,160], *'joie de vivre'* [xxiv] and that most difficult to define concept[161], the 'Quality of Life'[162].

What is seldom recognised in this burgeoning industry of 'Personal Growth' or self generated healing, is the essential embeddedness of ritual within a **total** social context; a recognisable context which is non-existent in our modern, technologically sophisticated and spiritually impoverished society[163,164,165]. It is perhaps also ignored that the function of 'ritualised' image making is not solely that of 'creativity, and that there is more than releasing 'creativity' at work in these therapeutic rituals. The study of the history of art and artists is an abundant demonstration that creativity in itself is no guarantee of health, either physical or psychological. In fact, during the eighteenth and nineteenth centuries in the West, madness and illness, particularly tuberculosis, were **signifiers of creative genius**.

Both cancer and madness are 'creative' illnesses; the former creates pathological tissue and the latter a pathological view of reality.

Focused attention is central to healing rituals, meditation[166], creative expression and psychotherapy. I would suggest that it is the focused attention, or 'mindfulness', which transforms the internal environment[167]. It creates the space within which, what Larry le Shan (1989)[168] calls 'the unique song' of each individual, is sung. Art psychotherapy, as

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[xxiv] "Joie de vivre"; Fr. literally; the joy of life; the capacity to fully engage with life with humour, curiosity and full expression of affect, particularly Joy.

shown with Em's story, can facilitate the finding of that song, and provide the space where the bodymind recovers its memory of wellness[169].

Is it possible that the making of images, the exploration of the content that they represent and the talking out accompanying this process in group art psychotherapy, create such a structure; exhuming and examining memories and associations relevant to the process of pain and confusion accompanying illness and trauma with 'fellow travellers' who have a similar experience? Can this process be in some way similar to what was termed a 'vision quest' by the indigenous First Nation Peoples of North America[170,171]?

The 'vision quest' involves a practice of supported isolation and confrontation with both the individual's 'demons' and 'power animals/spirits'. In this ritual process he is empowered with a knowledge of his own inner resources[172,173]. In the course of this ritual the individual builds on an understanding that he is at once a member of a cosmic and terrestrial community, while at the same time gaining an understanding of responsibility for his actions and to the community, which 'holds' him. Would the psychotherapeutic image making 'ritual' process of art psychotherapy then be life affirming[174], increasing the individual's total well being? In like vein to the vision quest, would this also be a means of realising personally empowering meaning, rather than accepting perhaps debilitating social myths[175]? The most damaging of these is what Barthes[176] termed a 'second order connotation'[xxv, 177], wherein there may be an immediate equation of cancer to death, or perhaps worse, a 'death sentence', which implies **capital punishment,** arbitrarily meted out for an unknown transgression. [178,179,180].

[xxv] The 'second order connotation' was a concept of Barthes' by which he explained the emotive content superimposed on a 'thing' giving it a connotation apart from the essential meaning of the 'thing in itself' adjudged by its mechanism and pure function, where the connotation functions to maintain a set of constraining social norms associated with capitalism. It is a concept adopted by Feminist and Marxist Theory to elucidate much 'bourgeois social control'. While I do not support the totality of this theory, there is an element of this in the 'blame the victim' position that was prominent in the late 1980's in many BodyMind concepts then promulgated. The most important of these being a punitive stance towards the afflicted by ascribing **responsibility** for disease, because of what one thought; ie, that it was one's own **fault**. This concept was tremendously damaging as it ignored the underlying patterning of early life experience and unconscious 'scripts', the social milieu in which the person was embedded, and the multiple environmental factors such as social status, air and water pollution, quality of food and housing, and exposure to pathogen. Another such factor related to Barthe's theory is the concept of contagion experienced by some people with a diagnosis of cancer. This is not experienced by people, say, with cardiac dysfunction.

The signs and symbols used to express an idea may well hold within them a wealth of information hidden from functional awareness (otherwise termed the 'unconscious' in the classical psychoanalytic framework) regarding the 'cause' and course of a disease or trauma, experienced by the individual as illness or pain. These may be similar to the mnemonics in the story/song/place/being of indigenous peoples. In the making of images individuals are given the space to tell their own myth /story in an environment where it will be heard, acknowledged and respected, and in so doing validate their own existence. In turn validating and being validated by others in the safety of a group; they engage in 'art-ing', that is, 'being'; reconnecting to the soul, which is left in the dark corners of our culture's cupboard of skeletons[181]. The process of art psychotherapy becomes a ritual in the process of healing, and so, 'we return to a place once known', to realise that it, and we, are no longer the same; the never-ending spiral dance of growth.

"As mind-body medicine points more towards the empowerment of the individual through self-care, we may see a fusion of integrative health practices….with psychoneuroimmunology, with some new form of depth psychology that emphasises emotional language, mental imaging and a philosophy of self realisation….In this sense the historical dialogue between psychology and physiology may give a clue not only to the autonomy of human consciousness as a potent force for change in our bodies, but also to the epistemology of what present-day conceptions of science might evolve into the future."

Taylor E.[182]

The Place of the Soul's Song[xxvi]

In his work with oncology patients over several decades, Larry le Shan identified three reasons that were consistently given for not wanting to die; they are:

1. The fear of the circumstances of death.

2. The desire to live for others, to fulfill the expectations or needs/demands of others.

3. The desire to 'sing the unique song of his or her personality.'

[xxvi] See p104 for an attempt at defining Soul by Fred Alan Wolf and p. 107 for my own attempt.

"The body will not mobilize its resources for either of the first two reasons. Only for the third will the self-healing and self-recuperative abilities of the individual come into play."

The Mechanic and the Gardener. Le Shan, L[183].

The act of making an externalised representation of the internal image is a kinaesthetic activity, which may trigger all of the senses associated with the event portrayed, while simultaneously discharging locked muscular tension. The therapeutic action of recognizing agency in one's own life is reflected in a lessening of anxiety and an increase in joy. This then disengages the hypothalamic-pituitary-adrenal axis (HPA axis), responsible for the defeat/withdrawal responses and relaxes the autonomic nervous system (ANS) which triggers the fight/flight response[184], therefore returning immunoregulation to equilibrium.

Plate 5: Singing the Soul's Song.

It is through a process such as art psychotherapy that this 'unique song' can be recognized and accepted.

It is my hope that the research, described in the following chapters of this thesis, will be a positive addition to the understanding of bodymind healing, recognising as it does the holographic structure of the human being/becoming and the society by which it is supported, and co-creates. It is necessary for the acknowledged structure, previously accorded ritual, to grant psychological exploration its recognition as a **healing** modality. In the 'sacred space' memories are recalled through the making of images, and this leads to exploration of repressed pain followed by **conscious** decision making about the moderation or change of behaviours, which have become unconscious and destructive. It is possible that this process alters neuronal pathways and immunological responses laid down in early life.

"Every artist dips his brush in his soul, and paints his own nature into his pictures"

Beecher H W[185]

CHAPTER 2

Introduction to Immunology and Psychoneuroimmunology (PNI)

Historical Perspective and Theoretical Models

"If there is simplicity somewhere in physics and chemistry, it is not in the microscopic models……..living organisms are far-from-equilibrium objects separated by instabilities from the world of equilibrium and that living organisms are necessarily 'large' macroscopic objects requiring a coherent state of matter in order to produce the complex biomolecules that make the perpetuation of life possible."
Prigogine, I. "From Being to Becoming"[186]

"The immune system represents a concerted action of many components. That complexity cannot be analysed at a defined molecular level throughout the system at present. The more complex the phenomena are, the less likely that controlled and robust results and interpretations can be achieved. The physiology, pathophysiology, molecular mechanisms of a single cell are barely understood; when two cells interact can sometimes be understood; but the interactions involving three or more factors are not yet able to be understood. It is therefore not unexpected that several of the hotly disputed phenomena in immunology are complex (such as regulation). Such uncontrollable complexity, often paired with indirect or weak detection methods, such as enzyme- linked immunosorbent assay (ELISA), cytokine release, proliferation or delayed-type hypersensitivity, renders experiments almost unrepeatable and therefore unreal."
Zinkernagel, R. 2006 Keystone Conference on Tolerance, Autoimmunity and Immune Regulation; Breckenridge, Colorado[187].

Rolf Zinkernagel's discerning remarks regarding the complexity of immune function underscore the difficulty, perhaps even impossibility, of gauging a direct cause and effect association between components of whole body function. In addition to the cellular complexity of which he spoke at the 2006 conference is the convoluted interaction with the 'mind' and the external environment: it might also suggest that my

research is 'unreal'! Pert[188] asserts that mind and body constitute an indivisible communication network, which, she suggests, is dependent upon cytokines. Zinkernagel's comments regarding the 'unreality' of what he maintains as weak detection methods emphasises the need for an approach which embraces the whole at the same time as investigating interconnected (or perhaps even at times apparently unrelated) minutiae; it also has a correlate to psychosocial investigations, in that the 'social' aspect of this line of investigation is often given 'lip-service' when questionnaires are used to assess individual affective state in a 'snap-shot' manner[189], where affect is fluid and context dependent. Social interactions are as complex as the immunological interactions of which he speaks, as is the ecological milieu people inhabit. The context dependency, by way of tissue and organ specificity, of immunology is also being recognised and discussed[190,191].

Immunology is historically embedded in bacteriology and epidemiology through the curiosity and eventual understanding of a relationship between Infection and immunity[xxvii], a term originally used by the seventeenth century Dutch physician van Sweiten, who coined the term 'immunitas' to describe the apparent protection from certain diseases by surviving them[192]. The initial historical record in the West of this protection from a second episode of the same disease was by Thucydides, who, during the plague of Athens in 430BCE, experienced first hand, that those who, like himself, had previously suffered a bout of plague, were able to nurse others so afflicted without again succumbing to the scourge.[193]

Classically, immunity is seen as an organisms' **defence from attack,** a position promulgated by Louis Pasteur when he elucidated the 'germ [or pathogen] theory' after recognising that spontaneous generation did not account for fermentation or miasmas for infectious diseases, but identified micro-organisms as the causative agents. The phraseology used is skewed towards a military model with cellular **surveillance, attack** and **destruction** of **invading, foreign** organisms, or those which **evade and/or overwhelm patrolling** immune cells and antibodies are **weapons of destruction** in an **army of cells**, which has its origins in 19th century European nationalism and social unrest, when the body, like the state, became a contested economic and socio-political

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[xxvii] from *immunis* L 'to be exempt from public duty, *in*: not, *munnis*: ready for service' OED

entity with boundaries to be guarded from potentially 'marauding' 'Others'. Central to this concept are that of territorial ownership and also the discrimination and primacy of 'Self' from 'Other'. In the mid nineteenth century[194] (co-incidentally the time of tremendous social upheaval with cultural rebellions throughout Europe) Claude Bernard was critical in transferring this ideology to biology when he described the body as a demarcated autonomous entity, whose systems are in inter-dependent relationship within the organism as a whole. Sir Peter Medawar and Sir Mc Farlane Burnett later reformulated this, in relation to the immune system, when the term 'Self/non-Self' was used to address immunological appraisal of syngeneic or foreign cells/organisms. It was a major breakthrough, particularly in the context of transplant, or graft rejection, however the concept of 'selfdom' is based on two interrelated conceptual products of the 17th century, that of an isolated, autonomous, legal entity[195], and an established Sense of Self; nonetheless, the philosophical and political underpinning of this concept are not addressed[196,197], and the search for an understanding of what constitutes a 'self' is in fact still the source of much philosophical discussion and now investigation in the neurosciences[198].

An alternative view could well be described wherein the components of the 'Immune System' are in the continual process of **establishing** an identity[199] ___ much as the human psyche engages in **becoming** ___ and is, in effect, a system of **discrimination and communication**[200], in the business of maintaining organismal homeostasis. Such communication includes cellular signals of 'distress' (as cell integrity is interrupted by pathogen or injury) which elicit a response to repair damage and which Matzinger[201] suggests, accommodates the transitional phases of puberty, pregnancy and lactation, where changes in the 'becoming self' rarely elicit auto-immune degradation and which remain unaddressed in the Self/not Self construct. It also has psychological parallels. That which fits an individual's world view is accepted as congruent, and that which doesn't is rejected, or causes distress (may even be 'sealed over' to wreak havoc during or following periods of distress unrelated to the original event), and world views are challenged at each of the maturational stages mentioned above. The catastrophic immunological cascade that often claims the life of the individual in which the system is embedded following major trauma[202], has a concomitant psychological response with suicide or the 'Mussleman syndrome'[203] at times of total despair following

overwhelming loss or immobilisation. The proposition of immunity as communication and discrimination regards the human organism not as an isolated entity, but simply a mass of communication signals in constant relationship within and to a holographic, ecological web of fluid interdependent signals; ____ and here it becomes an issue of semantics as our language has, as yet, no construct to convey an actual concept of such fluidity ___ for even these words imply a separation at some point. The current view of the immune system as one of discrimination, communication and response allows greater scope than the restrictive one of cellular recognition of Self/non-Self, on which the field was founded, and which has naturally evolved to recognise the tremendous complexity of interconnectedness. This is in line with the concepts on which the field of psychoneuroimmunology (PNI) are built, where the biochemistry of **affect** is recognised as intertwined with the immunological response;

> "*Homeostasis is the physiological process by which the internal systems of the body (e.g. blood pressure, body temperature, acid-base balance) are maintained at equilibrium, despite variations in the external conditions*"[xxviii].

Perturbation of homeostasis, or interference with the coherence of the whole system, is a consequence of the imbalance of this interdependence.

The concept of stability throughout '*le milieu intérieur*'[xxix] was initially elucidated by Claude Bernard, when he observed that fluctuations in blood glucose levels were maintained within set limits, variation from which produced symptoms of pathology. The term itself, though, was coined in 1932 by Walter Cannon from the Greek *homo* (same, like) and *stasis* (to stand, posture) while studying the physiological effects of shock and the activity of the endocrine system, particularly the adrenal glands, and the maintenance of a stable internal environment[204,205].

[xxviii] Oxford Concise Medical Dictionary

[xxix] Le milieu intérieur: Fr. literally, the internal environment, referring particularly to the extra-cellular fluids: blood and lymph.

"The control processes (for the maintenance of homeostasis) require a flow of information which, parallel to, and associated with that of matter and energy, continually pervade the organism. ***Information transmission***[xxx] *makes use of signals as carriers which in turn utilise various sorts of material substrates"* [206]

Greger & Windhorst

Information transfer within both systems is carried out by way of the hormones, neurotransmitters and cytokines; the differentiation of which is somewhat fuzzy, as the same molecule may be involved in different types of communication and is thus categorized by function, depending on what it does where and when, either as a neurotransmitter or a cytokine, or perhaps a hormone. As an example, both prostaglandin and adrenocorticotrophic hormone (ACTH) are regarded as hormones if originating from the central nervous system (CNS), however when they are expressed by macrophages they are referred to as cytokines. Perhaps the easiest delineation is that of distance of effect; if the message is sent by 'interstate courier' it's a hormone, and if it's 'a knock on the neighbour's door', it's a cytokine; neuropeptides do both but only along nerve pathways. What is clear about cytokines, however, is that all nucleated cells in the body are capable of producing these regulatory peptides[207], although they will not all produce the same cytokines.

The immune and neuroendocrine (driving PNI responses) systems can be seen to be involved in the process of maintaining homeostasis in that they both, in concert, maintain a system capable of discriminating the direction of adjustment of variables: all of the scattered cellular and molecular and behavioural components of the systems are engaged in the maintenance of equilibrium; it is often unpredictable, and essentially the systems are systems of information transmission and response. The level of complexity of the vertebrate cellular communication system is phenomenal, and still relatively poorly understood.

A paradigm for the immune system has recently been suggested by Wu et al, which proposes that "*opportunistic pathogens* ***actively sense***[xxxi] *an alteration in host immune function,*

[xxx] my emphasis

[xxxi] my emphasis

and respond by enhancing their virulence phenotype"[208], which has important implications in the field of psychoneuroimmunology. Matzinger[209,210] has also suggested that the currently held assumption that immunological cells have evolved to bind to pathogen is back to front, and in agreement with Wu, suggests that the pathogens have in fact evolved means of seeking and binding to them! At the same time many pathogens evolve to avoid recognition by the immune system, thus avoiding the immune response that would normally eliminate them. This is more consistent with an understanding that pathogens are in constant contact with potential hosts with which they share an evolutionary relationship[211]. Indeed, it has been estimated that there are, in the immediate vicinity of the average human, **in excess of 4000 <u>potentially lethal</u> pathogens per cubic centimetre[212], and an adult will inhale 2 million litres of air in a 24 hour period, so 8[13] potentially lethal contacts every 24 hours: 500-600 different bacteria live in the mouth alone and half a million bacteria will already have colonised an infant's armpit by its tenth day of life.** The energy required to 'fend the invaders off' alone would surely exceed the possible intake, particularly if we then take into consideration that **the entire cellular population responsible for surveying nearly every surface and tissue of the human body, makes up only 1-2% of the total cellular volume!**[213] (At the same time it must be stressed that **not all bacteria are pathogenic**, as discussed below)

Taking this paradigm, and the Medawar-Burnett and Matzinger constructs a step further, Leng and Bentwich[214], and Raz[215] propose that the immune system functions along the lines of 'Fuzzy Logic', thereby by-passing the sticky problem of the definition of 'Self-dom' and introducing the possibility of shades of grey in discrimination, allowing that autoreactivity is a function of normal immunity. Raz, taking another step beyond the difficulty of defining self and the complex interaction of organisms in the non-sterile environments of gut, uro-genital tact, lung and skin, which usually elicit no immune response, is suggesting that immune responses are organ (or Matzinger says, tissue) specific, noting that "*the innate immune game played by the spleen is very different from that played by the lung and both are very different from that played by the colon.*"[216] Matzinger and Wu would seem to be in closer agreement to Bernard's suggestion that *le milieu intérieur* is as important to pathology as the pathogens themselves, rather than that outlined by Pasteur and Koch, where pathogens are in and of themselves the creators of infection

and disease; in effect the Bernardian concept is one on which PNI leans. The Bernardian sense that the organism is an isolated and independent entity is no longer tenable from an ecological perspective, however, and it is unfortunate that this perspective in particular has received, to date, very little attention although Chiappelli, Franceschi, Ottaviani, Soloman and Taylor, in *Comprehensive Physiology*[217] state that *"the Cartesian mind/body dualism is untenable, and health of the body is interdependent and intimately intertwined with the well-being of the mind"*, which, of course, is intimately intertwined with the geopolitical and socioeconomic environment[218,219,220,221] in which the body, of which it is an inextricable part, is an inhabitant.

Western biomedical, laboratory (often animal research) centred, culture, resulted in assumptions by some scientists which disregarded the impact of human cultural determinants and the general ecological context dependency of immunological priming and response. As an example, the 'hygiene hypothesis' suggests that reduced exposure to pathogens may be responsible for the rise in IgE (Immunoglobulin isotype E) mediated atopic diseases such as asthma[222]. Following immunisation and general improvement in sanitation, significantly reducing the pathogen exposure in early life, including the reduction of helminth burden; such an ecological interdependence of human culture, pathogen and immunity is missed in the closed laboratory situation[223], and the evolutionary development of the immune system. McDade suggests that "*pathogens drive a developmental process that closely resembles natural selection, leading to somatic evolution of the lymphocyte repertoire……the system is designed to incorporate information from the surrounding disease ecology, and the intensity and diversity of antigen encounters – especially early in life – can have a lasting impact"*[224].

A proposition which incorporates all of these concepts is found in McEwen's[225] concept of **allostasis**, the process through which homeostasis is maintained while the 'set point' shifts in a changing environment and which recognises variable physiological needs (allostatic load) dictated by environmental, biological, psychological and social demands: if the allostatic load exceeds energy intake, or is associated with social conflict or other dysfunction, which in themselves may disrupt energy distribution, pathology results[226].

All cellular beings have the capacity to engage in actions to prevent consumption by specifically known parasitic free loaders by processes such as phagocytosis or enzymatic disarticulation of the DNA of the 'unwelcome guest'.

In a surprising evolutionary leap, with the appearance of cartilaginous fish, however, immunity became more plastic and developed the added capacity to change with novel pathogenic encounters, and maintain a memory of such encounters to enable faster response on re-presentation of the **same** pathogen[227]. The immune system is also centrally involved in cellular renewal and tissue repair, thereby performing a vital function in cancer detection and recovery from mechanical injury.

Until quite recently, mammalian immunology[xxxii] has been divided into 'innate' (also referred to as non-specific immunity) and 'acquired' immunity (or specific or adaptive immunity), the former being phylogenetically far older than the latter. All vertebrate blood cells are produced in the bone marrow. Lymphoid precursor cells lead to B-and T-cells, T-cells undergoing a process of 'readying' in the thymus (hence T-)[xxxiii]. While all cells have receptors on their surfaces, T-and B-cells are those with the greatest number and diversity, allowing for tremendous specificity of contact and response, to the point that the difference in arrangement of **one amino acid** in a polypeptide chain may prevent binding by T-or B-lymphocyte receptors[228].

Neither innate nor adaptive immunity, however, can function alone. Immunity is conferred through the interactions between the two modes of pathogenic recognition and subsequent disarticulation and absorption (phagocytosis), in communication with surrounding tissue and memory of the adventure, within a single interdependent system as an integral aspect of a complex supersystem _____ the individual 'BodyMind'. This bodymind is again nested in its ecosystem (family, community and culture) and environment, another, greater supersystem, which also impacts on the bodymind's capacity to mount an immune response.

[xxxii] In the case of this thesis, the mammalian immunology under dsicussion is that of human immunology.

[xxxiii] B cells are so named, not because they originate in the bone marrow, but because they were first identified in the *bursa fabricius* an organ found near the avian cloaca..

The literature is not particularly consistent on the nomenclature and many still refer to innate and acquired immunity to distinguish responses already present from those which arise in response to the antigen, accordingly, for the purpose of this exercise, I will follow the classical demarcation. The point that there has been a distinct research bias towards the 'adaptive' immune system, being capable of 'cognition' and 'memory', which reflects the current lauding of the intellect in Western society, however, ought not to be missed[229], even though this bias has resulted in tremendous strides in the prevention of many diseases through the process of vaccination and further understanding of the complexity of this bodymind 'sensory organ'.

A theoretical framework, which encompasses the notion of a supersystem, is *synergetics*[230], which studies the essential interactions between apparently discreet systems, but which are in fact nested interdependently within a coherent Whole. Synergetics expects the unexpected and can therefore tolerate the 'phase jumps', which are a factor of biological activity, and in this case immunological and particularly PNI, function.[231, 232].

A Brief Description of Immune Function

> *"It should be stressed here that the dividing line between physiology and pathology is particularly arbitrary in this field (viz .immunology). For instance, we are not aware of any active defence mechanism ensuring the quiet and unobtrusive colonisation of our skin and mucous membranes by a host of micro organisms."*[xxxiv] [233]

As I have described above, every living entity is immersed in a rich environmental soup of potential pathogens and toxins, some well known, others intermittently encountered and still other chemical pathogens never encountered until the advent of the 'Chemical Revolution' of the 20th century. Most will elicit a response, if recognised as deleterious to the organisms' coherence, even if the organism consists only of one cell.

[xxxiv] In fact there are approximately as many micro organisms on the skin surface of the average human as there are people on the planet, living, multiplying and dying without any apparently detrimental effect, which we can no longer say of the human population on the planet!

The immune system cannot be found in any single organ, but relies on information exchange, interaction and co-operation between several organs, cell types and chemical communicators of various hues.

In vertebrates, and consequently humans, the primary 'envelope' (which, linguistically and immunologically, defines 'Self') is the skin and its moist involution, the mucous membranes of the respiratory system, optic mucosa, gut and genitalia. In 'Western' culture a common lay conception is held that **all** microbial life is dangerous to the integrity of the human system. This was generated initially by Pasteur and later Semelweiss's [234] recognition for the need for asepsis in the control of infection, initially surrounding post partum and wound infection. Unfortunately the valid understanding of the danger of infection was re-interpreted in the early twentieth century by the general public when it was coupled to a colonial concept of social elitism, correlating dirt, disease and poverty to a lack of civilisation and intelligence. This has been reinforced by public health drives and the not insignificant pressure of the chemical, pharmacological, and advertising industries, for example the current trend to advertise many household cleaning chemicals as capable of rendering the house 'safe from bacteria'. As is well recognised in biomedical field, there are, however, numerous populations of quiescent commensal and essential non-syngeneic, opportunistic organisms on whom we depend for survival. Example may be found in the gut flora which aid in digestion, appear to have an important role in maintaining normal sleep rhythm by producing a 'sleep factor' and which create Vitamin K and some of the B vitamins. Small members of the helminth family (hook and whip worms) in the gut, which aid in the suppression of IgE[235, 236, 237], and scavenging organisms on the skin surface, find nourishment in the constantly created detritus. Indeed it is being considered that Western children who are kept 'too clean' are susceptible to more allergies, and perhaps infections, than children who are allowed to 'play in the dirt'.

When **pathogens**, i.e. those microbes capable of threatening the functional integrity of the system, migrate in sufficient concentrations through this envelope or are carried through as a result of the rupture of that envelope because of trauma, the first, and immediate, response will come from the 'innate' system. An alarm signal that all is not well is communicated via immune cell (such as Dendritic Cell: DC) membrane

receptors, Toll Like Receptors, (TLR's) (a group of phylogenetically ancient primary pattern recognition receptors [PRR's] recognising evolutionarily stable pathogen structure patterns, such as the Lipopolysaccharides [LPS] of bacterial cell walls or flagellae) to which the DC responds. The response occurs either in concert with the soluble proteins of the Complement system, lysing the pathogen, or enveloping the pathogen (antigen) and re-expressing chopped up pieces of its protein as short peptide chains (antigen) bound to the Major Histocompatabilty Complex (MHC) on the DC membrane; this contact matures and activates the DC and also upregulates the production of costimulatory signals to activate T-cells and an adaptive immune response.

Tissue distress signals, such as the release of evolutionary ancient hydrophobic portions, (Hyppos)[238], may act as chemoatractant signals to which local granulocytes and macrophages will respond: it appears that macrophage populations may be idiosyncratic to location, supportive of Raz's proposition[239]. Other phagocytic cells, such as neutrophils, which are particularly adept at dealing with bacterial infection, and natural killer (NK) cells, may also disable offending microbes, in concert with the Complement complex and antimicrobial proteins. Neutrophil-mediated tissue damage by way of inflammation is a crucial factor in the initiation of an immune response[240].

There is a backward and forward flow of information between the 'innate' system and the 'adaptive' system. In fact, response by the 'adaptive' immune system is initiated, and regulated, by components of the 'innate' system, in particular DC's, receptors expressed on NK cell walls, TLR's and Complement[241,242.]

Within a space of between one and three hours following the instigation of an immune response a shift also occurs in neural activity, behaviour, mood and cognitive processes, similar to the response activated by external environmental stressors, become apparent. The rapid response appears to be related, not to cellular activity in immune response, but to the cytokines involved in stimulating the response[243]. Actually each behavioural response to infection can also be produced by the distress of restraint or the perception of danger. There are several cytokines involved in the activities mentioned above, bridging innate and adaptive immune systems and across system

boundaries, such as that between the CNS and the immune system, and immune system and cognitive function.

Whereas the immediate and primary discriminatory molecules of the immune system are the TLR's and DC's, the MHC and antibodies, expressed on the surface of B-cells (B-cell receptors or BCR's), are the discriminatory molecules of the adaptive arm of the immune system. In fact, the MHC family signal the idiosyncrasy of each vertebrate, even to the extent, it is believed, of providing the animal with an idiotypic odour[244,245] and all cells in the body bear the same idiosyncratic protein markers. Although MHC is divided into two classes with different functions, both have a groove in the top in which is accommodated short peptide chain molecules with which the MHC forms a complex. Class I MHC is expressed on the surface of all nucleated cells and platelets, whereas Class II MHC expression is restricted to cells involved in the immune communication system, particularly B-cells, Macrophages, DC's and activated T-cells. The form of the individual MHC gene of an Antigen Presenting Cell (APC) will determine the type and efficiency of the immune response, including autoimmune responses. The MHC groove is rarely empty, being occupied either by protein fractions from the organism itself, or from those which its expressing cell regards as noxious. Peptide fragments expressed in the MHC groove are always protein fragments which have been processed within the cell on which the MHC is expressed, however there are differences between the way in which MHC I and II express and present peptide fragments.

MHC I is loaded with cytosolic peptides and is therefore the primary way of presenting viral fragments, as viruses are only able to replicate by sliding through the host cell membrane and redirecting its biosynthesis to the creation of further viral particles. The virus is dismembered within the cell and fragments to be presented on the cell surface bound to MHC I. The antigen is presented to an activated CD8[xxxv] cytotoxic T cell. These will then clone in order to de-activate all other cells similarly infected. $CD4^+$ T-cells bind to MHC II; activation of the T-cells, however, requires at least **two** signals before an immune response is stimulated. A coactivation signal must be given through engaging CD28 on the T-cell surface, simultaneously with the CD80 or 86 on the

[xxxv] CD referring to cell surface protein Complexes of Differentiation

surface of the APC, for example a DC. The absence of any of these may prevent the APC from activating an immune response and the APC may signal 'tolerance' to the pathogen. If an appropriate response is activated, antibody production will kick in several days later. The activated $CD4^+$ T-cells then help the B-cells to produce antibody as only some, usually carbohydrate antigens, produce T-independent antibody responses. Memory B-cells will have a template for future recognition of the same pathogen, enabling a much-accelerated response. Cytokines play an important role in this whole process, for instance IL-2[xxxvi] and IL-6 synergise the generation of CD8 cytotoxic T-cells and IFN-γ may inhibit the effect of IL-4 in the MHC II induction of IgE secretion on B- plasma cells. They are also particularly involved in the 'switching' of immunoglobulin (antibody) production to enable greater specificity of response. In the event of a second exposure, clones of the ancestor cells are quickly created to prevent harmful proliferation of pathogen. The onset and regulation of an adaptive (specific) immune response is generated at the immunological synapse, that is, the molecular interface between APC's and T-cells.

As has been discussed above, the 'adaptive' immune system is neither the superior nor autonomous system it was once assumed as being, however it has cells in constant bi-directional interaction with, and depends for activation on, the 'innate' system; for example activated T cells can secrete IFN-γ, further activating neutrophils and macrophages to engulf and kill more bacteria[246]. Concurrently there is communication with the nervous and hormonal systems, which also have a regulatory influence. The processing of microbes identified as dangerous by innate immune mechanisms will take roughly **an hour**. DC's are themselves capable of recognising the danger of the antigen or toxin through their TLR's and, for instance, directing the subsequent adaptive (cytotoxic T-cell) response[247], whereas the complete processing of antigen and appropriate specific response by adaptive mechanisms will take about **ten days** to reach peak antibody activation, and **at least three weeks** for 'memory' to be established. It would appear that this is one part of a communication super system, working in two, perhaps three, steps, rather than two autonomous systems intent on defence alone[248].

[xxxvi] IL denotes interleukin: a class of glycoproteins produced by leucocytes for regulating immune response. (OED)

The cells which are capable of specific immune responses are the T-and B-cells. These cells acquire their specificity through a unique capacity for gene rearrangement during their development with a phenomenal variability, through which in the area of **2.5 x 10^6 recombinations** are possible[249], and it is this variability, allowing incredibly sensitive specificity, which distinguishes them from other immune cells.

Within the thymus all T-cells with a propensity to bind to self MHC molecules are recycled, following apoptosis[xxxvii], thereby selecting for non autoreactive immune cells. This is not always entirely successful, and diminishes in success when the whole bodymind is experiencing distress. It may also be a vital component of immune activity in clearing spent cells, particularly senescent red blood cells[250]. Additionally, MHC restriction is set while the T-cells are still in the thymus. When naïve T-cells are released into the circulation they are complete with their respective CD molecule, CD3, CD4 or CD8, readying them to be either 'helper' (Th1, Th2 or Th3) or 'regulatory'[251,252] T cells (T^{reg}), and seem to have a 'homing' towards particular tissue structures. The T-cell membrane receptors (TCR's) are only capable of recognising antigen already processed by an APC, unlike B-cells, which are able to engage with native antigen. $CD4^+$T-cells bind to APC's and are functional in stimulating clonal proliferation of further T-cells specific for the presented antigen, whereas $CD8^+$T-cells (Cytotoxic T-cells: CTL's) monitor all cells (MHC I) and when viral antigen is detected will also clonally proliferate and attach to the infected cells to induce apoptosis. Surviving CTL's if contacted by $CD4^+$T-cells will become circulating memory T-cells.

On its own B-cell contact with antigen elicits little consequential activity **unless** a heavy concentration of epitopes in lattice formation is encountered: in that case B-cells will proliferate and differentiate into plasma cells. Activated and differentiated B-cells (plasma cells) when bound to their specific antigen secrete glycoproteins particular to that antigen; antibodies (or immunoglobulins). Immunoglobulins are found in blood, tissue fluids and bodily secretions except sebum. Immunoglobulins exist either as freely circulating molecules, or remain bound to cell membranes. Under normal conditions B-cell proliferation is dependent on T-cell assistance. If during an interaction between

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[xxxvii] Apoptosis: normal cell death; cessation of function and clearing through phagocytosis, that is, 'ingestion' by macrophage, monocyte or polymorphoneclear cells (usually neutrophill).

APC and T-cell, a B-cell happens to be 'doing the rounds' in the vicinity of this interaction, and one of the T-cells recognises the fit of its epitope with its receptor, the T-cell will send out a host of signals which eventuate in the B-cell evolving into a plasma cell and cloning; all of the cloned plasma cells will have the same immunoglobulin fitting the epitope recognised by the first B-cell. The 'switching' of production from one immunoglobulin complex to another is also T-cell dependent. Immunoglobulins, in cooperation with CTL's, are responsible for the neutralisation of viral infection.

As a result of the previously mentioned gene shuffling immunoglobulin (Ig) molecules are created, each with a basic monomer 'Y' shape, with two identical light and heavy peptide chains on either arm of the 'Y' which function as antigen binding sites. The 'anchor', the 'I' of the 'Y', is composed of two heavy chains, which binds to various cell receptors and Complement complex proteins, thereby mediating different effector functions such as opsonisation, cell lysis and degranulation of basophils, neutrophils and mast cells. The ends of the arms of the 'Y' are made up of globular antigen binding sites.

There are five different immunoglobulin isotypes, each with their own heavy chain configuration defining its function and variable regions, which define antigen specificity, and differ between antibodies of different B-cells (but the same for all antibodies produced by particular individual B-cells), concentration and localization: IgA, IgD, IgE, IgG and IgM.[253,254]

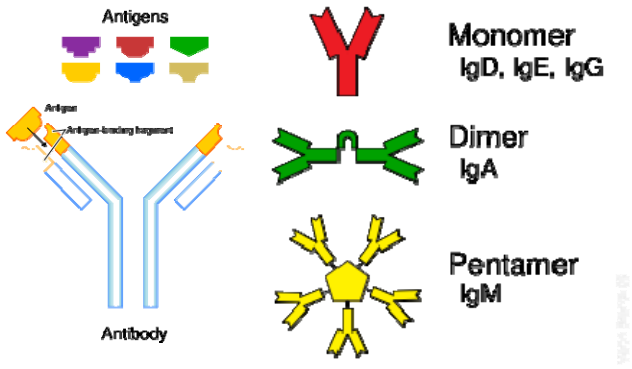

Figure 2: Basic configurations of immunoglobulins (antibodies)

Image taken from http://en.wikipedia.org/wiki/Antibody

IgG: (of which there are 4 subclasses) is a monomeric immunoglobulin with two binding sites. IgG is the most abundant of the antibodies/immunoglobulins, distributed reasonably equally through both tissue and blood. It is the only antibody which is capable of crossing the placental barrier and confers protection against Infection to the foetus and neonate, therefore termed the 'Maternal Antibody'. IgG opsonises[xxxviii] many pathogens and engages the Complement cascade to lyse[xxxix] the pathogen.

IgM: Has the largest molecular structure, forming polymers where multiple immunoglobulin molecules are arranged in large pentamer or hexamer configurations, therefore primarily found in serum and secretory fluids, is also an effective Complement activator and termed a 'natural antibody' because it was initially assumed to be present prior to antigen exposure, however such a scenario is improbable, as even *in utero* a foetus is exposed to antigen. It is, however, the first antibody response generated to a newly seen antigen. It is expressed on naïve B-cells and the first immunoglobulin found on mature B-cells. Along with IgD, whose function is little understood (although may be involved in tonsillar immunity[255] and intermittent fever syndrome[256]), IgM is found on most quiescent B-cells.

IgE: Is a monomeric molecule with a high concentration of carbohydrate and is the lowest in concentration of all immunoglobulins, binding to receptors on mast cells and basophils of connective tissue. The bound IgE molecule in turn serves as an antigen receptor, which, when activated triggers the release of histamines, heparin and sometimes serotonin; the clinical manifestation of an allergic reaction, or Type I hypersensitivity. IgE does not promote Complement complex activity. IgE plays a part in parasitic helminth elimination and is also present, like IgA, in mucosal excretions.

IgA: Dimeric, trimeric or tetrameric molecules. The dimeric molecules are linked by two chains, one, the 'J'[xl] chain, is a unique structure, formed within the IgA secreting

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[xxxviii] Opsonin: a substance, esp. an antibody, which attaches itself to foreign organsims and makes them more susceptible to phagocytosis. OED.

[xxxix] Lysis: disintegration of a cell. OED.

[xl] 'J' denotes 'joining'.

cells. In outer secreting cells these are the epithelial cells of the mucous membrane. While IgG is the most abundant immunoglobulin, except in secretions, IgA has the highest turnover/production rate, and is therefore actually the most abundant in the human body at any given time. IgA is found in serum and secretory fluids: maternal colostrum and milk, tears and saliva and the mucosal fluid of the respiratory, digestive and reproductive tracts.

Given the complexity of the immunological system, no one measure, nor even two together, are capable of giving a clear appraisal of the competence of immunological function, however, inference may be gained from assessment of key cellular functions such as inflammation and T-cell function in response to DTH, measurement of the primary contact antibody, IgA, and the concentration of signaling peptides such as cytokines, in this case, IFN-γ; Zinkernagel's apposite remarks about the veracity of such experimental design notwithstanding.

Interferon gamma (IFN-γ) Function

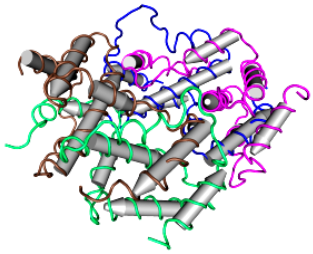

Figure 3: IFN-γ model

Image copied from: commons.wikimedia.org/wiki/images:1HIGinterferon gamma

Cytokines are members of the family of soluble communicatory peptides (short chains of amino acids) which contribute to the regulation of cell growth, differentiation (by binding to cell surface receptors and driving changes in gene expression) and communication, are the prime movers of the inflammatory and 'sickness' responses and in particular govern the amplitude and duration of an immune response. There are several cytokines involved in the activities mentioned above, bridging innate and adaptive immune systems and across system boundaries, such as that between the CNS and the immune system, and immune system and cognitive function. As a result of cytokine activity joint actions and co-operation of cells is possible in the fulfilment of

particular biological functions. There are cytokine receptors on all cells in the mammalian body; however, the major sources of cytokine expression in the immune system are the T-cells. One of the cytokines thus expressed is IFN-γ, secreted by activated T Helper I (Th1) cells, which communicates to both NK cells, (and other cells in the 'innate' system) and activated $CD8^+$ CTL's (the growth and differentiation of which it modulates) in the adaptive system. The expression of IFN-γ by both B-cells and activated NK cells is of importance in pathogen resistance and antibody (immunoglobulin) switching[257]. IFN-γ interacts with a specific cell surface receptor, common to all nucleated cells but most highly expressed **outside** the lymphoid system[258]. Th1 cells secrete IFN-γ generally in response to intracellular pathogens, such as virus, bacteria and protozoa. In nematode Infection Th2 immunity is inhibited by NK cell secretion of IFN-γ[259]. IFN-γ stimulates some antibody activity and activates macrophages and neutrophils[260] for phagocytosis, playing a critical regulatory role in antiviral, antibacterial and antiparasitic activities, upregulating pathogen recognition[261], and as a result, also plays an important part in the inflammatory response and 'sickness behaviour',[262] associated with infection (including transient depressive like symptoms in short duration infection and co-morbid depression in chronic disorders, see below). It also plays a part, in combination with Tumour Necrosis factor (TNF) α and β in inhibiting the proliferation of a number of transformed and normal cells, thus mediating mechanisms of cellular cytotoxicity[263]. It has recently been found to be a possible indicator of breast cancer type and activity, as it was found to be of greater concentration in *in situ* carcinoma than in benign or infiltrating tumours of the breast, and a decrease in expression in early tumour activity also observed, further suggesting that IFN-γ has a potential therapeutic role in treatment of this disease[264]. It is pivotal in efficient antigen processing for presentation via the MHC. Interaction with IL-4 will inhibit growth of B-cells, but it can also stimulate their proliferation through costimulation with anti-Ig, and downregulates the production of IgG1 and IgE, while also stimulating the expression of IgG receptors on myeloid cell lines, neutrophils and monocytes[265]. It is involved in cellular respiration bursts, bone growth and resorption and vascular health following injury and inhibits proliferation of endothelial cells and the proliferation of collagens, thereby negatively influencing wound healing.

IFN-γ is present in saliva, and therefore becomes a readily accessible mode of establishing the concentration of the cytokine in these bodily fluids, however, there does not seem to be an association between salivary IFN-γ, and serum IFN-γ concentrations[266]. In addition there is a marked 'tissue specificity' to IFN- γ expression, for example differing levels of activity between the upper and lower respiratory tracts, which ought to be taken into consideration when using saliva as a means of assessing degree of IFN-γ expression. Of particular relevance to the present study, high levels of IFN-γ have been observed in spontaneously regressing primary melanoma[267], and the immunological effects of BCG is IFN-γ dependent.[268]

Literature Supporting Impact of Arousal or Distress on IFN-γ Levels.

The action of IFN-γ is complex and context dependent, and may also be both pro- and anti-inflammatory. Indeed persistent Chlamydial Infection has been **induced and promoted** by IFN-γ treatment[269]. Survival of *Listeria monocytogens* infection in wild mice is reduced by 'overzealous' induction of apoptosis induced by IFN-γ, IL-6 and IL-1[270], while pancreatic expression of IFN-γ can result in murine diabetes[271]. IFN-γ is a feature of the immunoregulation of some CNS degenerative diseases, such as Multiple Sclerosis (MS), Alzheimer's and Parkinson's Diseases, and can amplify microglial reactivity to degeneration (the microglia releasing, IFN-γ, amongst other cytokines)[272],[273]. IFN-γ contributes to the mood disorders attributed to several neurodegenerative diseases[274], as well as non-disease related depression[275, 276, 277, 278, 279]. With regard to IFN-γ in direct relation to bodymind stressors (i.e. both physiological and psychological), the evidence is also variable, in some instances promoting survival, such as pulmonary response to infection[280] in high performance athletes[281], gut health[282] and improved intranasal vaccination in rodents[283]. On the other hand it is also implicated in impaired survival with Rheumatoid arthritis[284], post bacterial infection[285] and also, as mentioned above, with regard to major depression (and associated suicide) and the cytokine storm associated with major trauma[286]. The correlation between exam anticipation stress[287], bereavement[288] and viral infection and IFN-γ has been much researched[289], while less so the effect of psychotherapeutic interventions[290]. Therefore, while IFN-γ assay was included in the data from the project described in this study, the relevance of IFN-γ levels is yet to be determined and these results cannot be regarded

as anything but exploratory, although they may add a spicing pinch of grit to the mill of psycho-physical research.

Immunoglobulin isotype A (IgA) Function.

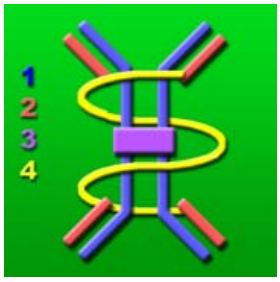

Figure 4: The dimeric IgA molecule

1: H-chain, 2: L-chain, 3: J-chain, 4: secretory component.

Image copied from Wikipedia

IgA is the predominant immunoglobulin in constant and direct contact with the external environment; it is secreted by plasma cells in the gut, respiratory tract, salivary glands, lachrymal glands, tonsils and lactating mammary glands. Receptors for IgA are expressed on a wide range of cell types, including phagocytic cells T-and B-cells and NK cells. The total surface area of the mucous membrane protected by Secretory IgA[xli,291](S-IgA) is greater than 400^{2}meters! *'S-IgA is the most abundant representative of the adaptive immune system in saliva.'*[292]

As a component of colostrum and milk it provides the mammalian neonate with passive primary immunity. During the last phase of pregnancy IgA of maternal mesenteric origin are transported to the mammary glands, and at birth expressed with colostrum and milk into the infant's gut, where it acts directly on the neonatal gut surface transferring antibodies to protect against a wide range of microbial antigen and toxins, also protecting the infant from respiratory infection. There are wide ranges of difference between populations as to IgA production[293], nonetheless, it is the antibody which will generally encounter pathogens first,[294] and when bound to antigen in mucous, will remove pathogen or toxin mechanically, either into the stomach, where

[xli] Secretory IgA is designated as S-IgA as per Nomenclature Committee of the Society for Mucosal Immunology (SMI): IUIS/WHO Subcommittee on IgA Nomenclature. 1997, this nomenclature is adopted throughout the thesis.

the stomach acids dissolve the pathogen, out of the airway on the wave of expelled air in a cough, a sneeze or a dribble of nasal mucous (which may also end up in the stomach when swallowed) or mucous accompanying urine or stool. As the first encountered immunoglobulin it has a vital function in protection against viral colonisation by impeding viral access to cell membrane. This occurs when viruses are captured and held within the secretory component of the IgA complex, or encapsulated within mucus. Toxic compounds are similarly prevented from harming the individual. S-IgA also exhibits a function unique amongst immunoglobulins in that it is capable of binding **intracellular** viral protein and transporting these proteins out of the cell, preventing their cellular invasion and thus replication[295]. The effectiveness of the mucous membrane in antimicrobial activity has been used in immunisations such as Sabine polio vaccine, and is currently being further explored as a safer and more effective means of immunisation than systemic introduction of attenuated or denatured bacteria, virus or fractions of either[296,297,298,299,300,301,302,303,304].

Enormous quantities of IgA are constantly produced with a rapid turnover, with production of IgA outweighing that of all other combined antibody classes[305] (IgA molecules lasting a few days). IgA maintains a concentration second to IgG, although the relative proportions will depend on whether systemic or mucosal sites are being sampled. Virtually all IgA is produced as a result of local antigenic stimulation of plasma cells; however the localized response may be expanded to include distant mucosal membrane, as seen when gut infection results in increase of IgA expression in lung tissue[306].

IgA dimers are synthesized in plasma cells which lie within the sub-mucosal membrane (lamina propria in the case of the gut); the 'J' pieces are added as the molecule is extruded through the plasma cell membrane. The complex is then diffused through the basement membrane and in that journey acquires a secretory component and the whole complex is released into the mucous. The secretory component appears to add stability to the complex in preventing its degradation by proteases and anchoring the immunoglobulin in the mucous membrane. In the gut the major lymphoid tissues are the Peyer's patches and the mesenteric lymph nodes. $CD4^{+}$T-cells in the Peyer's patches promote specific class switching to IgA. The IgA B cells home from the

Peyer's patches to the draining mesenteric lymph nodes and, via the thoracic duct lymph and blood, to the lamina propria of the gut[307], and other mucosal effector sites[308], including the skin[309]. Some IgA is absorbed into the circulation and transported to the liver, being re-expressed into the gut in bile. The mucosal immune system is highly specialized and functions largely **independently** of the systemic immune system, indeed T-cell independent S-IgA, found in the peritoneal cavity, and distributed diffusely in the lamina propria of the gut may represent an evolutionary ancient source of S-IgA capable of recognizing gut bacteria[310]. Serum IgA and Secretory IgA are biochemically and immunochemically different, are produced by cells with different organ distributions, and are also differently distributed in the body fluids[311, 312].

Serum IgA mediated effector functions include involvement in inflammatory response, antibody- dependent-cell-mediated cytotoxicity, phagocytosis, respiratory burst activity and degranulation and antigen presentation to DC's, however, IgA has also been described as having **non**-inflammatory functions because it is a poor activator of the Complement complex cascade. Secretory IgA on the other hand is not involved in opsonisation and can not activate the Complement complex cascade at all. Any inflammatory activity in mucosal membrane would be counterproductive as the enhanced permeability thus produced would impair mucosal integrity and therefore allow more pathogen or toxin to penetrate the internal environment. S-IgA binds with antigen, forming independent antigen-antibody complex, which can be either taken up by phagocytic cells, absorbed into the circulation and transported to lymph nodes or bound in mucous to be transported out of the luminal environment, as described above. S-IgA has an important antibacterial capacity by blocking attachment to epithelial cell membrane.

Amongst the primary immunodeficiencies, IgA deficiency is the most common, affecting 1 in 400 individuals, although almost absent amongst Asians. Curiously, given it's vital function in mucosal immunity, IgA deficiency results in no apparent symptoms, although some individuals do show a marked susceptibility to such gut infections as *Giardia lamblia, Campylobacter, Clostridium, Salmonella* and rotavirus, respiratory infections and autoimmune diseases, particularly Coeliac and perhaps

Crohn's Diseases. Gut health[313], nutritional and immunological status, with a view to the importance of IgA in mucosal health and first line recognition of potential pathogen, has precipitated a flurry of research into the effect of diet and supplementation of various substances[314], including 'friendly gut flora'[315],[316], or 'probiotics'. Of particular interest is the relation of S-IgA to bodymind distress

The normal salivary range of **total** S-IgA is between 40 and 148 μg/mL[317], although Childers *et al* [318]measured a variation of 48-1311μg/mL in **parotid** S-IgA. The mean baseline measures of the study population were between 52 μg/mL and 363 μg/mL: none of them could therefore be considered as being S-IgA deficient.

Literature Supporting Impact of Arousal or Distress on S-IgA levels as Measured in Saliva

One of the earliest pieces of research using S-IgA as a measure of a 'stress' response was conducted in the late 1980's, when Mc Clelland [319] used film images to promote arousal or relaxation, and found that viewing distressing film caused the S-IgA to plummet, whereas soothing images of Mother Theresa created a marked increase in S-IgA levels from baseline. In the study presented in my thesis, S-IgA (salivary) was assayed because there is sufficient evidence to suggest that both physiological and psychological distress have a negative effect on S-IgA levels, and is enhanced by moderate exercise[320,321], relaxation[322,323], psychotherapy[324,325], pure **enjoyment[326]** and even enjoyable frequent sex![327] It is also very easily collected by non-invasive means[328]. S-IgA levels describe an immunologically meaningful barometer of mucosal host resistance[329], which ultimately translates to general resistance, as the mucous membrane represents the interface with the external environment, from which most pathogen and toxin will be delivered.

The bulk of early research into the effects of 'stress' on IgA production seems to have focussed on elite athlete performance and susceptibility to upper and lower respiratory tract Infections (the 'above the neck' and 'below the neck' criteria for maintenance of training or rest), where it was recognised that S-IgA levels decreased and episodes of upper respiratory tract infection (URTI) increased during periods of intense training. It

was further observed that this correlation was also dependent upon period and intensity of exertion as well as anxiety levels[330,331,332,333] , but that there was, however, no correlation between the S-IgA level and performance[334]. Monitoring of S-IgA levels can alert trainers of impending infection[335], bearing in mind the circadian rhythm of S-IgA secretion[336]. Another subject of early investigation was the effects of 'exam stress' on the health of university students, it being anecdotally known for as long as student have had to sit them, that there is an increase in URTI's around exam time[337,338,339,340,341], reflected in depressed S-IgA levels. S-IgA levels have also been seen as predictors of post-partum infection[342], which correlated to anxiety, fatigue and depression, possibly leading to immunological deficit over time[343], to both mother and infant. Military exercise has also been studied as a causative agent of distress and hyperarousal associated S-IgA reduction and it was revealed that nutritional intake and individual differences in coping strategies[344] were significant contributory factors, although carbohydrate replenishment alone had no effect on S-IgA flow or secretion rate[345]. Additional factors were the **perception of the situation** and **exhaustion**[346, 347, 348, 349, 350, 351, 352]. The point of perception doesn't seem to have been explored in the research with elite athletes, and it is central to this study. Further research to elucidate the difference between competitive exhaustion and anxiety and examination anxiety showed a marked increase in S-IgA with an intellectually taxing task, but no change in exercise exertion[353]. 'Major life events'[354,355] may also depress S-IgA function, but, again, it must be borne in mind that an event is distressing if it is **perceived** as such, and nutritional status may also be affected, through missed meals, alcohol or tobacco consumption and lack of sleep, disturbing circadian rhythm and essential rest. These factors decrease the total health status of those undergoing distressing life events, or transitions in life phase. These points are also relevant to socioeconomic status where those of lower socioeconomic status often perceive themselves as having less agency in their lives. They generally suffer lower nutritional status and a concomitant increase in dopaminergic substances ingestion, such as wheat, sugar, milk, chocolate, coffee and alcohol. Accompanying this is a lower S-IgA level than age matched people in higher socioeconomic brackets[356]. Lastly, S-IgA has been seen to correlate positively to the adaptability of young pups destined to become Guide Dogs for the Blind[357].

DTH Skin Response

The delayed hypersensitivity test was devised by Koch in the late 19th century, after unfortunately killing several people by injecting killed tuberculin preparation intravenously. Recognising that a delayed inflammatory response at the site of injection, if given intradermally, gave an indication of previous exposure to the bacillus, he subsequently used the test to identify asymptomatic patients who had been exposed to tuberculosis. In the mid twentieth century it was demonstrated that a 'cell only' fraction could initiate a DTH (or CMI: Cell Mediated Immune) response.

Delayed Type Hypersensitivity following the intradermal introduction of a known antigen, in this case purified *Mycobacterium tuberculosis,* is used to give a semi quantitative measure of cell-mediated immunity, in that the results are not definitive of immunocompetence[358,359]. A negative result does not rule out Tuberculosis infection or previous exposure if PPD (Purified Protein Derivative) is used as the antigen. Other antigens used for DTH tests are *Candida albicans* and *Tetanus toxoid* as the majority of the population has been exposed either through vaccination or passive immunity. (TT as part of the Triple antigen inoculation routinely given to infants in most Western countries and BCG, the most commonly used vaccine in the world[360])

It is essential that it be recognised that a DTH test response is only one aspect of a series of interrelated responses mounted by the host to the introduced antigen challenge[361,362,363]. If a positive response is mounted, it is, however, a good indicator of APC, memory T-cell (Th1), TCR and pro-inflammatory cytokine (IFN-γ and TNF-α) activity. In fact IFN-γ is the cytokine which plays a dominant role in the initiation of a DTH/CMI response[364], and Th-2 cells with their secretion of IL-4 and IL-10 in its resolution[365]. Thus, by inference, the activity of these cytokines may be observed. As noted above, IFN-γ was the cytokine measured in salivary samples of those who participated in the research project presented in this thesis. In addition, the use of DTH test may be of relevance, particularly with the study population, in that melanoma is a disease in which dendritic (Langerhan) cell activity is crucial to skin health, and much active research is in progress into immunotherapeutic means of

treating the disease, particularly if it has metastasized, when other, conventional cancer treatments have little efficacy.

It is crucial to distinguish between a negative DTH test response, reflecting no previous exposure to the antigen, and true anergy, where the immune system fails entirely to recognise the antigen, despite previous contact. It may therefore be necessary to follow up with a second DTH test, 72 hours after the first, or with further serological investigation.

A genetic anomaly may thwart the host mounting a DTH/CMI response[366]. This is an anomaly on chromosome 10[367] (Interferon gamma receptor 1: IFNGR1, also known as CD119) where a loss-of-function mutation[368] prevents the cell surface receptors from binding with their natural ligand, IFN-γ[369]. This mutation generally leads to death from overwhelming infection, particularly of the intracellular pathogens, *Mycobacterium* and *Leishmania* and the gut parasite, non-typhoid *Salmonella (enterica)*. IFN-γ knockout mice, however, are able to mount a strong DTH test response, although they are unable to effectively target sites of intracellular infection, such as *Chlamydia*, pointing to the dual role of the CMI (DTH) response: Th1 and Th2 associated[370] (that is, pathogen recognition, inflammation and resolution of the inflammatory response: see above).

Anergy may also result from various factors, including immunodeficiency diseases, the result of immunosuppressive medication, long term distress, anaemia, malnourishment, heavy alcohol consumption[371], UV exposure[372], cholylithiasis[373], and active tumour progression[374], where tolerance, at T-cell level, to tumour antigen appears to be induced by the tumour itself[375,376,377]. Amongst the HIV sero-positive population DTH skin test response has been seen to be a good indicator of survival time and time before evidence of clinical AIDS, with cutaneous anergy predictive of shorter survival time[378].

In the field of immunotherapeautic or vaccine treatment of cancer, DTH tests are being used to assess immunocompetence, prior to administration of the vaccine, often paired with adjuvant BCG (*Bacillus Calmette-Guerin*)[379,380], with varying degrees of success. It has been reported that DTH testing did not accurately reflect the

immunocompetence of women with advanced breast cancer (see above: Schiffman et al. 2002), who had negative DTH test responses to the Multitest, a multipronged DTH test to assess recall of common antigens, but could mount a positive response to TT[xlii] after booster vaccination, as measured in peripheral blood samples.

Literature Supporting the Impact of Arousal or Distress on DTH Test Response.

As with all other aspects of immunological function the DTH test is affected by both acute and chronic arousal, each, however in a different direction. There is an evolutionary advantage to mounting a strong CMI (DTH) response to acute arousal as the organism prepares for a possible physical assault, by releasing energy stores and readying the immune system for potential injury and subsequent introduction of pathogens[381,382]. Faced with the apparent paradox between the stress response and immune suppression and evolutionary gain, Dhabhar [383] demonstrated in the mouse model that a period of acute stress prior to administration of an antigen significantly **enhanced** skin DTH test response, which is in line with the expected physiological threat response, whereas with chronic stress the DTH response is blunted and the rate of autoimmune diseases increases. The psychological corollary is the flattening of affect when individuals are placed in a position from which there is no perceived escape, and the further suppressing self harm that is inflicted through the use of mood altering substances, or even suicide. This blunting was also observed as a result of the chronic distress accompanying a spouse along the emotionally painful journey of metastatic breast cancer[384]. The correlation between psychological depression and immunological depression was observed with duration of the spouse's illness significantly associated with strength of DTH test response, although subjective psychological distress reduced with accommodation to the situation[385]. Elderly nursing home occupants, who may also perceive themselves as lacking escape from a distressing situation, was another population in which this blunting was observed, as with the breast cancer population[386], however, there was a discrepancy between DTH test response and T-cell proliferation (TCP) where the two tests results correlated well in 'high responders' to DTH, but not so to 'low responders'.

[xlii] TT: Tetanus Toxoid

McDade [387] has made the very pertinent point that the focus on immunological study has been on healthy (he maintains, arguably, over nourished) Western individuals and laboratory animals, ignoring the greater percentage of the world's population. In Northern Malawi, Black et al.[388], found the same disparity as mentioned above, between DTH test result and whole blood culture stimulation results, amongst healthy young individuals who had not previously been exposed to *Mycobacterium Tuberculosis* through BCG vaccination. In some individuals there was roughly a 30% difference between DTH test response results and IFN-γ assays from the cultured blood, with more than half the study population mounting IFN- γ responses to *in vitro* stimulation whereas just over a third mounted positive skin test responses: (<5mm induration: DTH skin test response) in fact 4% of the study population who had zero DTH skin test response had IFN-γ levels in excess of **500** pg/mL and 13% of those who showed a post test induration **greater** than a 10mm had IFN-γ levels **lower** than **62** pg/mL, the level at which a positive result was determined. Older males mounted stronger DTH test responses. Shell-Duncan [389] found that the DTH test response was an accurate predictor of the physiological stress of gastroenteritis and acute respiratory infections in young children, associated with chronic malnutrition.

Gaab et al [390], on the other hand, found that for normal healthy males there was no correlation between DTH test response and degree of distress; current, acute or chronic, however, in later investigation where Cognitive Behavioural Stress Management (CBSM) was part of the protocol cortisol levels were significantly reduced through the psychosocial intervention[391]. This reduction of cortisol levels would presumably correlate with change in DTH test response. Taro Smith et al.[392] found that moderate and sustained 'stress', through physical exercise, was beneficial, to both sedentary young and retired older men, to immunological function as assessed through DTH test response to KLH (Keyhole Limpet Hemocyanin) challenge, supporting Dhabhar's 1997, (see above) findings that **acute** stress is immunostimulatory.

When investigating response to 'stress', from many angles, university students have often been approached as target populations (perhaps because of the investigators' painful memories of examination deadlines). Alison Smith et al.[393], using the same antigen as Taro Smith, that is KLH, found that with increasing distress there was a

concomitant decrease in DTH test response, however, again, there was no correlation between TCP *in vitro* antibody (IgG) production and levels of distress. Schneiderman[394] suggests that intermediate stressors, such as exams, promote a Th2 shift where Th2 cytokines become dominant over Th1 cytokines, favouring humoral immunity and suppressing cellular immunity. As distress becomes chronic the whole proinflammatory cytokine system 'loses the plot'[xliii], (as one finds with psychological response) and both cellular **and** humoral responses are blunted[395], perhaps it is this deregulation which is reflected in the disparity between TCP and DTH test responses.

Finally, and perhaps most pertinently to the present research, chronic 'stress', an accumulation of 'major life event' experiences and a lack of social network is seen as increasing the susceptibility to skin cancers[396]. The Langerhans cells in the epidermis are the primary initiators of CMI in the skin, and are the cells, coupled with the cytokine IFN-γ, most active in a DTH skin test[397]. The highest recorded incidence of cutaneous malignant melanoma in the world occurs in Australia[398], and the Hunter Valley has the 3rd highest incidence in NSW[399]. The UVB component of sunlight, in which we are constantly bathed in this country, is a complete carcinogen. *"Immediate effects of UVB radiation include DNA damage, epidermal hyperplasia, and inflammation."*[400] Immune function in the epidermis is also suppressed by UVB. A generalised state of anxiety and man made chemical assualt is now pervasive in our society[401], as is the increasing amount of UVB.

Unfortunately there has been far more importance placed on the role of UVB as a 'complete' carcinogen, than the multifaceted aspects of all cancers, to which melanoma is no exception. According to the SEER[xliv] database there was a **619%** increase in melanoma risk in the 50 years between 1935 and 1985 in the USA and in the following 15 years the risk factor rose to **1:75**[402]. Depletion of the ozone layer may have a part to play in this, as the sun itself hasn't changed in that time, and increased exposure to a dazzling host of manmade chemicals and industrial pollutants, which almost exactly parallel the risk factor dates, must also be considered a pertinent factor. With the

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[xliii] 'to lose the plot': a colloquial phrase inferring a conniption, or loss of control.

[xliv] SEER: Surveillance, Epidemiology and End Results; a Data base for the National Cancer Institute in the United States of America.

heightened concerns regarding skin protection a new and unexpected phenomenon has emerged, that of Vitamin D deficiency, not seen since the 1920's when dietary deficiency was its primary cause. Vitamin D is in itself a protective agent against cancer and is being recognised as of far greater importance than simply to healthy skeletal growth[403, 404].

Psychoneuroimmunology (PNI)

"Although immunity plays a key role, it is naïve now to think that host resistance is due only to immunity. Multiple factors, both exogenous and endogenous, contribute to host resistance in the interacting network or system with many components, including the central and autonomic nervous systems, the endocrine systems, immunity, nutrition, growth factors, and probably others, as yet unknown, components. All share chemical mediators, which through their receptor-transmitter interactions and signalling produce complex dynamic patterns of information flow and communication,…….. Thus, impaired host resistance seems to be a regulatory problem resulting in collapsed homeostasis and based on breakdown in molecular communication"

Psychoneuroimmunology: Jerry, M.[405]

"This new approach (PNI) *to health says loud and clearly that the causes, development, and outcomes of an illness are determined by the interaction of psychological, social and cultural factors with biochemistry and physiology. Our physiology and biochemistry are not separate and distinct from the rest of our life experiences. The mind- a manifest functioning of the brain – and the other systems interact in ways critical for health, illness and well-being."*

Ray, O.[406]

In the last fifty years researchers in the field of PNI have been engaged in illuminating the interdependence and interface of the three systems, the immune, neuroendocrine and mind, focusing on the interplay **within the whole system**, rather than maintaining an outmoded fragmentation, illuminating where different facets of phsychophysiological function are reflected in, or reflect, the effect of physical and or psychological perturbation.

"The paradigm of psychoneuroimmunology (PNI) provides a general systems model for understanding the complex interactions involved in host resistance, ***including its behavioural dimensions***[xlv]*."*

Gerger & Windhorst eds.[407]

Hans Selye[408] demonstrated that distress from a variety of 'stressors' resulted in adrenal enlargement accompanied by thymic hypertrophy and involution, establishing a pivotal link between the immune and nervous systems. Initially the majority of the research followed Selye's[409] lead and investigated the role of arousal and the process of adaptation to such arousal in what he had termed the General Adaptation Syndrome (GAS), and which eventually became known as the activation of the Hypothalamic-Pituitary-Adrenal (HPA)[410] axis. In so doing focus was almost entirely on the quantification of **what negative stressor**; restraint, isolation, foot shock, tail clamping etc., resulted in **suppression of which cellular component** of the immune system, generally assessed *in vitro,* that is by removing blood or tissue from the animal and culturing the cells. This removes the cells from their normal ecosystem, perhaps in itself a cellular stressor, but most certainly removes them from normal communicatory networks. Robert Ader[411], one of the founders of the field of PNI, said at a meeting in 1987 *"The immune response occurs in a neuroendocrine environment except that measured by immunologists"*. The behavioural and psychological aspects of early research were neither assessed nor considered as a factor in the distress[412], and the euphoric or joyous state, termed by Selye, eustress, has been almost completely ignored in 'stress' research[413,414]. Selye was frustrated by his inability to actually define the arousal/pain/misery/despair he was investigating, relying often on **a painting of a crowd of miserable people** hanging over his door to describe the affect that was the focus of his research[415], and adopted the term 'stress' from physics where it refers to "*the force per unit area on a body that tends to cause it to deform. It is the measurement of the internal forces in a body between the particles of the material of which it consists as they resist separation, compression or sliding in response to externally applied force.*"[xlvi] Unfortunately the term has become ubiquitous in the English language (and has been adopted by many others) and is as amorphous in its meanings as is 'love', or for that matter, 'mind'…….everybody knows what **they** mean, but it means different things to each individual; it also has distinctly different meanings

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[xlv] my emphasis

[xlvi] OED

in different scientific fields, even in one of the principal texts in the field of PNI, Ader, Felten and Cohen's[416], an explicit definition is avoided. In Medicine the term is used to define "*any factor that threatens the health of the body or has adverse effects on its function, such as injury, disease, or worry"*[xlvii], whereas in Psychology it is used to refer to "*a physiological condition, usually affecting behaviour, produced by excessive mental or psychological pressure".*[xlviii]

As a result of the earlier research focusing on incremental increases in exposure to a 'stressor' and *in vitro* assessment of immunosuppression it was accepted until quite recently that all 'stress' is detrimental. In essence this is counter intuitive. The HPA axis/ Acute Phase response (APR) of an innate immune response[417] is evolutionarily ancient. The APR is observable in single cell organisms, and it would appear that the response functions to maintain an organism's homeostasis and in fact actual **immediate** survival. As stated above, Dhabhar[418],[419], and his colleagues have demonstrated that it is the **prolonged and increasing distress** which had been observed in the early years of research which is the 'bogey'[xlix], not distress *per se*[420]. Another factor which became increasingly evident was that the experiments that were being conducted in the laboratories, dominated by investigations that relied on overwhelming distress, weren't necessarily applicable to Everyman's (or Everymouse's) everyday world,[421] and that *"specific antibody responses were attenuated in association with complex behavio(u)ral factors that did not necessarily include a physically painful or harmful event"*[422] indeed the toxicity of several chemicals is increased in the **presence** of a predator, or social distress.[423,424].

HPA axis activation in vertebrates was originally thought to be governed solely by the autonomic nervous system (ANS) and generally considered to be beyond conscious control. During the last twenty years this has been severely challenged as studies in meditation and classic conditioning, for example, have demonstrated[425,426,427,428,429] Cannon's Fight/Flight/Fright model is driven by Selye's HPA axis activation. While Cannon recognised that this is a time limited response in the natural environment, Selye recognised that prolonged activation lead to exhaustion, infection, neoplasm

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[xlvii] Oxford Dictionary of Medicine

[xlviii] Oxford Dictionary of Psychology

[xlix] Bogey: an evil or mischievous spirit; OED

growth and eventual death. (It must be noted, parenthetically, that many of his and other's 'stress' experiments were nothing short of sadistic and would not be cleared by any Ethics Committee today.) Subsequent research has demonstrated that this is a very simplistic model and factors such as lowered energy intake (such as occur at the end of a feeding season, prior to migration, amongst several animal and bird species)[430] individual trait[431,432,433, 434, 435], perception of agency[436,437], social status[438, 439, 440] and the inflammatory and immune processes themselves also play a part in the activation of this axis, indeed form feedback circuits with the HPA axis. In addition, it does not function in isolation, being entwined with the Sympathetic Nervous System (SNS) noradrenergic and adrenergic responses[441,442] and nerves of both systems infiltrate all lymphatic organs, concentrating in areas rich in T-cell traffic[443]. It appears actually to be the same dynamic response as that which is activated in the APR[444] of an immune response; communication between the HPA axis/APR, SNS and the cognitive centres is bi-directional[445]. Appraisal, both immunological and psychological, is an important facet of the activation of these axes, and plays a central role in PNI, although only in the last decade actively addressed in research.

A recent paper published in PNAS, Waltersheid *et al.*[446], demonstrated a connection pertinent to the present study: UV radiation is immunosuppressive, as has been discussed above (p.66), and the epidermal photoreceptors are *cis*-urocanic acid (*cis*-UCA). How the connection between these leads to immunosuppression, however, was unclear, until this team recognised that *cis*-UCA binds to serotonin receptors. Serotonin is a neurotransmitter involved in depression and a sense of wellbeing.

The Emergency Response Mechanism.

There are two arms to the HPA axis/APR, activating each other; the first arm is concerned with the activation of the neuroendocrine neurones in the paraventricular nucleus (PVN) of the hypothalamus, releasing corticotrophin releasing factor (CRF), dopamine and histamine. CRF is also released from neurons in the central nucleus of the amygdala and the locus coeruleus; neurons which are also involved in vigilance, fear appraisal, sexual activity, feeding and foraging and sickness behaviour. CRF is the major physiological regulator of pituitary ACTH secretion, via a specialised capillary

network. This network empties into the portal circulation and transports ACTH to the adrenal cortices which release glucocorticoid hormones, in humans primarily cortisol, from the zona fasiculata. Cortisol is an anti inflammatory hormone and suppresses pain receptors; it is also an antagonist to HPA/APR activation, so by a negative feedback loop, dampens the synthesis of further CRF in the hypothalamus and ACTH precursor peptides, proopiomelanocortin (POMC). Other arms of the PVN and the supraoptic nucleus (SON) release arginine vasoppresin and oxytocin into the general circulation. AVP can act synergistically with CRF to stimulate ACTH. During increased arousal, additional sources of ACTH can be accessed from the periphery. The second arm of this activation, the sympathetic (autonomic) nervous system (S/ANS), is located in the locus coeruleus, in the brainstem, which precipitates the release of the catecholamines, adrenaline and noradrenaline, throughout the brain and from the adrenal glands. The release of adrenaline by the SNS dilates pupils, exerts an excitatory effect on heart rate and output and on smooth muscle cells of the vessels that supply blood to the skin, and mucous membrane to help reduce heat energy loss. Further, it influences metabolism by modulating endocrine function to increase glycogenolysis, insulin secretion and fatty-acid mobilisation. Lung capacity is increased and blood shunted away from the gut, whose peristalsis is slowed, to the brain and large muscles to facilitate increased visual acuity and escape. The two arms of the 'stress response' act in concert.

Lesions in the anterior hypothalamus suppress the number and cytotoxicity of NKC's[447], whereas lesions in the amygdala and hippocampus stimulate them. The amygdala and hippocampus are involved in recognition of danger and memories of how to deal with it. The firing rate in the hypothalamus directly parallels activity in the immune system and the adrenal cortex, seen by a shift in noradrenalin output and serum concentration, hence supporting the propositions which led to the creation of the field of PNI. Ten years earlier than Korneva's[448] elucidation of limbic lesions, Besedovsky[449] demonstrated a direct connection between immune function and the CNS through the observation that firing rates in the ventromedial nucleus of the hypothalamus also increase as the primary antibody response peaks. Other parts of the CNS which are engaged in this cascade of activity are the mesocortical and mesolimbic dopamine systems involved in cognition and the amygdala and hippocampus complex

involved in memory and emotion. At the same time, the CRF neurons also mediate opioid receptors and analgaesia and emotional tone, all of which provide the organism with a memory of the event. It also provides access to memories of previous, similar events, in order to learn how best to avoid re-exposure to the 'stressor', and deaden the pain of any injuries sustained in an attack, if that is the source of arousal.

Interruption of the HPA/APR, and particularly the febrile component of the response, may lead to worse inflammation, and if it is chronically interrupted, perhaps to autoimmune diseases[450]. IFN-γ transcription is inhibited by circulating cortisol, although a basal level of cortisol is critical to homeostasis. Peripherally, the liver is involved by inducing the release of acute phase proteins, liver derived recognition molecules, and angiotensin, the pancreas in the upregulation of insulin production, and the kidneys in secreting rennin and aldosterone. CRH, vasopressin, angiotensin, rennin and aldosterone are all involved in the increase in blood pressure and volume. HPA/APR is a beautifully orchestrated whole system response, dependent upon CNS coordination, and while it is generally associated with the emergency response, is essential to homeostasis.

Modulation of arousal is dependent upon communicatory molecules, just as is the immune response, in fact, relying on several of the same molecules: hormones, neuropeptides, interleukins and cytokines. As previously discussed at the beginning of this chapter, all immune cells express receptors for these communicatory molecules and feedback loops exist between the immune cells and the CNS.

IL-1 (in fact IL-1β) is the primary cytokine for the activation of the HPA/APR; it is a pleiotropic cytokine, stimulating APP expression, some of which act as enzyme inhibiters thus providing damage control during the febrile phase of an APR; IL-6 functions as an emergency competence hormone. TNF-α and Heat Shock Protein are also expressed, and a critical factor in HPA/APR responses are an increase in core body temperature which promotes recovery; a factor known for millennia in ritual healing practices of indigenous peoples[451,452,453], or top athletes of today. In the case of the immunological and inflammatory responses this serves to make the environment untenable for pathogens, whose viability depends on a very restricted temperature

range. This is, however, a double edged sword; local tissue damage, CNS damage and death may result if core temperature rises above that which the body as whole can itself tolerate. Increased IFN-γ serves to maintain these cytokines within physiologically acceptable bounds. Muscles and other tissues and organs undergo catabolism as the individual's energy requirements are met by the emergency. Interestingly the innate immune system is upregulated in response to acute threat, and the adapted immune system down regulated, similarly under immediate threat, modes of behaviour which are well entrenched come to the fore, and recently learned modes are shelved: *"under stress you regress"* is a well known aphorism from psychotherapy.

This model addresses imminent threat, but not the prolonged grind, which is often part and parcel of 'urbanisation'[1]. It also frames the activation of the HPA in a negative sense. During a normal day cortisol levels will fluctuate for a number of reasons, not all of them threatening: a child's simple excitement and apprehension about learning to ride her first bike, her brother's exhilaration with a successful ski run down a *piste* or perhaps their parents' sexual intimacy being some examples. Appraisal and 'coping' are two factors which determine the frame for an individual.[454]

Under increasing and/or prolonged distress the HPA/APR becomes maladaptive, for example the increased blood pressure of an arousal response becomes chronic hypertension as the organism attempts to maintain the pressure required for increased cerebral oxygenation and blood volume for the large muscles in readiness for an escape which never occurs; if, on the other hand, behaviour is consistent with the imperative to mobilise energy for removal from the threat (perceived or otherwise) no maladaptive response occurs[455]. If the stressor is not removed or cannot be avoided, as is often the percetion in our society, a total immune dysregulation may occur leading to increased susceptibility to infection, decreased response to vaccination, slower wound healing and a decreased pyrogenic response, all of which predisposes to disease and early death[456].

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[1] and as I'm writing this, anchored to my desk, a piece from Il Seraglio, where a young woman bemoans her fate as a prisoner of a 'wicked shiek', echoes in my mind.

Stress, Psychosocial and Psychoncology Research

During the past forty years it has become increasingly recognised that psychological and somatic health are inextricably enmeshed, abandoning Cartesian reductionism in favour of a systems theory approach, regarding the whole as a dynamic system with multiple levels of function, the bodymind[457,458,459,460,461,462]. More recently, as previously outlined, it has been recognised that S-IgA, IFN-γ, together with salivary cortisol are readily available and sensitive indicators of immune function directly tagged to physical and psychological distress[463,464,465,466, 467,468,469,470,471].

A host of research results have demonstrated the positive impact of psychological interventions on psychosocial health and adjustment to a diagnosis of cancer[472,473, 474,475,476,477,478,479,480,481,482,483].In David Spiegel's[484] previously mentioned study, however, there were no immunological parameters measured. As also discussed in the Introduction, controversy still surrounds the suggestion that psychotherapy influences the prolongation of life through such interventions[485,486,487]. Temoshok & Wald[488] were critical of the methodologies of both the Speigel and Goodwin studies while supporting Spiegel's general tenet that social support and psychotherapy are life enhancing. Spiegel himself[489] wrote a review of research into the effects of psychotherapy and oncology patients' survival time, and remarked that, without doubt, there were benefits from a psychotherapeutic intervention, and while prolongation of survival was still not seen to increase, at least there was no physical harm done in the process. A recent paper published by Kissane[490] at Sloane Kettering Cancer Centre in New York in collaboration with researchers from various hospitals in, Victoria, Australia, has corroborating this finding, whereas Richardson[491]. Reiterating what was written in the Introduction, Watson et al[492], Cunningham et al[493] and Fawzy et al[494] have recorded a favourable impact on survival length as a result of psychotherapy. In addition, Butow et al[495], in Australia, found a predictive correspondence between psychological state, quality of life (QOL) and survival amongst melanoma patients.

An issue, which has not been particularly well addressed, is the intentionality of the therapists or their type of interaction with the participants.[496] The researcher's

intentionality is an important factor in the outcome of a research project, as is being recognised by studies in Consciousness over the last 30 years[497, 498, 499, 500].

Research results would now seem to clearly suggest that psychological interventions have a positive effect on overall quality of life by reducing depression, increasing spirituality and life affirming attitudes[501,502,503,504,505,506,507,508,509,510,511,512,513]. This ought not to create surprise, as Freud[514] developed psycho-analysis, or the 'talking cure', **specifically** to treat the psychophysical distress of hysteria, where repressed trauma is converted into a physically debilitating symptom of no apparent organic cause. Psychological interventions, then, came into being, precisely to assist people experiencing emotional difficulties, and therefore wishing to explore their interior world. Common sense would suggest that a diagnosis of a potentially life threatening disease, which is how cancer is commonly perceived, would create tremendous psychological upheaval[515, 516,517.]. It would then follow that an intervention, which has come into existence to address such issues, would in fact be beneficial. Even people assumed to have health inducing attitudes, may well become withdrawn and immobilised by shock, when confronted with a diagnosis of a life threatening disease, or a major trauma, if left without adequate emotional support[518, 519,520, 521..]

The social mythologies (see Chapter 1) of many illnesses are in themselves debilitating[522,523] and must be explored and debunked if the person's inner resources for healing are to be activated. In addition, the distasteful, and at times harrowing, nature of many treatments, in particular in oncology, contribute to the presenting traumatic situation[524,525,526,527]. This is likely to be detrimental to both patient alignment in treatment, and an immune system already heavily burdened and reduced in effectiveness[528,529,530], despite demonstrated clinical effectiveness of treatment.

The connection between bereavement[531], a situation creating intense emotional distress, and immunological impairment, was an area of early research into the effect of distress *per se* on the health of the individual as a whole. Many of the earlier works focused on the results of animal experimentation in which the animals were subjected to varying types of distress, or what could easily be described as torture, such as imprisonment in a glass tube, which was then heated to become intolerable, or dogs

made to swim endlessly in cold baths. It was found that these animals gave up and died, either during the experiment, or when faced with further experimentation, however if there was even a slight possibility for escape, their survival was prolonged[532,533,534,535]. This gave rise to the 'helpless-hopelessness' concept[536], which militates against full recovery from disease, and leads to death as the only possible escape from an intolerable situation. Unfortunately, while this proposition has great merit, it seems also to have lead to the polarisations of affect, suggesting erroneously, that it is not possible feel both helpless, and in some sense also powerful at the same time, or sad while also happy[537]. As discussed above, it is not 'stress' in itself, which is deleterious[538]. What leads to death is a situation in which there is isolation[539] and from which there is no perceivable escape[540,541,542], in fact in many preliterate societies the ultimate punishment is to be banished, which leads inexorably to death[543]. Figley et al[544] had observed this phenomenon amongst wounded soldiers during WW II, and Victor Frankl[545] based his whole theory of human psychology with its emphasis on a need for meaning, and an ability to alter the perception of, and response to, a given situation, for healthy survival, on observations he made as a prisoner in Auschwitz and Dachau (see also Chapter 1). David and Jerome Frank[546] described the perceptions that were common to combat soldiers who experienced slower wound healing and increased *schistosomiasis* infection rate. These factors were firstly their **perception** of the degree of danger that they faced, secondly the **ambiguity of information** that they received and finally a feeling that their **welfare was of no importance** to those in authority. It is a set of perceptions which pervade many current societies, particularly our own.

The experience common to most people who are given a diagnosis of cancer is a *"Why me?"* response. There is no apparent meaning to the event, which becomes coupled with a feeling of utter desolation and social isolation[547]. In Western society, through the distorted and distorting lens of capitalism and religion, disease is an enemy to be overcome and illness is experienced as punishment. This mindset at once alienates the ill person for his failure to be a productive unit, while at the same time transforming him into a 'patient', a commodity in the 'health industry', what Richard Taussig[548] terms the reification of 'patients'. Symptoms of illness in this framework are regarded as **things in themselves** rather than representations of both biological (mal) function **and** social relationships. It is a position consistent with the 'professional distance' that

most health professionals have been taught to maintain and has detrimental ramifications for both the consultant and the person seeking her assistance; the former rarely recognised. This dynamic robs the consultant, or clinician, of the opportunity to engage with true empathy and places her in a power differential in which she may not respond with either appropriate or naturally experienced emotion, resulting in her becoming prey to the very distresses which are conducive to the illnesses about which she may be consulted. The person seeking her assistance is not aligned as an equal partner in addressing the *dis-ease* of his **own** bodymind.[549]

Many studies have utilised relaxation and guided imaging[550,551,552,553,554] to both promote relaxation and 'educate' immune responses[555,556,557,558]. The Fawzy and Fawzy team[559,560], of UCLA, California, with a similar study population, has been discussed previously. Andersen et al[561], found a convergence between psychological and biological effects after a psychological intervention, specifically aimed at reducing emotional distress and isolation through group support coupled with health behaviour education, in a population of women with breast cancer, as did Carlson and colleagues[562], using a mindfulness-based stress reduction (MBSR) intervention with outpatients receiving treatment for either breast or prostate cancer In these latter studies, immune responses (Carlson also assessed IFN-γ, although serum IFN-γ) and psychological and behavioural assessments were also made and the suggestion was made by Andersen et al. that *"If psychological interventions impact cancer survival, the process is likely to be multifactorial, including psychological factors, behaviour factors, biological responses, and other factors."*

In short, a systems approach is necessary[563,564].

A Rationale for the Use of Art Psychotherapy in This Research Context.

Art (psycho) therapy has been used in the area of mental health since World War II in the UK, the USA, and Europe, although it has its origins in bodymind work, when it was used in the UK in the rehabilitation of tuberculosis patients.[565] It is interesting to note that an early foray into PNI[566] was made at the same time, with the same patient population, and also in the UK, when Day[567], a general practitioner, recognised that

unless the psychosocial factors attendant to tuberculosis were addressed, there was little hope of recovery. As early as 1919, however, Ishigami[568] had already identified a decrease in the phagocytic activity of leucocytes amongst tubercular patients at periods of intense psychological distress. With the closure of the sanatoria the therapeutic use of art making moved further into the psychiatric domain, abandoning its earlier links with psychophysical health.

There is a resurgence of interest in the discipline of art psychotherapy in the area of physical medicine[569], particularly in oncology and palliative care, since the works of Susan Bach[570], Elizabeth Kubler-Ross and Dame Cicely Saunders[571]. Dr. Kübler-Ross[572],[573], used the making of images by patients, and their supporting or bereaved relatives, in her groundbreaking work in what was originally called thanatology, and is now known as palliative care. She was able to identify, within the patients' images, an almost uncanny intuitive understanding on their part, of their disease process and time of death. Susan Bach had found similar connections between images and intuition amongst patients in the UK[574]. Indeed a whole new area of art psychotherapy has arisen to ameliorate the distress of life threatening and chronic illness[575,576,577, 578, 579, 580, 581,582,583], that of Medical Art (psycho)Therapy,[584] where Kate Collie and her team[585] have done some very innovative work and extended the traditional delivery of art therapy to telehealth.

Achterberg et al.[586] have also employed a process of patient image making, in combination with active internal imagery to successfully influence neutrophil concentration and adherence to capillary walls prior to migration into extra-vascular tissue in healthy university students, and positively alter the blood chemistry of cancer patients[587].

The Achterberg team assert that these results are related to the connection between the stimulation of the frontal lobes of the brain, critical in imagery, (including visualisation, dreaming, meditation and hypnosis) and the hypothalamus via the limbic system, which controls emotion. Previously in this chapter I have discussed the role played by the hypothalamus in the regulation of the immune system, including the effect of lesions to this area of the brain and the parallel of firing rates and cytokine

involvement. Activation of these cytokine receptors influences both physical and psychological behaviour[588,589,590,591,592]. The mesocortical and mesolimbic systems, also involved in the arousal/immune response are involved in cognition, as are the amygdala/hippocampus complex[593], which is involved in memory and emotional response[594].

A study which has explored the use of art psychotherapy amongst returned service people in order to treat PTSD (post traumatic stress disorder) was run by Collie, Backos, Malchiodi and Spiegel[595], while Talwar[596] has investigated the use of art psychotherapy with traumatised people in general, remarking that the proprioceptive process of art making assists with the integration of cognitive and psychological content. Stress related disorders such as PTSD are accompanied by activation of the inflammatory response system[597,598].

The field of Psychoneuroimmunology has come into being to explore the interactions within the bodymind[599,600,601,602,603].

Art psychotherapy, therefore, stimulates all of these systems[604]; the frontal lobes through the imagery and images created, and the limbic system by way of eliciting the emotional connections to the images thus externalised and the cognitive process of understanding and integration, as it is a discipline that uses the making of images, either two or three dimensional, as the primary means of communication, exploration and integration of issues creating psychological distress. Of late another new field of medical art psychotherapy has arisen, that of 'Mindfulness Based' Art psychotherapy to utilise Buddhist based meditation practices in concert with art psychotherapy to influence physiology through the reduction of the tension and anxiety inherent in the current 'Western' lifestyle, including the distress of cancer[605,606.607].

During art psychotherapy the patient/client/participant (*quaestor*[li]) creates an externalised image, thereby increasing the potential effect of the image in that sense, as

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[li] From the Latin quaerer; quaest: to seek. The 'other' in the psychotherapeutic dialogue seeks clarity in his life. The other term which refers to the non-professional participant in the dialogue, 'analysand', refers to someone engaged specifically in the long process of psychoanalysis, rather than psychotherapy, where the term 'client' is used.

it is open to 'reality-checking' and mutual exploration by both participant and therapist. This is an important facet of the modality, as is illustrated in Plate 1, where a woman described her cancer as a 'black hole' into which everything disappeared, however, made a beautiful image of delicate rainbow coloured ribbons **emerging from a dark centre**. Having made the image she was able to address the positive aspects of her illness experience, and recognise both the positive and negative gains in her life.

It must be stressed that art psychotherapy does not require artistic skills of the participant, nor is it the aim to produce works for public exhibition, rather, it is a potent medium for exploration of the triggers for, and management of, the emotional response accompanying negatively perceived events, and finding vent for the full gamut of emotional expression while at the same time engaging the innate healing powers of creativity.

While the primary thrust of image making in art psychotherapy is exploration of unconscious content, another benefit is that it is in general experienced as a pleasurable exercise, engaging creative expression and the kinaesthetic experience involved in manipulating art materials. The proprioceptive involvement with the image created reconnects the creator with the event portrayed and long held tension can be discharged in a supportive environment. Empathy is also generated by the close proximity to one another, the shared pain and by the visual cues which stimulate 'mirror neuron' activity, points raised by the dance therapist, Cynthia Berrol[608] in a discussion of mirror neurons, dance and empathy, in which she cites Italian neurological research[609] which uncovered the activity of pre-motor neurones in the frontal lobe, activated in the **observer** of an activity; a sensibility vital in imitative learning, contextually appropriate emotional response and social cohesion.

In my own clinical experience, as with that of other art psychotherapists[610], 'patients'/clients have said that exploration of issues otherwise perceived as too frightening to confront, was possible, and paradoxically gave a sense of safe distance, when transformed into visual images, in the company of, and shared with, the therapist. The expression of psychological content, not accessible to functional awareness, (thereby making it cognizant) is spontaneous with image making, and if

explored in a therapeutic setting, is shared with the therapist. The process is reported by clients to be less threatening than dream recollection or free association, which relies on verbal communication, and which may still engulf the person recounting the experience with intense emotion, in essential solitude. The maker of the image has an opportunity to consciously influence processes, such as the activity of pain receptors[611,612,613], the vomiting reflex[614] and cell generation, not normally affected through conscious manipulation, all of which has significant potential in working with patients within the medical or surgical setting. Achterberg and Lawliss[615,616] have demonstrated a clear connection between visual imaging and blood chemistry.

The weekly involvement in art making, creating a tangible representation of the process, is also, as a by-product, a medium for the increase in a sense of self worth. A sense of increased self worth is facilitated simply through the accumulation of new skills and expertise in handling the media in the activity of visually expressing ideas, in an environment where judgement of competency is suspended and where the fear of experiment is shared.

Medical art (psycho)therapy has a particularly useful role in paediatric oncology, where verbal skills have not yet matured, and for those who must undergo protracted periods of isolation[617, 618, 619]. In the field of paediatrics, it is the medium *par excellence* to assist children in their accommodation to an alien environment and to explain unfamiliar and often invasive treatment[620,621, 622.] Children use images naturally[623]. When verbal acuity is not yet mature (and mistakes in verbal communication often made when the child relies on social cueing) images are a potent and accurate medium for children to explore and express needs, fantasies, fears and hopes[624]. Nez[625] goes so far as to suggest that art psychotherapy catalyzes the psyche's innate healing abilities.

While engaged in both my practicum, and the pilot project which informed this study, with medical, surgical and palliative care oncology patients in Sheffield, UK, I found that many were able, spontaneously, through art psychotherapy to identify 'major life events', which they had perceived as overwhelming, and had occurred between two and five years prior to the diagnosis of their neoplasm, in agreement with Katz and Epstien's findings[626]. The identification and resolution of distress came with

engagement with their images. Brain metastases were also evident in drawings, before otherwise diagnosed.

In the area of life threatening disease, styles of coping, such as actively engaging in ways of dealing with the unexpected, becoming a participant in treatment and expressing affect; may increase the effectiveness of treatment. In contrast, low self esteem, passive compliance or static resistance and hopelessness coupled with a sense of isolation all appear to contribute to recurrence of disease following treatment, or actual lowered effectiveness of treatment. Further, evidence indicates that depression, overwhelming life events, and general anxiety, lower the effectiveness of the immune system[627,628,629,630].

Engaging patients in art psychotherapy, particularly in a group setting[631,632,633,634,635,636] may assist greatly in the amelioration of these problems. Trauma surrounding the diagnosis of a life-threatening disease, and the attendant medical or surgical interventions, is reduced, and treatment enhanced, by addressing the emotionally loaded issues confronting the person experiencing illness, through psychological support[637,638, 639]. It is at this point that art psychotherapy comes into its own: 'patients' are able to mobilise self expression at their own pace, with the help of the therapist, and reclaim a sense of control within a period of apparently chaotic activity, more importantly, by imaginal, rather than verbal means, thereby supporting their severely challenged immune systems[640].

It is not being suggested that art psychotherapy as a modality, should, or indeed could, replace conventional medical or surgical treatment, or that it is a modality suitable to all people. The potential for its use as a powerful adjunctive treatment modality however, ought to be recognised, and structures put in place to allow patients access to such therapeutic assistance as art psychotherapy would allow them, which requires valid research, the recognition of which inspired and informs the subject of this thesis.

The most obvious application then would seem to be in the area of psycho-oncology, as it is well accepted that this population in particular, when emotionally supported, fare better than those who receive only medical intervention.

While there is increasing anecdotal evidence of the value of art psychotherapy in the open hospital setting, particularly in paediatrics, oncology and palliative care, there has been little evaluation of the efficacy of non-psychiatric art psychotherapy[641] and its overall medical impact, and virtually none of its physiological impact beyond the reduction of cortisol levels, pain or vomiting. Evidence to date would suggest that art psychotherapy has a potentially significant role in the time course of various medical treatments, and has been seen to be of tremendous assistance to severely debilitated people in allowing them a medium for venting emotionally loaded issues safely[642,643]. There would seem to be a place for art psychotherapy to be used to support and enhance immune function, and thereby, perhaps, recovery from illness, as well as supplying a means of addressing emotionally loaded issues, which does not rely on verbal sophistication.

Finally, a paper published in the British Journal of Cancer by Corner et al.[644], describes a study where cancer 'patients' themselves were asked what they thought were cancer research priorities. Overwhelmingly they felt that the psychosocial issues were of top priority; support with living with cancer and the impact the disease has on their lives were the issues that they felt required urgent research attention. Art psychotherapy is a modality which lends itself to this need for being heard and addresses the 'patients' need for support. If such research can be coupled with a demonstration of a positive physical effect, the needs of both patients and clinical researchers may well be met.

CHAPTER 3

Introduction to Art Psychotherapy

In the UK the term 'art therapy was generally used prior to the early1990's, when a debate amongst the members of the British Association for Art Therapists (BAAT) was resolved by the decision to adopt the term 'art psychotherapy' in order that the psychotherapeutic aspect of he modality be stressed. Since 'art therapy' is shorter, it is still frequently used. My preference is the term 'art psychotherapy' as the other term, although shorter, is often confused with diversional art, which, while indisputably a valuable component of the social worker's repertoire, and a modality which allows hospitalised people a creative outlet, has no psychotherapeutic orientation.

Primarily art psychotherapy is a psychotherapeutic modality central to which is the interaction between the image and the two participants in the therapeutic dialogue, the 'patient'/ 'participant' /'client' or '*quaestor*' and the 'therapist'; this may be represented diagrammatically thus:

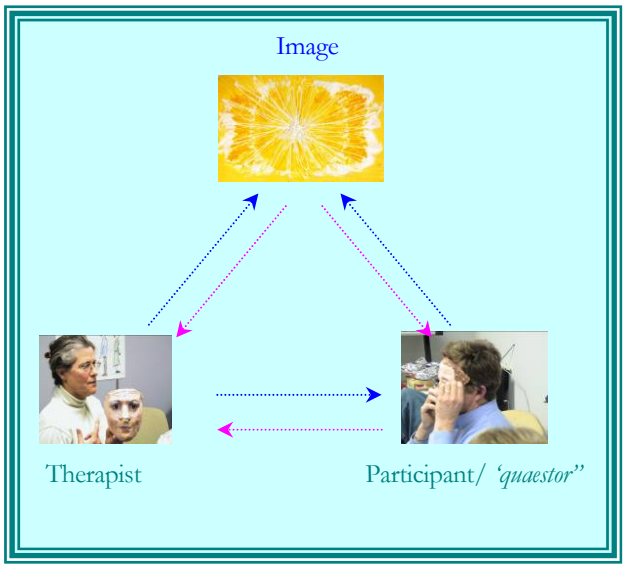

Figure 5: The triangular relationship between the therapeutic protagonists

In the case of group art psychotherapy this dialogue is extended to include the other members of *the group and* ***their*** *images*. It becomes a polyphonic song with multiple resonances and harmonies.

Of principle importance is the gaining of an understanding of inner content through the use of the symbolic language of individually created images facilitated in a safe, environment[645] where a positive therapeutic relationship[646,647] is established between both (all) participants in the therapeutic dialogue[648].

A wide range of art materials are made readily available[649] to allow free expression of this inner content either in two or three dimensions: Acrylic, gauche and watercolour paints, long and short flat and round ferrule brushes of varying sizes, soft, oil and aquarelle pastels, fibre-tipped pens, coloured pencils, aquarelle pencils, flat wax crayons, inks and drawing pens, scissors, adhesive tape and paste, clay, modelling plasticine, plaster bandages for cast making, A4 coloured paper, A2 white heavy weight cartridge paper, and sheet and roll 250gm water colour paper are all part of the available repertoire, 'found items' and items which can be utilised in collage making may also be added[650,651].

The focus, however, is on **expression**[652] rather than what is generally called 'creativity'. In Chapter 1 I have remarked that history is littered with sick, crazy and miserable artists of all shades and hues; although their creative legacy has enriched our environment and culture; the path they followed did not ensure their health. Creative expression, it seems, must be coupled with the cognitive journey of psychological exploration[653,654] despite the assertion that simply the process of making images and 'immersing' oneself in them precipitates psycho-spiritual healing[655]. As I suggested there, it is the concentrated, focused attention, known as 'mindfulness'[656] in meditative traditions, or as 'flow' by Csikszentmihalyi[657], which transforms the chaotic internal environment to one of coherence, within which optimal function is natural; in short, *''the soul song'* is sung. As may perhaps be seen through Em's story, art psychotherapy can facilitate the finding of that song. (see: Chapter 1).

During the art making phase of art psychotherapy a meditative state is entered, particularly during guided imagery and often, in the act of creating images themselves.

Each person is alone with their mind-pictures; their memories and the associations they evoke. Their 'gaze' is focused on the interior world, and the exterior surroundings fade from attention: an altered state of consciousness may be experienced in a time out of Time. In this state the transpersonal state is accessed[658]. Remembered sensations, words and intonations; the softness of an embrace or the pain of assault; smells of food; chalk; river water; fresh snow; blood; the sea; bush after rain; taste of ice cream; hot chips; curry; mars bars; bulls eyes; lemon; mango, details of past homes or favoured walks and faces of children, lovers or friends _____ all of these possibilities jostle for attention and slowly settle as the hand grasps pencil, crayon or brush. The intimidating emptiness of the virgin white page is embraced as an adventure of expression begins, getting the picture 'just so'.

Indo-Tibetan Buddhists have recognised the capacity for altering perception through the discipline of deep meditation, and image making, for at least the last thousand years. Recently Richard Davidson[659] has been researching the effect of mindfulness meditation on affective state,[660] and also how that impacts on immunological function[661]. Mindfulness based interventions, including mindfulness based art therapy (MBAT) are now being seriously considered as effective tools in dealing with the psychological distress associated with cancer[662, 663].

Art therapy came into existence in the UK and the US in the early half of the twentieth century and grew out of the psychoanalytic school. Both Freud and Jung[664] paid a great deal of attention to the artistic creations of their patients, although from vastly different perspectives: Freud to substantiate his thesis of the power and primacy of sexual energy[665], and Jung[666] to explore the wonder of trans-cultural commonality of symbolism as a function of what he called 'the collective unconscious'. Neither, however, paid much attention to the aesthetic of the work, that is, *"the specific formal features, such as their use of line, colour and texture, and their compositional coherence"*[667], which Maclagan asserts carries psychological resonances, and on which Furth[668] and Kübler-Ross[669] placed great emphasis.

Initially therapeutic art was used to assist people in their recovery from tuberculosis, where the focus was on art education and art as diversion, Adrian Hill, the nominal

'father of art therapy' in Britain, recognised the emotional needs of the patients and gradually shifted the focus of his intervention to be more psychologically oriented[670]. Work with psychiatric patients was pioneered by Susan Bach[671], Edward Adamson[672] and E.M Lydiatt[673] shortly after the Second World War, and this focus on art as a therapeutic modality in the realm of mental health remained until the late 1980's and early 1990's when it was then recognised to be of value in the palliative care setting, however, still very much attending 'mind' only, particularly psycho-spiritual issues[674]. I was amongst the first to explore the physiological impact of art psychotherapy in the UK and here in Australia. In the United States of America art therapy came into being through its application in working with delinquent and institutionalised children[675,676] and also, as in the UK, with inmates of insane asylums, however, there was a greater readiness to engage in the mind, body, spirit nexus in America. This is evidenced by the pioneering work of Florence Cane[677] in the early 1950's, and a decade or so later by thanatologist Elizabeth Kübler-Ross[678] and her student Greg Furth (1988), although arguably the greatest pioneer of this form of art therapy was Furth's other teacher, British analyst Susan Bach.[679] Bach was a scientist who escaped the Nazification of her native Berlin in the 1930's, settling in London to establish an analytic practice originally using art with the mentally ill. In 1947 (the year I was born) she recognised that spontaneous pictures accurately depicted an inner 'knowingness' on the part of the patient, of their disease process and psychological state, an empirical demonstration of both the power of the personal unconscious and 'the collective unconscious[680]. She communicated with CG Jung and Toni Wolf in Zurich about the significance of her discovery. Bach worked for many years with the children in the Great Ormond Street Children's Hospital, developing her understanding of this intimate intuitive communication between psyche and soma, an understanding, which has deeply informed my own work. Schaverien[681,682], Edwards[683] Waller[684,685], Dalley, Case and Halliday[686], Dalley, Rifkind and Terry[687] have all added extensively to an appreciation of the importance and power of image making in the psychotherapeutic setting[688]. Malchiodi[689] also suggests that a great deal of interpersonal distress may revolve around issues of attachment, a point reiterated by Tacón[690] and Wilkinson[691], which has an impact both on brain growth[692], relational dynamics, coping strategies[693] and immunological function.

"People need people — for initial and continued survival, for socialisation, for the pursuit of satisfaction. No one — neither the dying, not the outcast, nor the mighty — transends the need for human contact"

Yalom[694]

Siegel[695] suggests that right brain activity (face/pattern recognition) mediates early infant experiences of attachment and that using image-based expression to explore feelings (left hemisphere, verbal pattern recognition/language) may help resolve disrupted attachment experiences. Wilkinson goes on to point out that a sense of self is developed **relationally**; group art psychotherapy addresses all of these points.

The most commonly used model in the UK is the psychodynamic model, which regards the individual as an active participant in the milieu in which he exists and who is influenced by both the microcosm wherein early childhood relationships are paramount and the macrocosm of the culture within which he is raised and lives.

Within this model there is a constant relationship between the individual and the environment, which results in a tension between spontaneous expression and culturally/socially acceptable behaviour. In an attempt to resolve the tension, that which is unacceptable or does not match with the dominant 'world view', is repressed, however, this repressed content 'must out' and surfaces in a symbolic form through physical symptoms[696], perhaps even a disease process[697,698,699,700], recurrent behaviour and relationship patterns and dreams[701]. This is not, however, to be confused with 'hysteria' or 'symptom conversion' as described by Charcot, Breuer[702] and Freud[703].

The images created in art psychotherapy can be likened to dream fragments[704] brought into the therapeutic relationship and accessible to both participants in the therapeutic exchange[705], although, having the possibility of more development than simple dream analysis: "*Something like a true conversation takes place between the artist and the work.*"[706] In the Jungian analytic framework the images are created as an amplification of the dialogue between analyst and analysand; between dream fragment and wakened awareness; unconscious content and consciousness. In the therapeutic context the aim of the artistic expression is to recover that which has been repressed, to foster the process of 'individuation', a term coined by Carl Jung[707] to describe the fundamentally important

process of psychological growth and maturation through the establishment of a healthy relationship between unconscious content, emerging in symbols, and consciousness[708]. Complimentarily the humanistic school, which also has a strong influence on art psychotherapy, posits that the individual has an inborn need, and capacity for, 'self actualisation'[709,710,711], relying on newly acquired facets of personality and understanding of behaviour in the present, rather than exhuming issues from the past[712]. Within this model there is little room for examination of unconscious content, rather the experience of creativity in and of itself, holds primacy. As do many other art psychotherapists, I take an eclectic approach to my practice. I agree with Tessa Daley[713] that "*the relationship between artist and art is fundamental to the art therapy process*", however, I also feel that there is a wealth of unconscious content brought to the fore in that process, which it behoves us, as psychotherapists to accept and assist in the artist's exploration thereof, particularly if we work from a psychodynamic perspective, as Greg Furth[714] states "*drawings in general…….express tremendous amounts of information about unconscious content.*"

"Image work, at bottom, is about bearing witness to our stories and the stories of others without whitewashing or turning away.…The witness aspect of us is the clear, universal consciousness that underlies our physical manifestation…..It is in the telling and re-telling, as truthful as we can, and in the genuine witnessing to the stories of all people that we heal ourselves and the world"
Allen.[715]

The 'sacred' space, the liminal space of ritual, in which this occurs, is the 'holding environment'[716] within which the journey in psychotherapy is undertaken. "*It is in the space between the inner and outer world, which is also the space between people, the transitional space, that intimate relationships and creativity occur.*"[717] The telling of one's story, often accompanied by the making of images, both sacred and profane, is as old as humanity itself. "*We make sense of the events in our lives through the narratives we construct to weave those events meaningfully into the web of our existence."* [718] The narratives are created and told, also in this ritual space, during the process of art psychotherapy, as the content of the image is 'unpacked'.

Two of the primary differences between traditional psychotherapy and **art** psychotherapy are that of the medium and complexity of communication. With traditional psychotherapy the emphasis is on verbal communication and that which is communicated to the therapist via the non-verbal cues of 'body language'. When this form of therapy is used within a group there are the added dimensions of both verbal and non-verbal interactions between members of the group and the therapist. When **art** psychotherapy is used the channels of communication are increased, for not only are the 'normal' media of communication employed, **there is the added dimension of the images**. Several channels of communication are active **all at once.** There are the group interactions, individual exchanges and the images. Effectively there are at least four conversations happening simultaneously.

Firstly there is **verbal exchange:** the medium utilized for exploration of the content of the images, interaction between the therapist and participants and interaction between members of the group.

Then secondly there are the **group dynamics:** the interaction between the members of a group bring about a dynamic particular to that group, and are constantly monitored, both consciously and unconsciously, by the therapist, whose responsibility it is to maintain healthy cohesion and foster an environment within which honest exchange between the therapist and the group and between individual members of the group is possible. Group images are also a function of group art psychotherapy, and constitute a non-verbal expression of both group dynamics and group consciousness, at the same time as creating a tangible phenomenon-in the-world of their group identity.

There is communication through the **individual images**: within the context of the group, participants create their own images, a discreet process in itself. This activity is an expression of each person's individual inner process and connection to the group consciousness and to the collective unconscious, or transpersonal domain, that great reservoir of the archetypes, images and ideas and life themes common to all humanity. The content of individual images has an impact on all other members of the group, and may function to precipitate, at an unconscious level accessible only through direct

sensory stimulation, a process of disclosure or exploration for other group members whereby previously buried memories can be exhumed and revisited within the safety of a small social unit, in effect bringing the issue into the outer world. Finally there is the conversation with and through **the collective unconscious,** this being activated by the interaction between individual consciousness and the group consciousness.

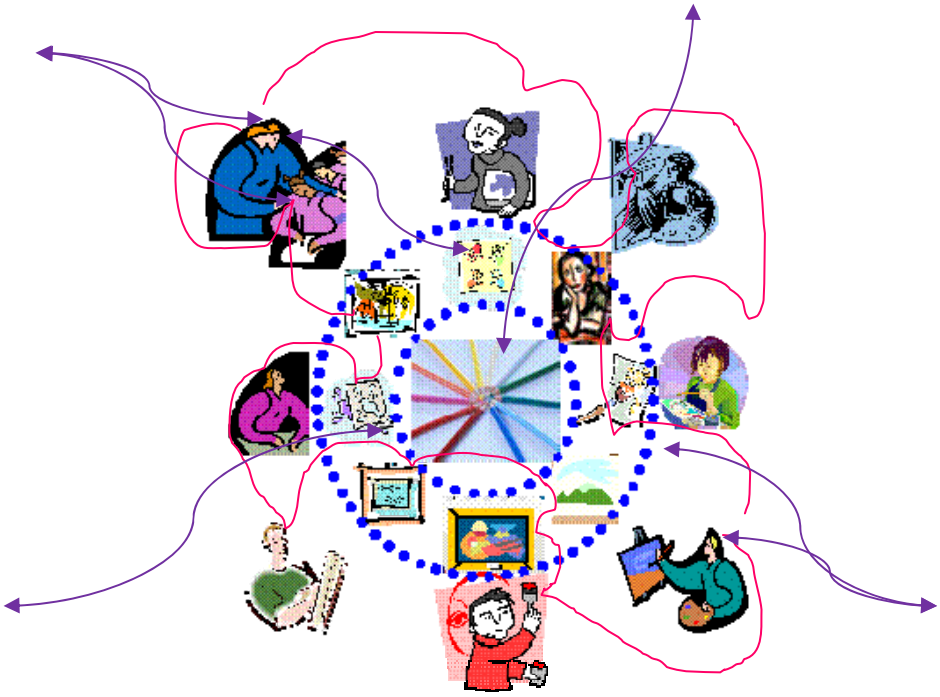

Figure 6: The Magical Mesh of the Group Communication.

The therapist, participants, images and collective unconscious, constitute a multilayered network of information and communication.

When appraising images created by clients, or participants, (or the 'quaestor) in the art psychotherapy setting there are several different ways of approaching the task, each informed by a very different philosophical school. In the United Kingdom, where I trained, the philosophical underpinning is that of classical psychoanalysis and psychodynamic theory, embedded within the positivist, scientific paradigm, and the image is seen as an extension, and therefore a tangible reflection, of the patient's/client's/quaestor's inner process. In line with classical Freudian psychoanalytic theory, and, of almost paramount importance and interest, (to the point, one might suggest of obsession) is the transference and counter transference between '**patient**' and therapist. The power differential is rigidly, maintained, reflecting

the paternalism of the 'health industry' as a whole; the great majority of art psychotherapy is delivered through the National Health Service.

During art psychotherapy, the process of externalisation *per se* is of importance; hence the general feeling tone of the picture is addressed. The therapist is required to enter into the picture in order to connect with the emotional state of the 'patient'; the way in which media are applied and the weight (both literal and metaphorical), the colours and composition are noted (the aesthetic) in this therapeutic identification (counter transference[lii]), with the 'patient'. Within the space of identification and the distance of observation a triangulated therapeutic encounter occurs between the therapist, patient/client, **and the image**, and healing may occur (see Fig 5). There is a great reluctance to engage in 'analysis' of the image, relying rather on the spontaneous associations, somewhat like the classical 'free association' of Freudian analysis, which arise from the client, the identifications made by the therapist and the actual kinesthetic experience of the embodying of the creative impulse inherent in all humanity. Art psychotherapy within this model is used almost exclusively in the field of psychiatry and palliative care.

There is a common (public) misconception that an art psychotherapist 'interprets' images, and lays the interpretation 'at the patient's feet'. This is expecting the art psychotherapist to act in the capacity of 'seer', which she is not, rather than psychotherapist and facilitator of inner exploration, as her training dictates. My experience in the field has also given me a perception of what I do, as art psychotherapist, as being something akin to cryptography, in that I have an understanding that we, as human beings, have evolved a superbly efficient way of storing information in our bodyminds, as images, often symbolic, and in a sense holographic[719], acting as mnemonic. A single whiff of a particular perfume can bring back to awareness a whole series of image events, felt throughout the body and accompanied by the emotions experienced at the time that the events first occurred.

As an art psychotherapist, and artist, I have been trained to 'see' differently, to **intentionally** take my gaze **into** the image, and by extension, the presented world of

[lii] Counter transference: the emotional reaction of the analyst to the subject's contribution. OED

the image-maker, to form a positive counter-transference. I have always looked for patterns; the innate coherence in the thing I see or to which I listen. It is how I make sense of the world I inhabit. Looking at the images is different to looking at the mobility of faces; focusing on lips moving, to help me discern what is said. I am in direct conversational relationship then, in the looking. The images are a hidden world which I must enter to 'feel' the presence in the picture world. What does it tell me, and the person who made it? I shift my 'gaze' from surface story to soul story, listening intently with my eyes again, but now at colour, texture, trajectory and symbol. I search for the sound of the myth and communicate with it deep in my soul. *"The more the analyst is familiar with the other's soul as its mirror, the better he can understand the dream (*image[liii]), ***but if he is too close he can no longer reflect, because he has become too much like the other……the concern of the analyst is to maintain his connection with the inside and not to lose his root metaphor."***[liv, 720]

I have learned to look for cues, which point to the mnemonic and ask questions, which unlock the code created by the maker of the image lying on the floor or table between us. In this sense I work idiosyncratically; differently.

One of the 'master keys' to the unlocking of the codes is in the repeated theme. Our lives are regulated by an internal metronome, synchronised with the external movements of celestial bodies: and as Pinkola-Estes[721] says, there is magic in numbers. The whole process maintains that the person with whom I am in relationship at that precise moment is a co-creator of that moment, and through this relationship a third entity has been created; the image. The image is the mnemonic. Mc Niff[722] suggests this image is a participant in the process. As such, it cannot be divorced from the verbal exploration, which accompanies the information it presents.

I must also own that I work in a tension between allowing the process to unfold, unassisted, as Hillman would suggest is necessary as a process truly respectful of the

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[liii] My insert

[liv] Emphasis added. The root metaphor to which Hillman refers is that of understanding and suffering: that is, human behaviour is understandable because it has an *inside* meaning. The inside meaning is experienced and suffered. Hillman (1965)

other's soul, and engaging in the 'cryptographic' exploration; the unlocking of deeply repressed memories through this process. The healing that I have witnessed as a result, however, as Em's story illustrated (Chapter 1), serve to maintain my feeling that it is worthwhile to pick up the 'golden thread' of mystery and follow it, and the most fertile space for finding such threads has been in the exploration of repeated themes

Greg Furth, in his book 'The Secret World of Drawing' [723] outlines three precepts on which the analysis of art therapy images rests. The first is that there is an unconscious from whence pictures, dreams, intuition, and parapraxes[lv] arise in an attempt at communication with the conscious mind. Secondly that the picture must be accepted as a **reliable and valid** method of communication with the unconscious, and to reiterate Bach's [724] findings, seems to have a 'knowing' of physical state beyond that of conscious understanding. Thirdly, and of importance to this current thesis, that Mind and Body are not separate entities---they are interactive aspects of the totality of an individual, and like the conscious and unconscious aspects, there is a striving towards balance within the bodymind. I would add that the therapist cannot 'work with' a drawing or art work independent of the person who created it; and also that the creation of images in art psychotherapy is an intentional, interactive process of coming to a point of new understanding in a verbal, visual and pre-conscious dance brought to conscious awareness, between the image, the client and the therapist.

Betensky[725] outlines a phenomenological method of art therapy in a sequence of steps, which she has researched over a period of fifteen years in the clinical setting of her practice as an art therapist in Israel and the United States of America, where there appears to be a propensity to use the images made during art therapy simply as psychological diagnostic tools. She writes of a four step sequence of engagements, commencing firstly with the direct experience of the art materials, 'checking them out' in order that the 'client' familiarizes herself with the media, leading to the creation of the phenomenon, and display of a piece of 'visual text' (a painting, drawing, collage, embroidery or sculpture etc.), which is put in the 'public domain', the space between therapist and 'client'. The second step is that of 'phenomenological intuiting'; the

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[lv] Parapraxis: a minor error in speech or action, such as a slip of the tongue , a slip of the pen , an action slip , or a slip of memory: OED

therapist and 'client(s)' 'distance' themselves from the image (phenomenon). In placing the inner content in a form where it can be presented to 'an other', where both encounter the image, the distance of disengagement is fostered where the 'content' may be appraised afresh. This is then followed by the third step of an 'intentional-looking-to see', whereby, with the image between the two participants in the dialogue both move their intention **into** the image, and with consciously directed gaze look to find, how the image 'feels' and what the image has to 'say'. Finally both proceed to describe the phenomenon that they have 'encountered'. This is achieved by a) describing what this image means/says to these people at this time in this place; establishing the context/history of the image, then b) studying the structure as a whole and its interrelated components to gain an overall 'sense' of the image, investigating how all the components of the image fit together, how they interact, and what paradoxes are presented (if any), and finally c) phenomenological connection and integration, coming back to the session and dialogue, and arriving at a new horizon, which is taken in to the life world of both parties in the dialogue.

While I do not use her method specifically, I was surprised, when reading her text to recognise that we work in very similar ways. I do not work in a rigid sequential method; rather I follow the client in a more fluid way, flowing with the process. The basic steps, however, are very close, and as she also states, philosophical phenomenology has been adapted to the needs of art psychotherapy and recognizes the input of Gestalt and person centered therapies, while I have, in addition to this, as I have stated previously, integrated facets of Jungian therapy, anthropology and the work of Susan Bach, Elisabeth Kübler-Ross and Greg Furth, as well as mythological studies, Reichian and Yoga based body energetics.

When addressing an image made by a client during art psychotherapy there are, I think, some cardinal rules, firstly that images produced during art psychotherapy are not an end product, rather, they are part of a process of active imagination. Secondly there are definitely no recipes, only signposts for which to keep one's eyes open. Thirdly, if what the therapist sees and brings to the client's attention doesn't 'fit' for the client then it is either an issue for the therapist to address, or the client is not yet ready to address the issue. In the case of the former the therapist must deal with this in

appropriate supervision, and in the latter the therapist can 'tuck it away' until the client re-visits the issue at a later date; resistance serves to alert the therapist of a defensive protection of un-integrated pain, and must be honoured, not broken down; it has served to maintain the client's emotional integrity (though not authenticity), and will shift slowly as the client gains new psychodynamic skills, strength and an internal locus of control when the resistance will, almost of its own accord, evaporate. Fourth, each person brings a unique story to the therapist, and this must be borne in the forefront of the therapist's mind when appraising an image for signifiers; there are universal patterns and stories contained within unique individuals. The final two points are extensions of what I have stated above; it is important to be present with the client while the image is made, both to be a participant observer in the ritual of self exploration and to be a 'midwife' to the birth of the phenomenon created; and that the therapist is **not** an interpreter of images, rather more a cryptographer with a different sensibility and way of seeing, helping the 'client', or participant in the therapeutic interaction, to break a code he co-created with the collective unconscious, in active relationship with his own history, and which has since been 'buried' below awareness amongst the other habitual behaviours.

The therapist functions in a unique relationship, being involved in the other's life as no one else, and must hold this responsibility always in the forefront of her mind, bearing witness to suffering and acting as, what Hillman [726] refers to as, a 'Midwife to the Soul', or in the Greek mystery tradition, the psychopomp[lvi].

Signposts

Some signposts specific to art psychotherapy as suggested by Elisabeth Kübler-Ross, Susan Bach[727] and Greg Furth[728]:

1. What is the general feeling tone of the image, as viewed by the therapist, and is this consistent with how the image is described by the client?

[lvi] Psychopomp: a guide of souls to the place of the dead: the spiritual guide of a living person's soul. OED.

2. What media were used to create the image; do they work to enhance or minimize the expressed feeling content of the image? What texture is achieved with these media? How is the space of the page used?
3. Assess the composition of the image; who or what is where and how do these figures relate? Are there any barriers? Who blocks whom from what?
4. What are the trajectories of any objects and extensions (such as things held in the hand, brooms and cars, bikes, balls etc.)?
5. Are there any repeating themes? The numbers are almost invariably keyed to a significant life event, or other significant collection, such as numbers of members of a family. **I have found this is one of the most revealing of points.** Although I had found supportive evidence of this amongst Jungian writers, notably Pinkola-Estes, noted above, I was astounded to read, in a text on modern science, while writing up this thesis, "*numbers ….appear to be a tangible connection between the spheres of matter and psyche. According to hints dropped by Jung it is here that the most fruitful field of further investigation might be found*"[729]
6. What or who is missing?
7. What or who is emphasized or central to the image? Are there any physical distortions? These may give an indication of a physical pathology.
8. Are there any paradoxes in the image, either of colour, shape or description? A paradox is a signpost with neon lights flashing, for within the paradox rests the visible tension between adaptation and repression, and the push towards integration and authenticity, and therefore the greatest potential for growth.
9. How are colours used, being mindful of the cultural context of the colour? Are they emphasized or inappropriate? What is the weight of application?
10. Is there any shading and if so how is it used? The degree of energy used in the shading may indicate an anxiety over an issue or what is held 'in the shade/shadow[lvii]'.
11. What line style is used, are there any under linings or encapsulations? Are there any lines across the top or bottom of the page? What is the client protecting or how feeling hemmed in or 'over hung' by what burden?
12. Are there any erasures or what is hidden on the other side of the page? What may not be shown although needing attention?

[lvii] The Shadow refers to the unaccepted part of one's psyche, which usually rules from the shadows.

13. Is there any transparency of objects within the image? The client may be 'seeing through' an issue, rather than attending to the issue/ be in a state of denial or having difficulty seeing what's going on around him.
14. Is there consistency of size and proportion? Who is overvalued (too large) and who undervalued (too small)?
15. Is there consistency of perspective? If there is a confusion of perspective the client may be confused about life, about 'getting things into perspective'; if there is a 'bird's eye view' the client may be emotionally removed/distant.
16. Are there any words written on the page? These require special attention, the client may well be unsure that she is 'heard', or safe within the therapeutic situation.
17. Is the image abstract or realistic? If abstraction is used the client may be hiding from himself or an issue, may be 'asking' the therapist to 'come and find me', or having great difficulty illustrating what he wants to express.
18. Do trees appear in the image? Are they well leafed, well rooted, gnarled or wounded? A single large tree may be the client's own 'Tree of Life'.
19. Check the **personal** aspect of symbols even though it may also signify archetypal content; while the archetypes do emerge during art/image making, they do so in a personal context.
20. Does the style and articulation of the 'story' change over time?

A final point of consideration, not specific to the analysis of any one image, but in a progression of images, is a recognition of points of change: the moments at which an *"Aha!"* occurs, which signifies the commencement of integration.

In 1989, almost two decades ago, Harriet Wadeson[730] wrote, *"It is my hope that in the future individuals' treatment programs will be considered incomplete if they do not include art therapy to allow patients to investigate their outlook towards their illness, their immune system, their medication and their goal of regaining health."* Her plea is slowly being realised, and it is to be hoped that this thesis will add to the growing body of work which supports the findings of the efficacy of art psychotherapy in ameliorating psychophysiological distress and improving health. Cathy Malchiodi [731]adds that *"Medical art therapy groups provide a means of expression not found in other forms of psychosocial treatment and offer the*

opportunity to explore concerns intrinsic to the experience of cancer in a creative, personal way…….. (and*) helps those threatened by disease or disability relate their experiences in an atmosphere of social support, personal empowerment and authentic expression."*

CHAPTER 4

Methodology, or the Method of Investigation

The Philosophical Underpinning of the Method of Research

"Of course it often happens in science that things are too complicated to be calculated exactly, so that one has to be content with a rough qualitative understanding"
Dyson.[732]

Qualitative methods involve exploration, the first step in inquiry. Quantitative methods involve verification; the last step.
Scheff.[733]

"Science has a double value, or valence: natural and phenomenal. Natural because sentience stands for the organism and its structural coupling with the environment, manifest in a detailed and empirical sense. It thus includes, without remainder, the biological details of the constitution and explanation of function, an inescapable narrative. Phenomenal, because sentience has as its flip side the immanence of the world of experience and experiencing; it has an inescapable lived dimension that the word organism connotes already. Moreover, that the organism is a sentient and cognitive agent is possible only because we are already conscious, and have an intrinsic intuition of life and it's manifestations……..Given that the scientific tradition has construed the natural as the objective, and thus has made it impossible to see the seamless unity between the natural and phenomenal by making sure they are kept apart; no bridging or 'putting together' would do the work. The only way is to mobilize here a re-examination of the very basis of science. But this gets, all of a sudden, too ambitious".
Varela.[734]

This research project has undergone several changes from that which I first proposed in my application for PhD candidature; even after initial ethics approval had finally been granted for a totally re-worked proposition.
To reach fruition, however, it was essential that the protocol be reshaped 'on my feet', almost literally at the 'eleventh hour', as the anticipated participant population was lower than the required size for a randomised controlled trial; it had been calculated that for statistical relevance to be reached I would need a study population of no less than 60 participants.

This process was both constructivist and inductive. The research project was in constant iterative and reiterative flux in response to the demands of changing situations congruent with the philosophy within which art psychotherapy, as I was taught, is embedded, that is hermeneutic phenomenology. It was also a little akin to creating a sculpture of a lively and dynamic model _____ with very wet clay ____ and no armature. Eventually I found excellent material which would provide the supporting framework.

Originally the project was designed as a piece of 'classical' quantitative psychobiological research, with a population randomised to control (a group to meet for weekly conversation as a group with me) or intervention (the art psychotherapy) groups. From the outset, however, I had felt it imperative that the art psychotherapy component be described in a narrative form. The source of the qualitative data was the component central to this study: data collected to record the group art psychotherapy journey and the images made during its process, through which immunological changes were observed. In order to validate that component of the research process I felt it essential to include an analysis of that data describing the **process of change** through the use of art psychotherapy.

There were six deciding factors for this direction: firstly to give the participants who were to engage in a research project **with** me **a voice**; without these willing people there would be no research[735]. Secondly, because art psychotherapy research is in its infancy and the discipline neither well known, nor understood outside its field, I felt it essential that the process be well described in order that an understanding of the

process of **art** psychotherapy, not simply psychotherapy *per se,* be illustrated as the modality through which exploration and bodymind change occurred. Thirdly, a point not generally appreciated, that the **images themselves are data**[736], which come **nested in a story encompassing a history in a particular context**. Fourth, it was important to describe the illness and life experiences of the participants because there is a body of literature, cited in the Introduction, which suggests that there are 'personality factors' [737,738] apparent in some cancers, and also that cancers with differing histologies may not respond in the same way to psychotherapeutic interventions[739]. This last point is of great importance to the ongoing debate regarding the impact of psychotherapy on physiological function, particularly in such a vulnerable population as those enrolled in psycho-oncology research. The previosuly mentioned hallmarks of the Type C personality, described by Lydia Temoshok[740] are, amongst other things, learned blunting of affect and compliance in order to avoid confrontation. This learned blunting, and avoidance behaviour is presumably mutable through psychotherapy. An understanding of the **illness** and psychotherapeutic experience is necessary to corroborate or refute this observation and to inform the implementation of practices, which will best support others with a similar diagnosis in treating their **disease**[741]. Fifth, as I discuss in this chapter, I feel strongly that a marrying of both methods of investigation adds a richness of understanding not possible through the use of either a positivist method alone, or of any of the now many qualitative methods, in isolation from quantitative data, even though, epistemologically, they are based in completely different paradigms. Finally in agreement with Scheff [742], and leading out from the last point, is, as Wertz [743] suggests, an appreciation that it is first necessary to gain an apprehension of the essence of a phenomenon through eidetic reduction before it is possible to extend research into that phenomenon further to investigate its generality, which may be carried out using quantitative methods. It is particularly applicable, as in this case, when the area of research is not yet established.

Essentially the issue, with which I dealt early on, was a journey into uncharted territory. This has been at times daunting, often nerve wracking, exhausting, and by turns exciting and exhilarating. I knew that the research that I had planned was novel. At the time that I was working on the protocol, no other art psychotherapists had

undertaken research which explored the cross-talk between psyche and soma, although several understood the reflection of different aspect of the bodymind in each other[744], and others have written about the existential improvement of people's lives and reduction of 'stress' as a result of engaging in art psychotherapy[745,746,747,748,] What I hadn't anticipated was that there was no framework into which it would comfortably fit, until I reached the stage of writing up my data, and recognized that what I had intuitively created was a protocol utilising a mixed methods research approach; a style of research which is essentially quite old, but has in the last two decades been reshaped. It is a type of research particularly suited to the fields of nursing, sociology, education and various branches of anthropology and ecology[749,750,751,752,753,754,755]. This situation, as I explained in Chapter 1, has necessarily had an impact on the whole research process itself. When I began I suspected that it was likely to be at odds with the accepted concept of biomedical research, and knew it was most certainly so with the type of research undertaken in art psychotherapy to date. Art psychotherapy, as I have written in Chapter 3, has been primarily involved in the intra psychic research of distress, as it is experienced, and is strongly rooted in the interpretivist paradigm, which is uncomfortable (so uncomfortable, in fact, that it is barely recognized in art psychotherapy training) with the positivist approach necessary in biomedical research, required to assess the **physiological** aspect of bodymind response to art psychotherapy. Previous research into the effect of imaging, that is guided imaging, and how this is observable by biological processes has been classically oriented, positivist, quantitative science[756], whereas research into art psychotherapy interventions, particularly in oncology and palliative care, has been qualitative, interpretive, case study oriented research, although this is now changing and quantitative methods are being used to assess psychosocial changes[757].

It is, I feel, accordingly appropriate that I spend some time outlining the history of the existing dominant biomedical **scientific research paradigm**, in which this project was originally embedded, and the shift that is currently gaining increasing momentum, as well as the **philosophy** which has informed the investigation of **the experience** of those who participated in the research project, in order to clarify the philosophical ground from which the methods of investigation have arisen[758], that is, the

epistemologies which gave rise to the way in which the investigation was conducted, data collected and conclusions drawn.

Science and Culture, and the Culture of Science

The Universe is vast. Nothing is more curious than the self satisfied dogmatism with which mankind at each period of history cherishes the delusion of the finality of its existing modes of knowledge. Sceptics and believers are alike. At this moment, scientists are the leading dogmatists. Advance in detail is admitted: fundamental novelty is barred. This dogmatic common sense is the death of philosophical adventure.
The Universe is vast.
Whitehead.[759]

At a basic level, 'Science' is the knowledge of natural processes, observation of patterns in, and an ascription of meaning to, those processes. The intellectual activity of observing natural phenomena, ascribing meaning to those observations and extrapolating from these observations to create and demonstrate working theories, in order to modify both life process and life-space, is apparently a very longstanding pre-occupation of humanity. Rudimentary calendars inscribed on bone date back at least 40,000 years[760]. Mathematics and astronomy sophisticated enough to build huge stone 'observatories' was in place more than 7000 years ago[761,762], as was an understanding of human physiology to allow for trepanation of the skull[763,764] and reasonably sophisticated dentistry dating to 9000 years ago[765]. This intellectual activity is contained, and sometimes strictly constrained, by a shared worldview: a culture. One of the things, which hold a culture together, is a system of signs by which all members communicate[766,767]. This system goes beyond verbal language to encompass signs of mystery and reverence observed and transferred through ritual[768]; as I alluded in Chapter 1, ritual is an important function of indigenous healing practices. The culture determines that which is worthy of, not mere observation, but deeper scrutiny. More importantly perhaps, the culture determines and is constrained by, the framework, or paradigm, within which explanations of such observations are couched[769].

All natural phenomena are apprehended through the senses, and translated in such a way as to 'fit' within the individual's concept of 'reality'. This includes the sense referred to in English as the '6th sense', that of intuition, the 'sense' which provides non-logical information and 'gut, or heart, knowing'; a 'sense' of unease or rightness in the absence of normally obtained information. The concept of reality is very much governed by the social construct. It is important to bear this in mind, because, while we in the 'West[lviii]' work within a cultural set now dominated by a particular paradigm, which we call the 'scientific method', and naturally regard as the only acceptable method of enquiry if the results are to be taken seriously, it behooves us to bear in mind that cultures and paradigms evolve, mutate, are abandoned and even overthrown or lost entirely[770]. Few educated in the West would now seriously entertain that miasmas cause diseases, and yet it was accepted with total conviction up until less than 150 years ago, similarly, only 73 years ago an eminent psychologist was suggesting that 'emotion' was an unnecessary and unscientific term[771]. To ignore the impermanence of accepted frameworks of enquiry is to fall prey to cultural elitism, which is, at its heart, antithetical to the unbiased curiosity and exploration, which the 'scientific method' requires. Indeed the philosopher of science, Paul Feyerabend[772] argues that what accounts for knowledge in one era may not be so in another, and as we are not able to determine that which will eventuate we ought not to narrow our mode of enquiry, particularly not to a method determined by **one** branch of science, mechanical physics Ironically, it is another branch of physics, sub-atomic physics, which has led the way towards new paradigms of 'reality'. Interestingly several quantum physicists, Fritjof Capra[773],[774] and Fred Alan Wolf amongst others, are actively grappling with the metaphysical concepts of 'Spirit' and 'Soul'. Wolf describes Soul as that which has no object reality, but rather is a *"process involving consciousness of knowledge….and occurs in the vacuum of space in the presence and absence of both matter and energy…..The major activity of the soul is manifestation of matter and energy and the shaping of the material world by knowledge"*[775],

> *"Science can be considered to be neither a unitary set of methods and procedures, nor universal practice. What counts as 'science' varies over time (philosophically, historically and sociologically) and is elusive. It is more useful to understand the 'scientific method' as an evaluative repertoire,*

[lviii] The 'West" here refers to a culture which arose in the Atlantic-Mediterranean basins with roots in Greco-Roman civilisations; a set of social norms and ethical values based in a Judaeo-Christian world view including patriarchalism, imperialism and materialism, political pluralism and reliance on a shared science and technology.

than as a universal procedure……It is a social process that takes place within a language community and hence is responsive to the prevalent values, beliefs and expectations of the community."

Sharrock and Anderson [776]

All research is selective. It is impossible that the researcher can in any sense capture the literal truth of events. Karl Popper[777] pointed out that there are only observations, all of which are dependent on the characteristics of the device used for measurement, and the situation in which the observation occurs; there are no absolute reference points.

"What we observe is not nature itself but nature exposed to our method of questioning. Our scientific work in physics consists in asking questions about nature in the language that we possess and trying to get an answer from experiment by the means that are at our disposal."

Heisenberg[778]

One of the core assumptions within our current paradigm is expressed through the metaphor of the machine.

"The world and people, are thought of as machines, whose properties can be measured and whose behaviour can be predicted on the basis of the causal models. Behaviourism and radical empiricism exemplify this approach……..The problem with the metaphor of the machine is that people do not understand themselves this way."

Rice &Ezzy [779]

In the West nascent 'science' was inseparable from philosophy from Greek civilisation until the early nineteenth century. Rapid industrialisation, however, depended on technological innovation, and in the early nineteenth century 'science' became institutionalised. With institutionalization science became professionalised and scientists accorded high social status. May[780] points to the acculturation of scientists, and that, through a process of '*disciplinary socialization'* they are taught to recognize specific sets of patterns, while Miles and Huberman[781] say, as a result of that acculturalisation, scientists tend to seek consistency and avoid novelty in order to

maintain the intellectual and social comfort of 'nesting' within the ruling paradigm despite the dependence on non-conformist thought for the creative leaps which mark true scientific exploration. As a result of this, anomalies which challenge that paradigm, are frequently ignored, or may in fact not even be recognized at all if there is no construct within which these anomalies may be apprehended. One such anomaly is that which is being investigated in this research; that making pictures and talking about the stories they hold has an effect on how the body responds; or more to the point, that 'mind' and 'body' are indivisible, even though it is what happens in the 'body'(see p.18), that is measurable, and neither scientists nor philosophers have in the last two and a half millennia agreed on what constitutes 'mind' or 'consciousness', although Koch[782] assures us that neuroscience now stands on the threshold of the chamber in which this Holy Grail is hidden.

"Therapeutic revolutions occur after a crisis develops when there is general recognition that clinical interventions are not producing the positive results predicted by prevailing paradigms."

Baum et al.[783]

There seems to exist a spiraling rhythm between ways of interpreting phenomena and cultural shifts in perceptual filters. The tension of disjunction increases between inconsistencies of accepted wisdom and novel data revealed as a result of an expanding world view, which, pushing until the filters are no longer congruent, slips to give way to new filters which accommodate the new data, to come to that which Thomas Kuhn[784] called a 'paradigm shift'. A rhythm exists between curiosity and certitude, a rhythmic flow from enquiry to convention and conviction, and back again.

Within Western history several such shifts have occurred. In the pre-literate period a wholistic[lix] worldview was regulated and interpreted through the motion of the planets and stars, was populated by seen and unseen forces of beneficence or malevolence, all

[lix]Regarding words I am an unabashed pedant and I have specifically spelled the word "wholistic" as such, rather than the more common "holism", because the word refers to a concept of wholeness, not to either type of "holiness"; being neither holy nor full of holes; however 'whole', 'holy' and 'healing' all come from the same root, meaning a state of 'soundness'.

requiring human participation and propitiation in order to remain functional. A cycle of seasons of fecundity and barrenness encapsulated humanity as an integral part of life in seamless time, which gave way to a perception of humanity separate from nature and independent of any governing force other than the observable organization in the Cosmos. This organization was reflected in the political structure of the city-state, where all facets of human nature might be explored and articulated with the faculties of the intellect, faculties, which put humanity apart from other living beings. More importantly for our current shifting worldview, it was argued that the physical vehicle, the body, entrapped a soul, that which bestows life and connects the individual to the Cosmos, longing for freedom from its encumbrance. This in turn contracted so that enquiry focused entirely on an understanding of 'Creation' from the perspective of 'Man's' place therein and his propinquity to God (Judeao-Christian), filtered through interpretation of Biblical texts (hermeneutics), and acceptance of the absolute authority bestowed upon those texts. Time became an entity measured linearly, as dictated by those texts, and was accepted to have commenced with the first day of Genesis, a concrete reality.

The rigidity of this stance culminated in the religious wars of the twelfth and thirteenth centuries, and exposure to Arabic culture, which led to a blossoming of curiosity and the intellectual expansion of the Renaissance. The two dominant epistemologies, the paradigms, which have served to contain Western thought since then, rationalism and empiricism, arose within this climate of enquiry and allowed a secular approach to philosophy. Scientific investigation (or more correctly natural philosophy) for the sake simply of broadening intellectual horizons matched a restlessness to continue exploration of the world beyond Europe, following the expansion and mobility of populations of the most famous of those religious wars, the various Crusades to the 'Holy Land'.

Building on this intellectual expansion, in what has become known as the 'Age of Reason', an epoch in the era called 'The Enlightenment', another paradigm shift was driven by Descartes and Newton, echoing Aristotle, who proposed a mechanistic view of a perfectly ordered universe in which 'Man' was the supreme expression of 'Creation', independent of and above the rest of 'Nature', because of his faculty for

intellectual enterprise. The mechanistic view of the Universe eventually left out God altogether, and enquiry was conducted, not for the sake of understanding God, but with the hope of emulating the creative principal by carrying the mechanistic paradigm to its natural conclusion; if the 'machine' were to be taken apart, the workings would be understood by deduction, and thus replicated.

Two of the foundations of our current 'scientific' paradigm were laid down during that time: Newton's concept of the predictability of effect following cause, and Descartes' principles of investigation[785]. It is perhaps apposite to include the 'laws' that both men wrote.

Newton's three laws of motion[786], which almost every high school child receiving a western education learns by rote, are:

1. every object in a state of uniform motion tends to remain in that state unless an external force is applied to it.
2. the relationship between an object's mass (m), its acceleration (a) and the applied force (F) is F=ma, where acceleration and force are vectors.
3. **for every action there is an equal and opposite reaction**. (It is this last rule which has had perhaps the most pervasive influence.)

Descartes' 4 rules[787], which few students learn, but which govern the way in which they conduct their enquiries, and construct their reports (even qualitative reports) are:

1. never accept anything as true, without evidence of that truth, that is, carefully to avoid precipitate conclusions and preconceptions, and to include nothing more in my judgments than what has presented itself to my mind so clearly and so distinctly that I had no reason to doubt it.
2. divide each difficulty into as many parts as possible and as may be required to resolve them better.
3. direct thoughts in an orderly manner by beginning with the simplest and most easily known objects, in order to ascend, little by little, step by step, to knowledge of the most complete and by supposing some order even among objects that have no natural order or precedence.

4. throughout to make enumerations so complete, and reviews so comprehensive, that I could be sure of leaving nothing out.

Another paradigm shift is in progress, and was heralded at the beginning of the twentieth century, by Einstein's theory of relativity. A few short years prior to which, the likes of Kraepellin[788], and other esteemed savants[lx], had announced that there was little, if anything, left to understand of any scientific value, and that their successors would exercise their talents in simply categorizing that which was already known!

An irrefutable worldview of mechanistic certitude was suddenly displaced by a concept which explored the **relative** relationship between energy, mass, space and time, calling into question not only the tenet that the observer as an impartial and uninvolved objective witness, but more fundamental issues such as the reality of time. With Einstein's work, and subsequent sub-atomic exploration, an intimate relationship was proposed between observer and event, with each influencing the other. The paradigm shift in which our culture is engaged is a return to a wholistic view, recognizing that all life forms are intimately interconnected; that the notion of neutrality of interpretation is a fallacy, and the linearity of time non-existent.

David Bohm[789] termed the world available to our five senses the 'explicate order', and the existence of the sub-atomic, the 'implicate order' – the latter a state of infinite possibilities, what Wolf might describe as the Soul, from which the former unfolds and presents itself to our experience.

"To change a major paradigm is to change our definition of what is possible".
Woodhouse.[790]

A dilemma with which I have had to struggle is a tenacious hold to a mechanistic worldview, dominant in the biomedical sciences, which is at odds with both my personal philosophy and experience of interconnectedness, and the unfolding understanding and acceptance of the complexities of life which is reflected in such

[lx] Savant: a learned person OED

areas of research as consciousness and its lack of defined locality, the BodyMind, bootstrap biology[791], ecology[792], complexity[793] and chaos theories[794].

My research illustrates that issue, because I have chosen to measure discrete physiological functions, in concert with psychological questionnaires, which adheres to a positivist ideal, while I recognize these discrete functions as transitory measurements in a complex system. In tandem with these quantitative measures is an illustration of a whole-body process, with a distinctly interpretive and phenomenological bent, as evidenced in the art psychotherapy process. This then extrapolates to the mode of analysis of data. Should the research depend primarily upon quantitative data, that which is 'taken seriously' within the medical context; items which can be seen numerically and compared readily, or should it rely on the verbal and pictorial/artistic images; on the research of intrapersonal reality through psychotherapy[795] ----- translated into a narrative; a 'Story'? This 'qualitative data' illustrates the felt experience of people who have confronted the diagnosis of a life threatening disease. Through the process of group art psychotherapy, they have explored connections that **they** have made to **this** illness, **their** life experience and interpersonal dynamics. The story is a combination of each participant's own life story and of a journey that we made together. It is a story, which tells of a process of learning skills, gaining an understanding of interpersonal dynamics, shifting perception to acknowledge agency in one's life, and as a result of that, changing perceptions regarding what one conceptualises as creating a negative impact in one's life, all through the medium of image making, as **participants** in a research project that I designed, but which they drove.

Must it be either/or? Is there room for complimentarity, which will make sense out of the whole[796], in such a way that honours the participants and their process **and** the need for unambiguous information amongst medical professionals? Nursing, education, anthropology and ecology research would strongly argue that there is. Is it not possible to honour another natural philosopher of the Enlightenment who argued for just such a stance, in taking a Goethean slant to research[797], and regard the human being as the most sensitive (that is, relying on the senses) of all instruments, and acknowledge that an observation is the result of a relationship between that which is

observed and the one observing? Is it not important to recognise and accept that human experience cannot be studied in the same way that one studies a 'thing', and that both are necessary[798]? Consciousness is not concrete and things are not ethereal, although they are constructs of ethereal consciousness or mind. Indeed, the noted physicist Wolfgang Pauli[799] suggested that there was an inter-relation between the psyche and biological processes, and that our investigation of outer objects ought to be paralleled with a psychological investigation of the inner origin of the concepts we build about them through such investigation.

"If medicine were simply a matter of prescribing drugs or wielding scalpels then monkeys – or at least robots – might make adequate doctors. It's the human bit, as in most enterprises, that makes medicine tricky, fascinating, and difficult. Medical journals might be accused of ignoring much of that complexity with their diet of drug trials and systematic reviews. Increasingly, however, we are publishing qualitative research that probes the interaction between doctors and patients"[800]

We can develop a different kind of science…a descriptive, hermeneutic methodology in which we learn how to recognise when conditions are ripe for transformation,
Mehl-Madrona[801]

Art Psychotherapy as Research: Where Does it Fit?

*We sense things about our relationship to the environment without being able to verbalise them. Our emotions (*and pictures[lxi]*) often reflect this kind of knowing and evaluating, …. as well as the more deliberate and analytic processes studied in modern cognitive psychology.*
Lazarus.[802]

Art psychotherapy has come late to the field of research[803] and there was a hesitancy to engage in researching the process, particularly in the UK, where I trained, lest it be demeaned as yet another prescribable commodity. Judith Rubin[804] made the comment

[lxi] My insertion.

that "*the tendency in art therapy to discuss each of its two components, art and therapy, independently, to define the role of each in the field, and then study the interface seems contrary to the genuine character of art therapy*". _____ We have been precious about our practice.

Traditionally art psychotherapy has been utilized predominantly in the mental health arena, in both clinical settings and within the forensic and education systems. The empirical evidence that 'patients' improved while engaging in art psychotherapy seemed all that was necessary, however as Kazdin[805] points out, demonstrating a causal effect doesn't necessarily demonstrate the mechanism or the mediators of change. In the US research has been conducted through, amongst other places, the National Institute of Mental Health, Bethesda, Maryland, particularly where art therapy has been used as an adjunctive treatment modality with the major psychoses and within the forensic system[806]. The image in some of this research has been used as a diagnostic tool, particularly in the exploration of child/repressed sexual and physical abuse[807, 808, 809, 810]. In the new field of medical art psychotherapy, research has been far more readily undertaken[811,812]. On a pragmatic level the research is imperative for art psychotherapy to be accepted, and funding allocated[813]. Research in medical art psychotherapy has generally been phenomenological and single case study based, focusing on the **psychological** aspect of accommodation to, and amelioration of, the distress of life threatening disease, targeting such areas as self-esteem and treatment compliance. To my sense the weighting to the latter is somewhat unfortunate, as it serves to maintain a paternalistically hierarchical stance[814], although doubtlessly beneficent, towards those who undergo medical/surgical treatment, suggesting that they are not capable of making decisions about their own lives, and taking a capitalistic stance with regard to the value of the self, both ignoring the transpersonal aspect of illness, which may not necessarily see cure of disease as a cure of the illness[815], rather the unfolding of the psyche, the **internal** journey where the **soul experience** is paramount. In my own practice I recognise the tension between maintaining such a position in the face of dire illness and the desire that the person with whom I am working in this process recover optimum health. It is a tension born of a society where 'Death' is seen as the ultimate enemy, rather than a functional necessity of life, and where the clinician's mortality is as unmistakable as that of the person with whom she is confronted. It is a stance where we are regarded as 'outside of nature' and therefore needing to control 'her' forces, rather than accepting that humans are as much a

function of 'nature' as is the wind. It is also born of a concept, consistent with that belief, that 'health' can be recreated if only one 'does something', or 'they find a cure'; the core metaphor of physician as 'Hero'[816]. In order that the physician embody this metaphor 'he' must 'rescue' the victim; the ill person, from the 'monster' Death, which maintains the hierarchical split between provider and recipient of health care, denying the recipient agency in her health/healing.

Of fundamental importance to my practice is the belief that each human being is a unique entity, and brings to the clinician an individual story of life experiences. This is of particular significance to research involving psychotherapy. These life stories cannot be replicated, which then naturally means that the process is also unique to each individual. I accept that there are universalities of experience within the human situation, but these universalities are always filtered through learned values and interpreted in ways idiosyncratic to the individual. While there are generalities in both individual and group psychotherapy, I have never experienced two individuals or groups who are the same.

Art psychotherapy research also addresses the dominance in western scientific literature, even qualitative research, of 'the word', the exploration of text and transcripts of verbal transactions. This dominance reduces all reality to a one dimensional 'flat land' of language, or more correctly, to verbal language, when it is apparent that the perception of 'reality' is in fact multi-dimensional, relying on all our senses; our whole bodies in relation to their environment, as agents of intentional action. Mason[817] argues that this is an extremely limited (and limiting) uncreative way of undertaking and reporting research. In art psychotherapy 'what the eye can see' (both the 'mind's eye' and the eyes on my face) is central to intra-psychic research. The images, and hence 'what the eye can see' are the raison d'être[lxii], part of the ontology of the discipline. It is therefore important that the images, as another medium of communication, be included, and for which specific consent was obtained from the participants

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[lxii] *raison d'être*. French: the reason for being.

Connection to Felt Experience in Research

The Government Research Council of The United Kingdom declared in its corporate plan of 1992-97 that it intended to diversify its work on research methods by *"giving equal attention to qualitative and quantitative methods and seeking to promote appropriate methodological developments in all social science disciplines"*, however in reality there was very little change in the predominantly quantitative research methodologies of psychological investigation until the late 1990's.[818]

An area of significant influence in a change in direction of research in relation to human illness has come from nursing[819,820], also like architecture, fine art in relation to illness, and art psychotherapy[821], late to the field of scientific research. Nurses are in constant and direct interaction with the people for whom they care; their 'patients', and over the last half century there has been a greater recognition that people whose life stories are heard[822] and taken into consideration have a better relationship with their 'carers'[823], which also implies that they are more easily engaged in any medical care. Recently it has been pointed out that evidence-based practice gains considerably from the results of qualitative study results, in transformation of research results into clinically useful tools such as an educational DVD to address the stigma of HIV infection.[824]. It has become accepted that **how** people apprehend the world in which they live is governed in large part by their cultures[825], and that in having a respectful relationship it is necessary to give equal value to another's world view[826], hence medical sociology and anthropology have gained credence as means of studying not only 'the other's' world, but also facets of our own[827,828]. A phenomenological approach has been found to be of value in the field of health care research, as the 'lived experience' of the 'patient'[829,830], as told in the first person in her own language, assists in building an understanding of how to maximise the process of delivering a medical **service** of high quality.

Phenomenology

Phenomenological methods are scientific by virtue of being methodical, systematic, critical, general and potentially intersubjective. Like all good science, they require critical thinking, creativity, and reflective decision making that give rise to many procedural variations and innovations.

Wertz.[831]

Phenomenology has its origin in the 18th century, when the Swiss mathematician, Lambert coined the term to describe the proposition that there was a way of apprehending truth rather than falling prey to illusion and merely accepting the falsity of error. In the early 20th century Edmund Husserl[832] became the driving force behind a new movement, which took over the name initially used by Lambert. The term is used to describe a **science of consciousness** whose aim was to explore the relation between the perception of phenomena[lxiii], by intentional direction of consciousness towards an object, or phenomenon, as it appears to immediate consciousness via our senses, and the phenomena in themselves, followed by the subsequent ascription of meaning to that phenomenon through the intuitive grasping of its essence. This activity requires a suspension, or 'bracketing'[833] of all preconceptions about the phenomenon encountered; an essentially impossible task because, as Gadamer[834] recognized, it would necessarily then also require the suspension of all previous frames of reference, including those relied upon for communication; communication being an act which is learned and relies on the consensus of perception, specifically, a world view.

Heidegger[835] and Gadamer[836] eventually rejected Husserl's emphasis of revelatory intuition in favour of a hermeneutic exploration of what the phenomena mean in relation to man-in-the–world[837]. It is the **relationship** between that which is perceived and the perceiver in a lived environment, and the ensuing construction of meaning of the event, which is of importance in relation to psychotherapy. Gadamer contended that language and understanding are inseparable; that understanding occurs through

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[lxiii] from the Greek *phainomenon* 'that which shows itself from itself'

the process of interpretation, central to which is questioning, hence the import of this philosophy in psychotherapy. He felt that there is a relationship between the expectation of the interpreter and the meaning of the 'text' and that research using this construct relies on describing the way an experience is put together, how it is consciously constructed and works towards elucidating the essence of these constructs in order to understand the effects of such experience, both on an individual and social level, within an historical context; it also requires the inclusion of the researcher's reflection regarding the process which she has initiated and in which she is involved[838]. Phenomenology, however, being in essence the study of the **conscious mind** in interaction with the surrounding world[839], does not allow for any unconscious content. Unfortunately a very rich source of understanding of pre-intentional action is lost. The unconscious, however, is an accepted component of the psyche in art psychotherapy. This may appear, therefore, to present a methodological difficulty, unless it is also recognised that it is the aim of psychotherapy to bring unconscious content **to consciousness**, thereby bringing it to the 'here and now' where it can be intentionally appraised, offering a fuller picture of how one 'is' in the world; how one relates. In recent neurobiological research, it is also being suggested that the unconscious is such, simply because these functions are not yet wired into the circuitry of consciousness[840]. The unconscious is the implicate aspect of mind, which becomes explicate in consciousness.

A great gift of phenomenology to psychotherapy is Merleau-Ponty's[841] rejection of both mind/body dualism in the realisation that all perceptions are embedded in a world **constructed through our bodies**, that is, that we are embodied beings (body-subjects): the body's actions are intentional and in relation to the world-in-which-it finds-itself and not separate from the perceptions which are made of that world: also a rejection of the 'libidinous drive', freeing psychotherapy of the tyranny of Freudian sexuality. In his view sexuality was not a drive, (most particularly not the primary drive) in and of itself. Rather, he argued that sexuality is contiguous with the generality of behaviours, as expressions of the human 'being' in her world, constantly and varyingly responding to the environment at large, internally and externally; not as one drive alone, but a flux of emotional responses from which the perceiver pre-intentionally, and then consciously chooses different foci of attention to which to

ascribe meanings specific to the event, and act according to such meanings. These points have strong implications for the process of art psychotherapy, as the connection with the imaginal is a whole-body experience, and in the process of creating the images, the participant must engage conscious direction of attention to focus on a phenomenon he has created.

Phenomenology is the philosophy within which art psychotherapy, as taught at the School of Art Therapy in Sheffield University in 1990, is embedded. John Henzell, who was my tutor, is strongly influenced by, and intorduced me to, the European philosophers, particularly Foucault, Bourdieu, Merleau-Ponty and Ricouer, with whose work I also have an affinity. As a nurse I found the strictly hierarchical structure difficult to tolerate, particularly in relation to the 'patients', and have therefore been impressed by Foucault's explication of the ways in which power is used and abused in our society, especially with regard to the physically and mentally ill. Both Foucault[842,843] and Bourdieu[844] address issues of the relationships between the individual and society, especially the notion of agency[845], which is of importance in psychotherapy. Until a person recognises her agency in her own life, little can be achieved by way of sustainable change. Ricouer[846], on the other hand, resonates with me because of his insistence that one's sense of self is not a pre-ordained, static entity, rather, it is created through the stories one tells of oneself, and which others tell, both of which change with time and circumstance, but provide a sense of continuity and congruity within one's life. The story both shapes the sense of self, and is shaped by it, and there is an inherent morality to that life-story/storied life; an essential concept in the psychotherapeutic process, and the *raison d'être* for narrative enquiry. He also makes the point that **data** of psychotherapy are words, and the natural form into which words flow, is the narrative ___ the story as it is told to another.

In relationship to this project, phenomenology is the philosophical basis of choice for the qualitative investigation because the changes in **individual** physiological parameters in response to the way those individuals responded to explicit situations during **group** art psychotherapy was investigated. In adopting the phenomenological stance it is possible to specifically investigate and report the participant's being-in-the-situation in the first person, using his own voice. This is fundamental to an

understanding of the hierarchy of attention which informs appraisal of, and meaning given to, an event, whether distressing, enjoyable, or simply not worthy of attention. It is this appraisal which also informs response: in its bodymind totality, and therefore, the individual immunological responses measured in this project.

Hermeneutic Phenomenology and Art Psychotherapy

Hermeneutic phenomenology demands that the personal assumptions and philosophy of the researcher be included in any written work, hence a reflective journal is essential. It is in this open 'disclosure' that hermeneutic phenomenology differs from classical phenomenology, which requires that the researcher keep herself 'out of the picture' by 'bracketing', much as is required of the positivist, 'scientific method'. Gadamer maintained that it is primarily through **relationship** that 'text' is generated, whether written, drawn, sung or danced, and only through such a relationship is it possible to arrive at an interpretation of this 'text'. This relationship is not simply the relationship with the text as it is here, now, in front of me, but also encompasses my past, the past of the text, the future of both, and the culture(s) out of which the text, its creator and I unfold[847,848]. Interpretation is achieved through a moving backward and forward between immersion in the 'text', taking oneself into the text, and distancing from that same 'text', standing back to view it from the distance of disconnection of the immediacy of creation, moving spirally or cyclically, using the 'hermeneutic circle'[849], towards a new 'horizon', a new boundary of vision, or understanding, co-created by researcher, participant and place. Rather than a circle, I see the process taking the shape of spiralling lemniscates, opening when a conversation precedes the **making of an image** (the text), reflective **exploration** (Gadamer's reflective writing process), **discussion** and interpretation (the work between the image, the participant and the therapist) and closing with **integration** and the formation of a new horizon, then opening again a step up/on/out towards another horizon[850]. I have translated this process into a watercolour painting to imitate the fluidity of the process; the circular ouroboros[lxiv], associated with cyclicality and the

[lxiv] Ouroboros: Gk. devouring its own tail OED.

'hermeneutic circle', transformed into the lemniscates[lxv]; the infinite possibility in communication, to which the image is central.

Plate 6: The Hermeneutic Circle Becomes the Lemniscates of Infinite Possibility

Conversation leading to the making of an image, followed by exploration, discussion and back through the image to integration

Mala Betensky[851], writes in her book '*What Do You See; the Phenomenology of Art Therapy*', that "*Since phenomenology is an open-ended orientation with focus on a variety of phenomena-based themes, therapeutic art expression and art therapy qualify as legitimate themes for phenomenological theory and method. The emphasis on visually expressive self-projections with art materials of people in need to find themselves in the world, makes art therapy uniquely suited to both the aspects of the philosophy and the method.*" And further that as the approach is *"(f)ounded on the philosophical anthropology of man as being-in-the-world, phenomenology asserts the centrality of man's subjective experience, its intentional character, and its accessibility to consciousness."*

My experience, influenced by Jung[852], Kübler-Ross, Bach[853] and Furth[854], has shown me that in attending only to intentional and conscious phenomena, a tremendous amount of information willingly brought to the surface by the unconscious, in the

[lxv] Lemniscate: L. a ribbon. OED

form of symbol, is thereby ignored, in particular that of the psyche-soma nexus. The work of Susan Bach, Elisabeth Kübler-Ross and Greg Furth have had a great impact on the way I regard image content, and Stan Groff[855], and Ken Wilber[856,857] of the transpersonal psychology school of thought, with concepts of consciousness, and all of them, as well as Reich[858], Frankl[859], and Myss[860], regarding the psyche-soma nexus. My training in anthropology and anthroposophy also has an impact on how I view this nexus of energy.

With regard to an understanding of unconscious content in relation to somatic health, Kübler-Ross, Furth, Groff, Reich and Myss all in one way or another suggest that the energic system which inhabits our bodies, our life force: soul, if you will, is an extension of a greater energic system of which we are simply a part, and that our thought processes, both conscious and unconscious are also a part of this system. This philosophy of interconnectedness addresses the concepts of synchronicity, of precognition, the collective unconscious and the wholism of the bodymind and goes beyond a mechanistic direct 'cause and effect' mindset, to place greater emphasis on a construct which allows for influence rather than cause, and multi-directional flow, feedback loops and chaotic events, rather than a single definable and direct effect.

Although my original nurse training has placed me within the Newtonian materialist 'cause and effect' paradigm, I had the rare privilege[lxvi] of training in a school in the United Kingdom which was placed within the Faculty of Medicine, and the School of Psychiatry; a School which placed an emphasis on psychotherapy (other schools of art psychotherapy training are generally placed within the faculties of arts and humanities). The school strongly favoured the *'client's'* capacity for self actualization as described within the humanistic school, in particular that which is proposed, as described above, by the world view of hermeneutic phenomenology and the previously mentioned French philosophers. This was combined with the person centered approaches of Laing[lxvii] and Rogers, the former providing an excellent framework for

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[lxvi] It was, indeed, a rare privilege, as I was the only foreign student selected, in a class of 17, from a large pool of applicants.

[lxvii] the reference to Laing is not to his theories regarding the aetiology of schizophrenia, which have been discarded, but rather in regard to his respect for those in his 'therapeutic communities' which were considered to be works in progress, and where the 'staff' were seen to be almost 'participant observers' of another culture and reality.

phenomenological research[861], and the latter a model for therapeutic interaction with 'the other', recognizing that both participants, therapist and 'quaestor[lxviii]', are active and equal partners in the psychotherapeutic dialogue.

Laverty[862], quoting Maddison[863] suggests that the term 'methodology' is more appropriate to qualitative research as the **philosophical grounding** of the investigator, and hence the research in question, is of greater importance than 'method', which implies a strict set of rules. An organic process is dictated by research embedded within the philosophical context of hermeneutic phenomenology. An ability to move within the changing context of the research process, as both researcher and participant's world-views are influenced by the interaction of inquiry and exploration, undergirds such research; "*Often the descriptive account is an end in itself, whether framed as a narrative or organised in categories.*"[864] The interactive and iterative motion in the Jungian psycho-analytic, humanistic schools of psychotherapy and anthropological examination of a group or culture, requires openness, both to the cultural context and to one's own process and assumptions; it requires reflexivity and reflectivity, neither of which are acceptable in the Cartesian paradigm, as can be seen from the rules which Descartes outlined as prerequisites for enquiry in natural philosophy; that which became 'science'.

Mixed Methods Research

Let us combine both qualitative **and** quantitative data, recognizing them, not as discrete and irreconcilable, but simply different ways of observing and recording phenomena.

Early in the field of sociology research the mixture of methods was not of great moment[865,866] when it was argued that the positivist paradigm in science was no longer relevant[867 868], however, as qualitative research gained greater acceptance, a 'paradigm war' emerged between the 1970's and 1990's[869] during which qualitative research struggled to identify itself as a respectable methodology in its own right, distancing itself as distinct from the positivist and post-positivist paradigms[870].

[lxviii]See footnote xliv, p 71: in Laing's 'therapeutic communities' people were neither 'patients' (a term he actively rejected) nor 'clients' as they paid nothing for the service as an NHS funded initiative.

There is a suggestion that the epistemological differences between qualitative and quantitative data gathering, one being value laden and the other not, preclude such a marriage. If, however, we can accept, as Miles and Huberman[871] point out, that **each** is value laden and relies on cultural consensus, as we may accept that intellect, emotion and physical function are of equal importance to health, the marriage may be both happy and fruitful. Despite the contention that both epistemologies, the positivist, rational epistemology of quantitative biomedical research and the interpretivist, relational epistemology of much social sciences research are incompatible, Maxwell and Loomis[872] suggest that there is room for an alternative view. This view contends that an interactive approach is possible where, much as I have suggested that the 'human being/becoming' is a 'bodymind' in relation to its environment, so too methods of research are ways of interacting with a proposition being investigated, and the method depends on the point of interaction: if biological assays are required, say, T cells counted, a positivist method ought to be employed, if, however, I want to explore how a person feels depending on the level of those very same cells, I need to engage in a dialogue with the person. The results of **both** methods of investigation can then be relationally integrated to give a 'wholebody' description of a phenomenon: in this case, the perception and response to distress. The trick is to write it up in such a way that those in **both** camps understand what is being written. [873]

In the last two decades of mixed methods research it has been demonstrated that it is possible to amalgamate aspects of the two paradigms; qualitative methods with quantitative methods[874], although it is important, as Sandalowski[875] points out, not to call simply counting phrases quantitative, nor writing eloquently, qualitative. An increasing body of mixed methods research is performed in the field of health care, particularly over the last decade and a half[876, 877, 878, 879].

We can no longer operate within a paradigm nearly 2500 years old, reaching back to Aristotle, which argues that intellect, emotion, and physiology are in an independent but hierarchical relationship, with intellect ideally governing with dispassionate rationality. It is necessary to engage methods appropriate to measuring organic processes in concert with methods which explicate meaning: those, which hear and record stories, in order that the whole person, as a part of a society, be understood.

In a paper entitled "On the Psycho- in Psychophysiology: Notes for a History of Mind-Body Effect"[880] Eugene Taylor wrote:

> "*..somewhere in the not-too-distant future, we may see a merging of the science of brain chemistry with the psychotherapeutic counter-culture, since both seem to be driving current interests in consciousness, but from different ends…..As mind-body medicine points more towards empowerment of the individual through self-care, we may see a fusion of integrative health practices, such as yoga, meditation, biofeedback and psychoneuroimmunology, with some new form of depth psychology that emphasises emotional language, mental imaging and a philosophy of self realisation……we shall see even greater challenges to established thinking, as the phenomenology of healing embedded in the mind-body effect points back to the phenomenology of the very science-making process used to study the process in the first place …(and) the epistemology of what present-day conceptions of science might evolve into the future.*"

Indeed this thesis explores just such a fusion of psychoneuroimmunology and art psychotherapy, which can undeniably be utilised as a form of depth psychology.

CHAPTER 5
QUANTITATIVE METHOD

While the following section outlines the method used in the quantitative arm of the research project, and the collection of qualitative data is addressed in Chapter 7, the research protocol ethics clearance, participant eligibility and recruitment procedure necessarily applies to both arms of the study.

The Study Protocol

Permission for this project was granted by both the University of Newcastle Ethics Committee and the Hunter Area Health Ethics Committee:

Looking at the Connection Between Immune Function and Psychosocial Function
Research Protocol: HAREC No.01/11/14/3.21:
HREC H-355-0602
(Information for Participants [art psychotherapy group] and Consent forms are found in Appendix 1)

This study was designed to ascertain if there was any evidence of immunological change and accompanying psychosocial change amongst individuals within a closed group psychotherapeutic setting, in this case art psychotherapy, as seen through salivary Immunoglobulin isotype A (IgA), salivary interferon gamma (IFN-γ) and Delayed Type Hypersensitivity Test (DTH test) from tuberculin challenge, psycho-social scores obtained through validated questionnaires, and an accompanying qualitative Narrative of the process.

The receipt of a diagnosis of a potentially life threatening disease has profound psychological impact. Melanoma is accepted as having an immunological component, which made the assessment of immunological function relevant. That it is readily treated with surgical excision removes a primary confounder in immunological research amongst oncology patients, that of chemotherapy or radiotherapy. The incidence of melanoma is increasing at a faster rate than most other cancers in the

U.S., Australia, Northern Europe and Canada, suggesting that there are other factors that influence the aetiology of melanoma, than sun exposure.

According to the Melanoma Research Foundation[881] the documented risk rate over the last 70 years is as follows:

1935: 1:1500: 1960: 1:600: 1985: 1:150: 2000: 1:74.

It would seem from these statistics that there is more than sun exposure to the aetiology of malignant cutaneous melanoma. Current research is focusing on immunotherapy as a means of combating the disease. DTH tests with homologous tumour cells have been demonstrated as having a meaningful and statistical relationship between the intensity of DTH and clinical outcomes, especially 5-year survival,[882]and there is also a correlation between DTH result and serum IFN-γ concentration[883],[884]. It is a suggested that immunological function is tissue specific,[885] and as has been discussed above, immunological function is related to psychological distress, the perception of which is amenable to change through psychotherapy.

Originally it had been proposed to collect whole un-stimulated saliva samples only at the same time as the PPD challenges, however, this was reviewed in light of the small population (n=11), and the method of collection described below adopted. The change was made in consultation with my primary supervisor, Conjoint Associate Professor Dr.Margaret Dunkley, and Emeritus Professor Robert Clancy, Faculty of Health, University of Newcastle, subsequent to which a submission for Variation of Protocol was submitted to, and ratified by, the Research Ethics committees of both the (then) Hunter Area Health (now Hunter and New England Area Health) and The University of Newcastle, NSW, Australia..

After the protocol was reshaped, in light of the small study population, the salivary immunological measures were taken pre- and post-session in order to observe the immediate **and** cumulative effects of the intervention, in all but the three baseline measures, at **t1, t2,** and **t3**, when samples were collected post- session only. The decision to change the timing of the collection was made when the weekly art psychotherapy intervention sessions began at **t2**.

The literature relating to measures of S-IgA, S-IFN-γ and DTH test as indicators of physiological and psychological 'stress' implies that there is an observable and significant shift within individuals' measures post- over pre-intervention [886,887,888,889,890,891,892,893,894,895,896,897,898,899]. This was discussed in detail in Chapter 2.

Participants (Subjects)

All participants to this research project were recruited from the Newcastle Melanoma Unit, an outpatient clinic attached to The Mater Misercordiae Hospital, Newcastle, NSW, Australia, on the basis of a diagnosis of non-metastatic melanoma, as per the protocol's requirement.

Eligibility

In order to be eligible for this research project it was essential that potential participants be attending the Newcastle Melanoma Unit for a confirmed diagnosis of non-metastatic melanoma, of no greater depth than 4mm, treated with conservative surgery. It was also required that they be English speaking adults, capable of understanding and signing their own consent form. A diagnosis of any previous or concurrent malignancy was an excluder, as was a history of any immunologically challenging, or florid psychiatric disorder, requiring medication. A further excluder was a history of either dependency on alcohol, recreational or other illegal drugs. The time since diagnosis was not an excluder in the recruitment.

Recruitment Procedure

A display of works by people in the UK who had experience of cancer, and who were involved in the pilot study which informed this project, was mounted in the waiting room, in order that familiarising information be available to those attending the outpatient clinic.

The nursing staff of The Newcastle Melanoma Unit screened patient records as they arrived in the Outpatients Clinic, to ascertain suitability with regard to depth of

melanoma and other treatment and co-morbid disease processes. After screening, information fliers were distributed to potentially interested volunteers in the Clinic waiting room, and if they signified their interest, they were given the opportunity to discuss this further with me. If they were happy with this information I asked them to sign a prepared Consent Form.

Participation was entirely voluntary, and originally those who agreed were randomized (in a simple A, B format) to either of two arms of the proposed study, that is the intervention group to engage in art psychotherapy, and the control group, who were to meet for simple group conversation conducted by the same facilitator, to mitigate the confounding influence of facilitator alignment bias. While the potential participants were randomised, there was a high degree of self selectivity, a practice more consistent with qualitative research, in that it was required that individuals first submit a signed form indicating interest in participion, before they were randomised and consent obtained. As a result of the small number of engaged consenting participants, the final cohort of 11 participants became one group.

Data Collection

TIME PT	DATE	ACTION AND SESSION SUBJECT
t0	05.02.04	Questionnaires, DTH test, Baseline 1.Saliva sample.
t1	12.02.04	DTH test, Saliva sample, Group Image.
t2	19.02.04	Baseline 2 Saliva sample, 'Kinetic Family Drawings'.
t3	26.02.04	Baseline 3 Saliva sample, 'Childhood Story'.
t4	04.03.04	Pre-post Saliva samples, 'Diagnosis'.
t5	11.03.04	DTH test, Pre-post Saliva samples, 'Perception of Stress'.
t6	18.03.04	Pre-post Saliva samples, Colour Garden Vis"*.
t7	25.03.04	Pre-post Saliva samples, 'Forest House Vis.'*
t8	01.04.04	Pre-Post Saliva samples' Free Image'.
t9	08.04.04	Post Saliva samples, (late start)'Learned Belief Systems'.
t10	15.04.04	Pre-post Saliva samples, 'Misery/Joy'; AR loses the plot
t11	22.04.04	Pre-post Saliva samples, 'Anger/Intimacy'.
t12	29.04.04	Pre-post Saliva samples, 'Under Sea Vis.'*
t13	06.05.04	DTH test, Pre-post Saliva samples, 'Challenge of Treasure'.
t14	11.05.04	Pre Saliva samples, (no vials), 'Paul's medal/ Darren's War'. N.I #
t15	20.05.04	Pre-post Saliva samples, More process from previous session. N.I #
t16	27.05.04	Pre-post Saliva samples, 'Being good/ naughty'+ Rose's dilemma.
t17	03.06.04	Pre-post Saliva samples, 'No Talk'.
t18	10.06.04	Pre-post Saliva samples, A story, 'The Magic Cape'
t19	17.06.04	Pre-post Saliva samples, 'Pain to Happiness'.
t20	24.06.04	Pre-post Saliva samples, 'Body Image'
t21	01.07.04	Pre-post Saliva samples, Group Image.
t22	08.07.04	Pre-post Saliva samples, Wet on Wet/ 'Colour Garden Vis.'*
t23	15.07.04	Pre-post Saliva samples, Clay, 'Celebration of Me'.
t24	22.07.04	DTH test, Pre-post Saliva samples, 'Mask'
t25	29.07.04	Questionnaires, Pre-post Saliva samples, Round –up: N.I#
t52	10.02.05	DTH test, Questionnaires, no Saliva samples, 'Gain from art therapy'.

Table 1: Intervention Time Points, Dates and Actions per Session.

* = Visualisation # = No Image made for this session.

Quantitative data consisted of analysis of S-IgA and S-IFN-γ obtained from whole, unstimulated salivary samples, erethyma size following DTH challenge, and questionnaire responses. To establish baseline measures for S-IgA and S-IFN-γ, samples were taken pre-session at **t0**, **t1**, **t2**, **t3**, and then pre- and post- all sessions. DTH tests were performed at **t0**, **t1**, **t5**, **t13**, **t24** & **t52** and all participants completed a series of well validated, self administered, pencil and paper type psychosocial questionnaires completed at **t0**, **t25**, and **t52**.(Appendix 2)

A series of four psychological questionnaires were delivered in order to examine quantitatively, the degree to which any change held over time, or took time to become evident. The questionnaires were only delivered three times, to avoid 'questionnaire burden', and also 'questionnaire habituation'. These questionnaires are widely used in the field of psycho-oncology, and also measure psychological states known to be deleterious to immunological function. These include a perception that one's 'quality of life' is low, prolonged anxiety and a sense of helplessness, in particular. In addition, I felt it important to compare the results of these highly regarded tools with the qualitative data, specifically how the participants spoke of these feelings during the deeply probing **process** of art psychotherapy, and what changes they spontaneously reported. Essentially this compared the difference between observing and recording a process of change, in the narrative (the qualitative data) and observations at set points, a 'freeze frame' approach, by way of the questionnaire results.

At each time point the questionnaires were collected and held until after the twelve-month follow-up, when they were submitted for statistical analysis.

Questionnaires

1.The Mental Adjustment to Cancer Scale

This scale was constructed in the late 1980's at the Royal Marsden Hospital, a major oncology hospital in the UK, in response to recognition that there are significant issues with which a patient must deal when receiving a diagnosis of cancer. It has been suggested that means of coping, which are adopted, are critical in the

physiological and psychological adaptation to a diagnosis of cancer.[900] Rather than rely on individual interview, both time consuming and requiring specific training, a self-rating questionnaire was constructed, which allows a person with such a diagnosis to complete the questionnaire in private, rate their own responses and in their own time. The questionnaire is designed to identify such factors as helplessness/hopelessness, fighting spirit and anxious pre-occupation, and differentiate between state ad trait variables. The MAC is a 58-item scale (a four point Likert scale from "*Definitely does NOT apply to me*" to "*Definitely applies to me*" for each question) with a reportedly high agreement between clinical assessment and questionnaire scores, with normative values for specific cancers. The reliability co-efficient is found to be acceptable (Cronbach's α coeffients 0.65-0.84)[901] and validity established amongst cancer patients in various countries[902, 903]. The concept of '**Fighting Spirit**', however, is now receiving some intense scrutiny, as indicated by a debate and commentary published in Advances in Mind-Body Medicine in 2003[904,905,906,907,908].

2. The General Coping Strategies' Scale

The Coping Strategy scale is a multidimensional inventory of emotional and cognitive responses to stress in order to ascertain coping strategies, with no normative values; rather it is to be used in a relational way, comparing variables. There are independent variables to establish state and trait responses and a third to establish degree of response over time. A correlation seems to exist between coping strategies and personality. It was devised at about the same time as the MAC Scale, and is American in origin. While the inventory aims to be as inclusive as possible to allow for revelation of personal coping styles, it would seem important to bear in mind that "coping" is a particularly value laden concept, historically, socially and politically, and this is not addressed by Carver, Scheier and Weintraub[909], the Americans creators of the questionnaire. The COPE questionnaire is a 60 item scale, (with a four point Likert scale of *"I usually don't do this at all"* to *"I usually do this a lot"* for each question). Items have been presented in three different formats so as to elicit dispositional (trait), situational (state) or perceptual responses.

The internal consistency of the COPE scale is acceptably high: (Cronbach's α coeffients 0.45-0.92), and validity was also established[910].

3. The European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire: Core (EORTC.QLQ-C30)

In the late 1980's and early 1990's a great deal of discussion arose as to how Quality of Life was to be defined. It seemed that with each new piece of research into how best to provide effective care in the fields of oncology and palliative care, a new inventory of the QOL was created. Most of them appeared to focus on functional ability. The European Organisation for Research and Treatment of Cancer created a QOL unit in order to address the need for a coherent policy regarding QOL for cancer patients. I was present at some of the early discussions at Sheffield University, UK, regarding the definition of QOL for cancer patients, as each new piece of research was spawning yet another QOL scale. An International group, of which Professor Sam Ahmedzai of Sheffield University was a member, published research, which informed the first standardised EORTC-QOL questionnaire in 1993[911].

The questionnaire is:

a: cancer specific,
b: multidimensional in structure,
c: appropriate for self administration and
d: applicable across a rage of cultural settings.

Modules specific to cancer type supplement a core module. As there was no module specific to melanoma (at the time of the intervention in early 2004) the participants simply completed the core module. Some of the questions were not appropriate to this population, addressing issues of distress resulting from either chemotherapy or radiotherapy, and were deleted from the present analysis. These were item 15: the Symptom Scales: Nausea and Vomiting; item8: Dyspnoea; item 16: Constipation; and item 17: Diarrhoea.

The Quality of Life Scale (EORTC.QLQ-C30) is a 30 item scale (with a 4 point Likert scale ranging from *"Not al All"* to *"Very Much")* with an ability to distinguish between patients of differing performance status, physical and role function and global quality of life to a degree of statistical significance and a high degree of external consistency, although the scale for physical function fails to reach a high enough value. (Cronbach's α scores across domains range from 0.82-0.55, the latter being the physical function domain).[912]

4. The Hospital Anxiety and Depression' Scale

One of the fundamental issues in cancer treatment has been the emotional effect of such a diagnosis. In my own work with oncology and palliative care patients there seemed to be a degree of difficulty amongst medical practitioners in identifying the difference between appropriate sadness about information concerning the potential (real or perceived) truncation of life and actual clinical depression. It has been noticed that patients may suffer greater distress form their physical illness, and perhaps shorter life span, as a result of un-addressed emotional issues. A self-administered questionnaire was therefore constructed to assess mood, particularly anxiety and depression. If administered at intervals, as was done in this project, the questionnaire is capable of giving useful information regarding the possible progress of severity of either anxiety or depression over time. The HAD questionnaire is a 14 item scale where responses are ranged from minimal to significant, (again, as with the other questionnaires in a four point Likert scale), however, rather than a repetitive response scale, each question has its own particular set of responses. The correlation between test result and interview was high (Spearman's correlation: Depression r= 0.7 and Anxiety r= 0.74) when the questionnaire was constructed[913]. In a subsequent study the validity was recognised and consistency was found to be acceptably high (Cronbach's α for Depression= 0.83 Anxiety= 0.87, with a total α of 0.89)[914] , although a Dutch[915] study suggested that this questionnaire was of value only for screening and not as a 'case identifier' as suggested by the original authors.

Immunological Measures

Salivary samples

Participants provided un-stimulated, non-fasting saliva samples before and after each intervention session, to measure Immunoglobulin isotype A (IgA), and Interferon Gamma (IFN-γ), levels, except at **t1, t2** and **t3** when only pre-session samples were collected for baseline measures. All samples were collected in a familiar setting, to reduce the anxiety of unfamiliar surroundings, and at the same time of day to obviate the interference of circadian modulation, however, the collection time was early evening, when S-IgA secretion reaches a daily nadir[916]. Saliva samples were delivered directly into 5mL plastic tubes by the 'spit method'[917] and immediately frozen and maintained at -20°C until analysis in one batch to reduce analytical variability of measurements.

ELISA for S-IgA

S-IgA was measured by ELISA (enzyme-linked immunosorption assay). The assays were performed by VRI Pty Ltd, Newcastle, NSW, Australia, as per a standard laboratory procedure (IMM080). Briefly, ELISA plates (Greiner microlin 200 SB 705070 ELISA plates from Interpath) were coated with capture antibody (Silenus sheep anti-human IgA antibody, catalogue number: 981020020), sealed with Linbro microplate sealer product number 7640105 (supplier: ICN), and placed for 2h at 37°C. The capture antibody solution was then flicked out and the plate 'blocked' with 0.5% casein (BDH) for 45 min at 37°C. The casein solution was then flicked out and the plate dried in the incubator for 20 min. The dried plates were stored dry and wrapped in aluminium foil at 4°C until required. For assay of samples standards (prepared from Nordic human standard serum NOR-04) and dilutions of test saliva samples were loaded on the plate in duplicate and incubated at room temperature for 20 minutes. The samples were then flicked out of the plates and the plates were washed 4 times with PBS-1% TWEEN 20 (PBS-T). The detector antibody (Silenus peroxidise-conjugated sheep anti-human IgA, catalogue No: 981033020) solution was added and the plate incubated for 15 min at room temperature. The detector antibody was then

flicked out and the plate washed 4 times with PBS-T. TMB substrate solution (KPL brand microwell peroxidise substrate system 2C) was added and the plate incubated for 10 min at room temperature. The reaction was stopped by addition of H_3PO_4 and the plate read on an ELISA plate reader at 450nm with a reference filter of 620nm. The IgA concentration of the test samples was determined by comparison with the standard curve.

ELISA for S-IFN-γ

S-IFN-γ was assayed by ELISA (enzyme-linked immunosorption assay). The assays were performed by Dr Ren Zighang of the School of Biomedical Sciences, Faculty of Health, University of Newcastle, N.S.W, Australia.

Briefly, ELISA plates were coated with IFN-γ capture antibody (BD Biosciences: Cat. No. 551221), in carbonate buffer overnight at $4^{o}C$. The capture antibody solution was then flicked out and the plate washed 3 times with washing buffer then 'blocked' with diluent (PBS/1% BSA/0.1%TWEEN 20) for 1hr. at room temperature. The plate was then washed 3 times with washing buffer. For assay of samples standards (prepared from recombinant IFN-γ (r-IFN-γ), BD Biosciences Cat. No. 554616) and dilutions of test saliva samples were loaded on the plate in duplicate and incubated at room temperature for 90 minutes. The samples were then flicked out of the plates and the plates were washed 3 times with washing buffer. The IFN-γ detector antibody, (BD Biosciences: Cat. No. 554550) solution was added and the plate incubated for 90 min at room temperature. The detector antibody was then flicked out and the plate washed 3 times with washing buffer. Streptavidin-horseradish peroxidise solution was added and the plate incubated for 1hr. at room temperature. The plate was washed 3 times with washing buffer. TMB substrate solution was added and the plate incubated for 10 min at room temperature. The reaction was stopped by addition of 1M H_2SO_4 and the plate read on an ELISA plate reader at 450nm. The IFN-γ concentration of the test samples was determined by comparison with the standard curve.

Skin Test, DTH

Participants accepted six DTH tests to assess T- cell and serum IFN-γ activity through the capacity to recognise a past challenge. As an estimated 80% of the population have been exposed to *Mycobacterium tuberculosis* this antigen was used by way of Mantoux tests. DTH (Mantoux) tests were administered at **t0**, **t1**, **t5**, **t13**, **t24** & **t52**. The Clinical Nurse Consultants of the Newcastle Melanoma Unit performed the tests by administering an injection of 0.1 ml of PPD tuberculin (antigen provided by Commonwealth Serum Laboratories Limited, Australia) containing 5 tuberculin units into the volar surface of the forearm. The injection was made with a disposable tuberculin syringe, with the needle bevel facing upward, producing an elevation of the skin 6 mm to 10 mm in diameter, which was read by the participants themselves 48 hours later, using a plastic card created specifically for the purpose, through which holes of various sizes had been drilled. (Appendix 3) A *Candida Albicans* test, which had been included in the original protocol, was abandoned because of the vagaries of war, (the second invasion of Iraq had just commenced) which prevented the antigen coming from France in time for the commencement of the intervention.

Data Analysis

All quantitative data was subjected to statistical analysis using Statistics Package for Social Sciences version 14 (SPSS 14), and individual salivary data also analysed with Instat 3.

Wilcoxon Signed Rank Tests were run for all data to establish degree of statistical significance for all changes post-vs-pre test. In the case of the salivary samples this comparison meant that the intra session change was measured. In the case of the DTH tests the change over the duration of the intervention and at follow-up was analysed. In the case of the psychosocial questionnaires the change between pre-intervention, post–intervention and follow-up was analysed.

Student paired t-tests were performed on the individual salivary results to compare the difference between mean post- and mean pre session results for the duration of the

entire intervention. These data were further analysed using Instat 3 to establish normalcy of distribution.

Pearson's correlations were run to analyse correlation between DTH results and S-IFN-γ when their session times corresponded

Salivary results were also subjected to arithmetic calculations to ascertain a marker found to be of importance in an understanding of the individual variability, particularly amongst athletes. There is a normal daily or weekly variability, which in itself is not as significant as **the percentage of change in response to the challenge** of an intervention[918], either physical or psychological. S-IgA has to date been researched in greater depth than the S-IFN-γ, hence, at present, the latter remains exploratory only.

CHAPTER 6

Description and Discussion of Quantitative Results

This project was designed to elucidate the impact of a visual and creative form of psychotherapy, art psychotherapy, on the immunological of a group of people with a diagnosis of non-metastatic cutaneous melanoma (<4mm depth) who had undergone surgical excision, and to determine if general quality of life was improved with a concomitant reduction in anxiety and depression and improvement of coping skills

Quantitative data were collected in order to maintain the ethos of 'reflection' that is essential to this research project; namely, to demonstrate a numerical and statistical reflection of physiological and psychological effect experienced through group art psychotherapy, translated qualitatively into image and narrative.

The results of the quantitative data analysis are described in this chapter. **Table 1**, Chapter 5, p.128, matches all date/time points/actions .**Table 4**, in this chapter; p.142 matches all date/time point/ image subjects.

Data Measures

The quantitative data included S-IgA and S- IFN-γ and DTH test response (PPD[lxix] challenge response, as seen by erythema and skin induration) and the psychological testing scales used, that is, the MAC, COPE, EORTC.QLQ-C30 and HADS as outlined in the Method Chapter, Chapter 5.

There were two sessions when one immunological salivary sample collection was missed; **t9** missed on pre-session saliva collection as I arrived late (to be discussed in the narrative) and on **t14** when there were no more collection vials, because the re-order delivery hadn't arrived on time. A further time point was deleted from the statistical analysis of S-IFN-γ data, owing to insufficient data: **t15** (n=3), although there were sufficient samples of S-IgA for analysis at this time point.

[lxix] Purified Protein Derivative of *Mycobacterium tuberculosis*.

There were no samples of S-IgA which were below cut-off level. The cut-off level for S-IFN-γ samples was 15.6pg/mL. All samples between 15.6 pg/mL and 0 were analysed as 15.6 pg/mL. Missing data was entered as 0, and therefore not included in the calculations

DTH tests were administered at t0, t1, t5, t13, t24 and t52 and read by the participants 48 hours later. The results were recorded the week after the test, at the following art psychotherapy session.

Demographic Data

The group consisted of 11 adult participants between the ages of 45-70 (mean age 57.4 years), of Anglo-Saxon decent, from differing socio-economic backgrounds and educational levels, although all participants came from working class backgrounds. At the time of the research, all were resident of the Greater Newcastle region (NSW, Australia). Surprisingly, **80%** were male. One member had attended sketch classes and another was a prize-winning photographer, although 'artistic', ability was not a pre-requisite.

None of the participants were smokers, and all were married, except one woman who was experiencing a separation from a partner of 25 years. One participant (031)[lxx] started taking aspirin and. a β-blocker at about t8 to deal with a cardiac problem. The β-blocker is reported to enhance some immune function, although his immunological results do not reflect that, while salycilate (aspirin) intake inhibits cellular proliferation[919].

Three participants (one male, two females) dropped out after a period of **9** (36%) **7** (28%) and **3** (12%) sessions respectively, and their quantitative data discarded. They left the group of their own accord after having decided that the intervention 'was not for them'; one (Ned) after a particularly difficult session in which he became quite angry and abusive, and another (S) before engaging in the intervention as she found

---

[lxx] All names matching ID numbers are shown in **Table 3.**

the time too difficult to co-ordinate with her work schedule who also experienced a very large DTH response at the first test time (50mm+), having recently been in contact with TB. All of these participants were contacted by phone and their reasons discussed and support offered. They were also informed that if they chose to return to The Group within a period of a couple of weeks this would be accepted, subject to a discussion and assent from the other group members, as per the information given prior to consent being obtained.

The average number of session attended by the remaining **8** participants was **23.5** (**87%**), with one participant attending all **27** sessions and the lowest attendance being **21** sessions (**78%)**.

Results of Recruitment Process

In all **305** patients records were appraised at the Newcastle Melanoma Unit (**Table 2,** below). As each patient's records were checked a form was attached to the inside cover of their medical records, to avoid a repeat approaches on return visits. The enrolled nurse in charge of the clinic was to distribute information to each approached patient, and if a form stating an interest in the project was returned, I met with the person and discussed the protocol and their involvement. A signed consent form was then obtained, if interest was maintained.

Recruitment/uptake action	Number
Total number of persons targeted for recruitment	305
Ineligible because of disease status or traveling distance	151
Information not distributed	51
Declined	75
Accepted	28
Withdrawn	17
Dropped out	3
Completed intervention	8

Table 2: Recruitment Results

During the 18 months of recruitment **28** people signed consent to participate in the groups at the Newcastle site, but at the time of commencement this number dropped to **11**, with one member,(S), failing to engage in the intervention phase after a particularly strong DTH response (50mm).

Even though the participants were randomised, there was a great degree of self selectivity in the recruitment process. Several of the initial signatories asked if the group could be run at a different time to that which had been organized.

Poor uptake resulted in insufficient numbers of participants to create more than one functional group. Following a discussion with all those who attended for the baseline immunology measures and the research supervisors, it was decided to amalgamate the participants into one group all involved in the intervention, and abandon the control group.

Recruitment was abandoned at the other site, after 6 months. Again poor uptake was the deciding factor.

A submission was made to the ethics committees of both the University of Newcastle and the then Hunter Area Health Research Ethics Committee (now Hunter and New England Area Health Research Ethics Committee), for variation to the original project protocol, and subsequently ratified. Central Sydney Area Health Ethics Committee and the relevant clinic were also informed of the abandonment at their site.

It has been found that clinician alignment is supportive of recruitment[920, 921, 922]. Such alignment was not evident in this project, with some consultants expressing frank antipathy to the concept of a psychotherapeutic intervention, let alone so novel an intervention as an art based medium of expression, one senior consultant remarking emphatically, *"I don't want my patients thinking about their cancer!"*

The Newcastle Melanoma Clinic can have a turn over of more than 40 patients during a busy half day pre-surgical and diagnostic clinic, with one nurse attending to the record screening at the same time as organizing patient visits to their clinicians and

follow-up appointments. This puts a heavy load on one nurse, and the attention required to assist in recruitment added to her burden. The large catchment area serviced by the Clinic, also placed geographical constraints on many potential participants (the whole of the Hunter Valley and Lower North Coast of NSW making traveling distances of up to 250 kms a possibility).

Participant Denominators

In the quantitative data traditional coded numerical denominators have been used to signify participants; however this was un-natural when transferred to the qualitative data, the correlations between both are hence listed in Table 3.

ID	1	2	21	31	71	102	202	302
Name	Allen	Colleen	Paul	Darren	Rose	Jim	Ron B	Ron M

Table 3: ID numbers and names of completing participants.

Some of the participants opted to retain their own names, and others adopted pseudonyms, discussed further in Chapter 7. All quantitative data relating to Ned, K and S were discarded, as they left prior to the completion of the intervention. Their coded numerical denominators are therefore deleted as being unnecessary.

Time Point	Date	Subject: Image/No Image (N.I.)
t1	12.02.04	Group Image
t2	19.02.04	KFD aged 5 years and present family
t3	26.02.04	Childhood story
t4	04.03.04	Diagnosis
t5	11.03.04	Perception of 'Stress'
t6	18.03.04	Colour garden visualisation
t7	25.03.04	Forest house visualisation
t8	01.04.04	Free image
t9	08.04.04	Learned belief system
t10	15.04.04	Miser/Joy
t11	22.04.04	Anger/Intimacy
t12	29.04.04	Undersea visualisation
t13	06.05.04	Challenge of the treasure from the sea
t14	13.05.04	Paul's medal and Darren's war (N.I.)
t15	20.05.04	More process (N.I.)
t16	27.05.04	Being good/Being naughty: Rose's dilemma
t17	03.06.04	No Talk
t18	10.06.04	'The magic cape': a story
t19	17.06.04	Pain or happiness
t20	24.06.04	Body outline and internal imaging
t21	01.07.04	Group Image
t22	08.07.04	Wet-on-wet: Colour garden visualisation
t23	15.07.04	Celebration of 'Me': clay work
t24	22.07.04	Mask making
t25	29.07.04	Round up
t26	10.02.05	Gain from group & art psychotherapy.

Table 4: Time Points and Images Made During the Intervention

Table 4 provides a reference point for the identification of the image content of each session and time point at which they were created in order to ascertain the subject matter which elicited the immunological changes at each particular time point. The psychological process of each session, which produced the immunological change, is further expanded in Chapter 7

Immunological Results

The results of the statistical analysis for group means of salivary immunological parameters are shown in Figures 7 (S-IgA) and 8 (S-IFN-γ) and results of statistical analysis of individual's results in Figures 7 a-h(S-IgA) and 8 a-h (S-IFN-γ).

As stated in Chapter 5, except for the baseline measures, salivary results were compared between pre- and post-session levels, at each session, over the entire intervention, to assess the degree of shift in **immediate** immunological change, over a period of three hours, the duration of the art psychotherapy session, and cumulatively, over the duration of the intervention. These results were also subjected to arithmetic calculation in order to establish percentage of change post-session as compared to pre-session levels. Baseline measures at **t1**, **t2**, and **t3** were collected post-session only; hence there are no intra-session comparisons for these sessions.

The results of the analyses of individuals' results are displayed in Figures 7 & 8 a-h

The results of the statistical analysis for group means of DTH test results are shown in **Tables 7 and 8.**

nb: for **all tables**:*= statistical significance (2 tailed)
< = approaching statistical significance (2-tailed)

Saliva IgA (S-IgA) Results

In the S-IgA group means analysis, there were **5** time points, which showed statistically significant changes in S-IgA levels when comparing the post-vs-pre-intervention session measures. These were statistically significant increases at **t6**, **t8**, **t22** and **t24,** and a statistically significant **decrease** at **t21**. There was also a statistically significant increase, post- v-pre-session, in the group mean overall: **39.4%** increase: $\boldsymbol{p}$ **=0.03**. (Table 5)

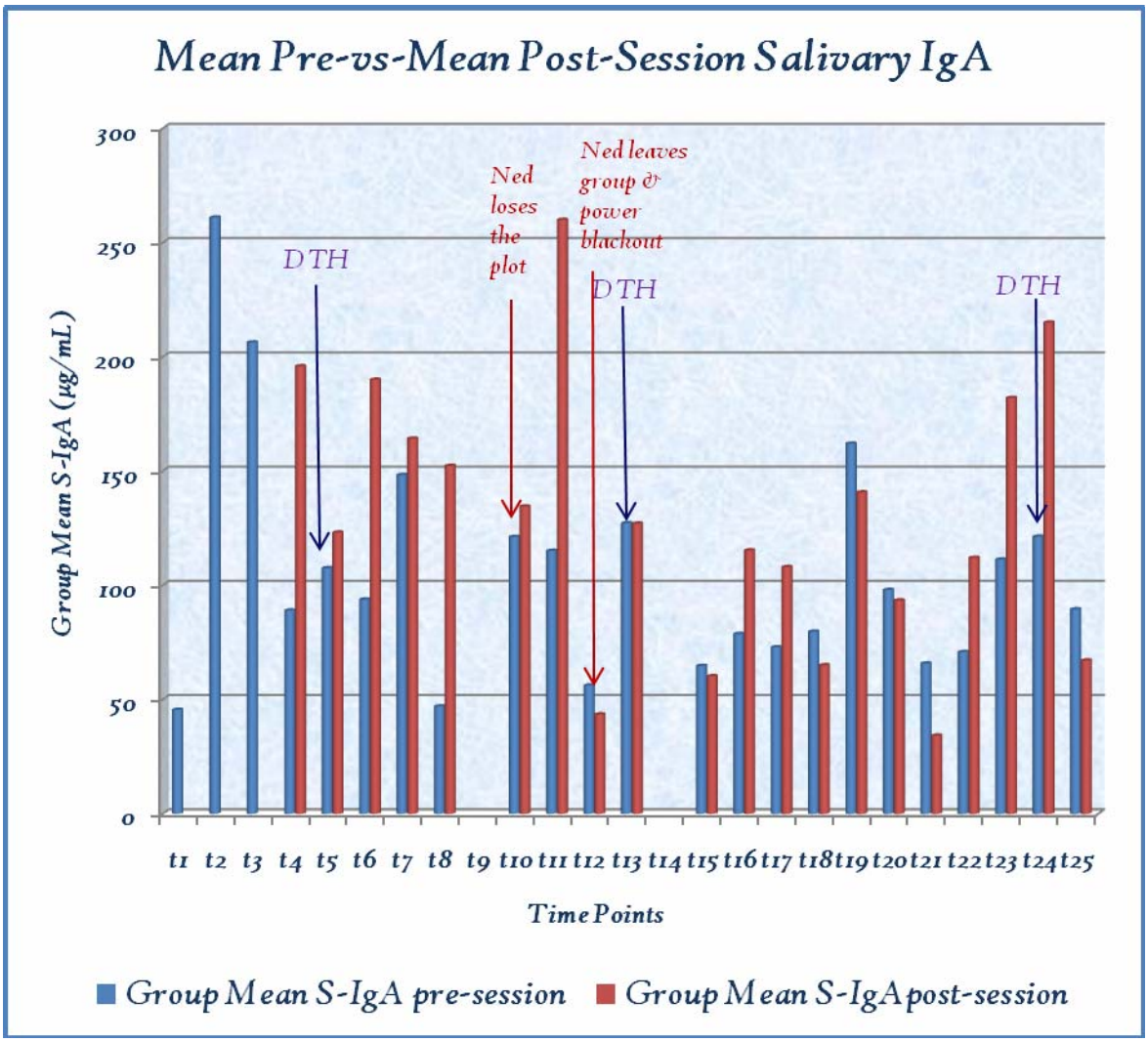
For the **S-IgA** individual response analysis, **9.6%** (17) of the time points (total 176 time points) for all participants exhibited a post-vs-pres session increase in excess of **100%,**

with the highest increases being in excess of **1000%: ID 1=1264%** at **t23**, **ID 202=1241%** at **t11** and ID 31=**1147%**, at **t22. ID 202** exhibited the highest percentage change overall; with **47.36%** of the post- session test scores increasing by more than **100%** over pre-session test scores.(**Figures 7 a-h**)

The majority of individuals showed an upward trend in S-IgA function, over the course of the intervention with increases ranging from 30% (**ID 102**) to 231% (**ID202**). Although **ID 31** showed a mean increase of 51.9%, his were the only results where the mean post-session S-IgA level was lower (136μg/mL) than the mean pre-session S-IgA level (109 μg/mL), and while **ID 302** showed a mean increase, post-session-vs-pre-session of 95%, his overall results showed a downward trend, with 80% of his sessional results lower post-session, compared to pre-session levels.

The results of two individuals reached statistical significance in post-vs-pre-session measurements: **ID 202**: p = **0.005** and **ID 1:** p =0.01, whereas the results of a third approached significance: **ID 21**: p = 0.07

There was a great range from week to week in the S-IgA measures, including in the baseline measures, both in group mean and in individual results. (**Figures 7 and 7a-h).**



DTH= delayed Type Hypersensitivity test. * Ned's quantitative data deleted[lxxi]

Figure 7: Mean Post-vs- Mean Pre-session Salivary IgA

This figure plots the group mean salivary IgA levels, post -session-vs-pre-session over the period of the intervention.

The first time point, t1, t2 and t3 were only taken pre-session, before the protocol was re-shaped.

*Group Mean Baseline S-IgA levels =**197.8** µg/mL.*

*Art psychotherapy commenced at **t2**. Individual baseline mean measures are shown with Figures 7a-h*

[lxxi] to 'lose the plot': a colloquial expression meaning to have a conniption, or lose control

TIME (t)	DATE	MEAN PRE-	MEAN POST-	SE PRE	SE POST-	SD PRE-	SD POST-	*p* VALUE	MEAN % DIFF
t4	04.03.04	89	195.9	31.3	62.6	82.7	165.6	<0.08	*120.1
t5	11.03.04	107.5	123.1	38.4	32.6	85.8	72.9	0.67	14.7
t6	18.03.04	93.8	190.1	41.5	49	102.7	129.6	*0.04	*102.6
t7	22.03.04	148.3	164.2	29.2	35.7	81.2	94.5	0.62	10.73
t8	01.04.04	46.5	152.3	10.4	40.6	25.5	107.5	*0.05	**225
t9	08.04.04	*No pre-session samples collected: late start: no video recording*							
t10	15.04.04	121.2	134.5	29	37.3	69.5	91.5	0.65	10.95
t11	22.04.04	115.1	259.9	47.3	85.6	116	209.7	0.16	*125.9
t12	29.04.04	56.8	43.5	15.4	6.5	40.8	17.2	0.14	-22.6
t13	06.05.04	127.2	126.9	18.8	28.3	60.3	74.7	0.99	-0.003
t14	13.05.04	*No post-session samples collected: no more vials: stock delivery late*							
t15	20.05.04	64.7	60.2	29.1	33.1	54.3	66.2	0.94	-7
t16	27.05.04	78.7	115.3.2	17.6	33.7	43.1	42.9	0.35	5.7
t17	03.06.04	72.93	108	21.2	37.8	56.2	100	0.16	48
t18	10.06.04	79.7	65	22.4	6	59.4	22.6	0.54	-18.4
t19	17.06.04	162	140.7	31.2	19.8	76.4	48.5	0.65	-13.2
t20	24.06.04	98	93.4	22.7	11.8	60.1	31.1	0.75	-4.6
t21	01.07.04	65.8	34.2	13.7	6.4	36.1	17	*0.05	-48.1
t22	08.07.04	70.8	112	23. 5	20.9	62	55.4	*0.05	58.2
t23	15.07.04	111.3	182	28.6	33.4	75.4	81.8	0.21	63.5
t24	22.07.04	121.3	215	18.2	51.5	51.4	145.7	*0.05	77.2
t25	29.07.04	89.5	67.1	21.9	22.6	53.6	55.3	0.33	-25.
Overall Mean		90	125.5	14.1	21.1	39.8	59.7	*0.02	39.4

Table 5: S-IgA Group Means Post-vs-Pre-Session Over Time: Wilcoxon signed-rank test p=<0.05

Formula used to calculate % difference:

$$\frac{\text{POST} - \text{PRE}}{\text{PRE}} \times 100 = \%\ \text{Diff.}$$

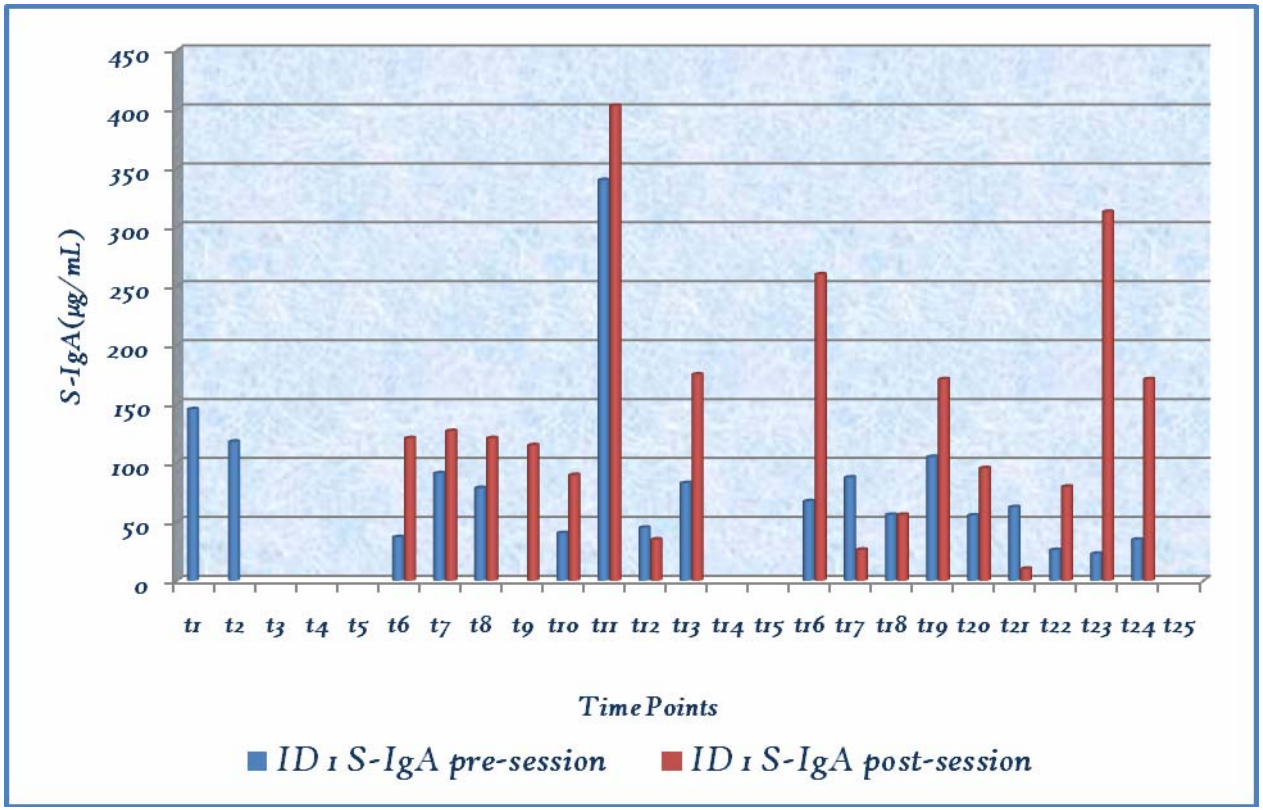


Figure 7a: IDI Salivary IgA

Student t-test: paired two samples for Means; two tailed:

Mean Pre-session= 77 µg/mL Mean Post-session=140 µg/mL ***p*=0.01**

Baseline Mean = 141 µg/mL. Mean % Change: post-vs-pre-session=+171 %

Time Points	*% Change*
t4	
t5	
t6	*227*
t7	*39.3*
t8	*53.8*
t9	
t10	*122.2*
t11	*18.5*
t12	*-22*
tT13	*2.6*
t14	
t15	
t16	*285.9*
t17	*-69.9*
t18	
t19	*62.8*
t20	*72.4*
t21	*-83.8*
t22	*205.5*
t23	*1264.4*
t24	*390*
t25	

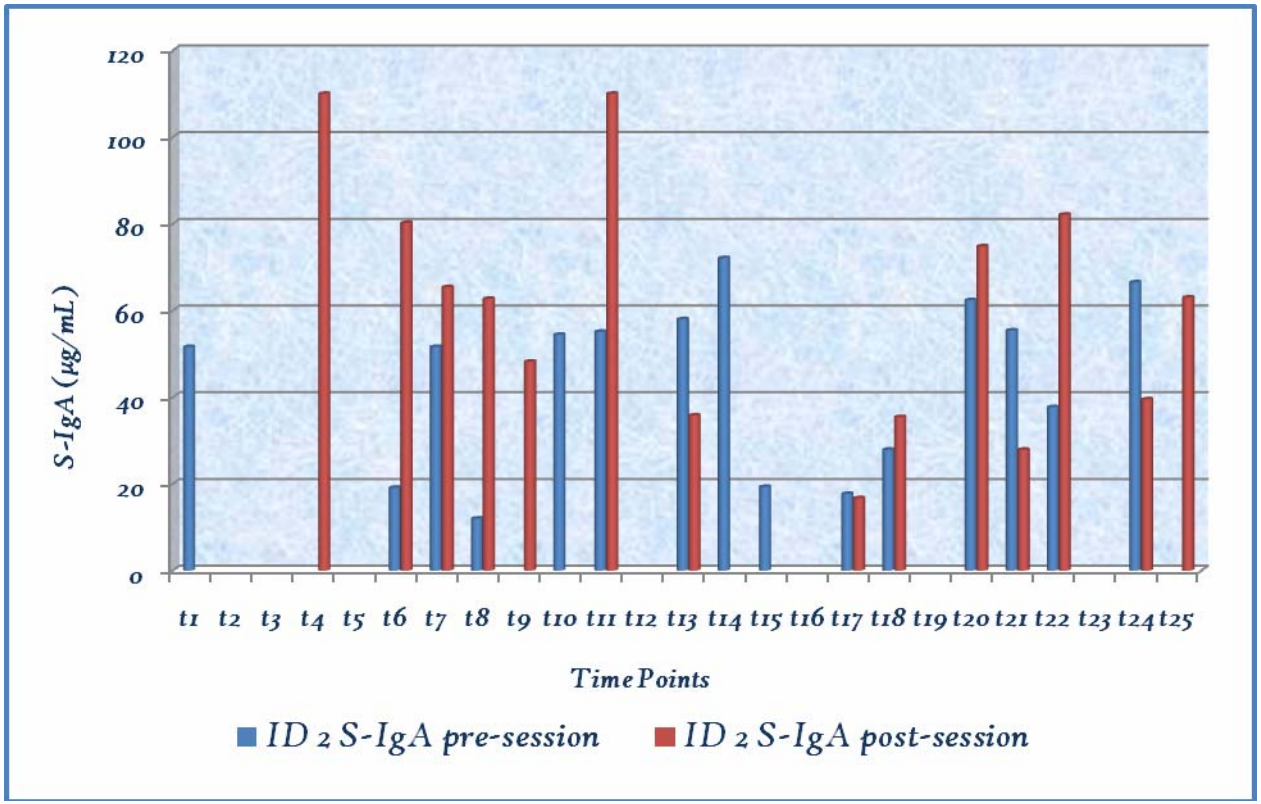


Figure 7b: ID2 Salivary IgA

Student t-test: paired two samples for Means; two tailed:

Mean Pre-session=44 µg/mL. Mean Post-session=56 µg/mL. p=0.2

Baseline Mean = 52 µg/mL. Mean % Change: post-vs-pre-session=+96%

Time Points	% Change
t4	279
t5	
t6	321
t7	25
t8	425
t9	
t10	
t11	103
t12	
t13	-61
t14	
t15	
t16	
t17	-6
t18	25
t19	
t20	17
t21	-49
t22	115
t23	
t24	-41
t25	

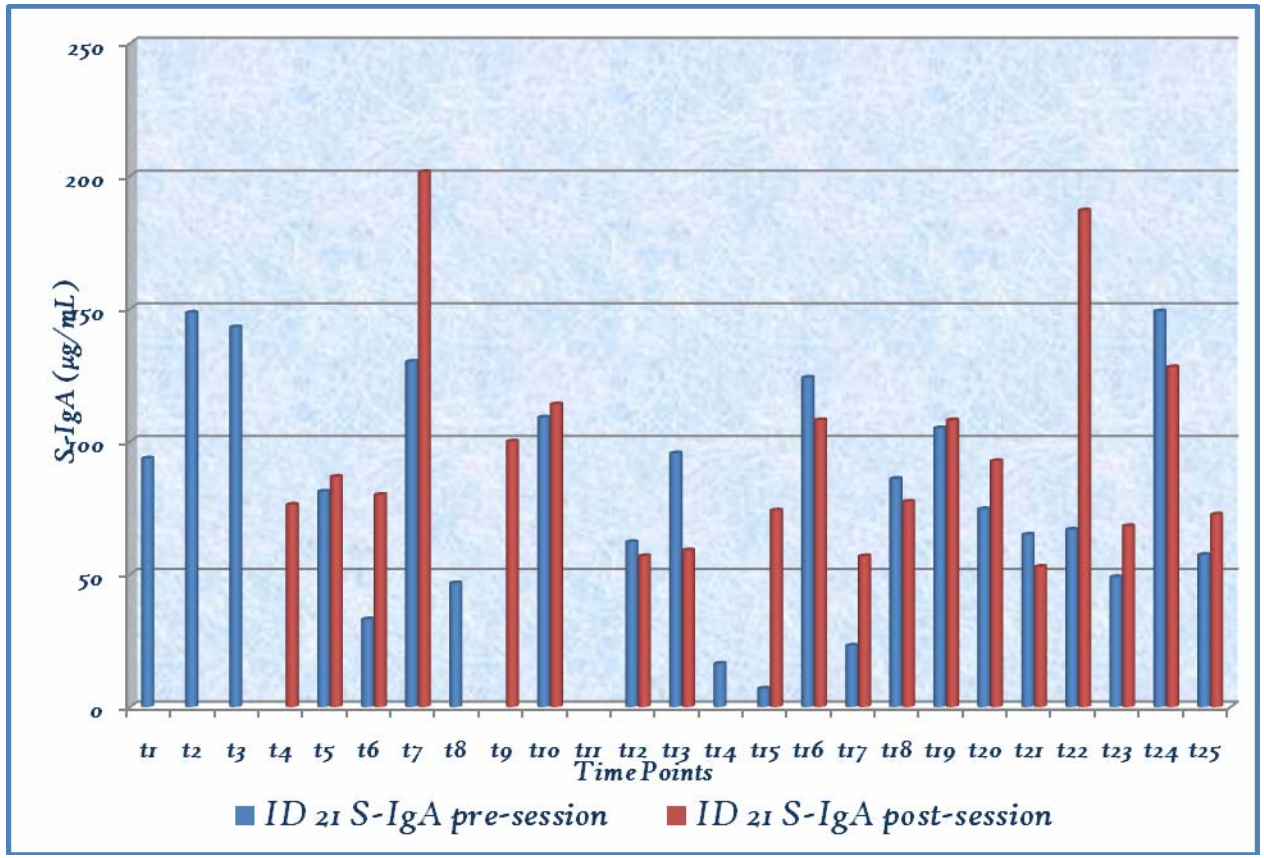


Figure 7c: ID21 Salivary IgA

Student t-test: paired two samples for Means; two tailed:

Mean Pre-session=77.5 µg/mL Mean Post-session= 95.5 µg/mL. p=0.07

Baseline Mean = 128.4µ/mL. Mean % Change: post-vs-pre-session=+90.4%

Time Points	*% Change*
t4	*6.25*
t5	*6.8*
t6	*142.8*
t7	*55*
t8	
t9	
t10	*4.5*
t11	
t12	*-8.6*
tT13	
t14	
t15	*967.5*
t16	*-12.9*
t17	*145.8*
t18	*-10*
t19	*2.9*
t20	*24.3*
t21	*-18.7*
t22	*179.9*
t23	*39.4*
t24	*-14*
t25	*26.5*

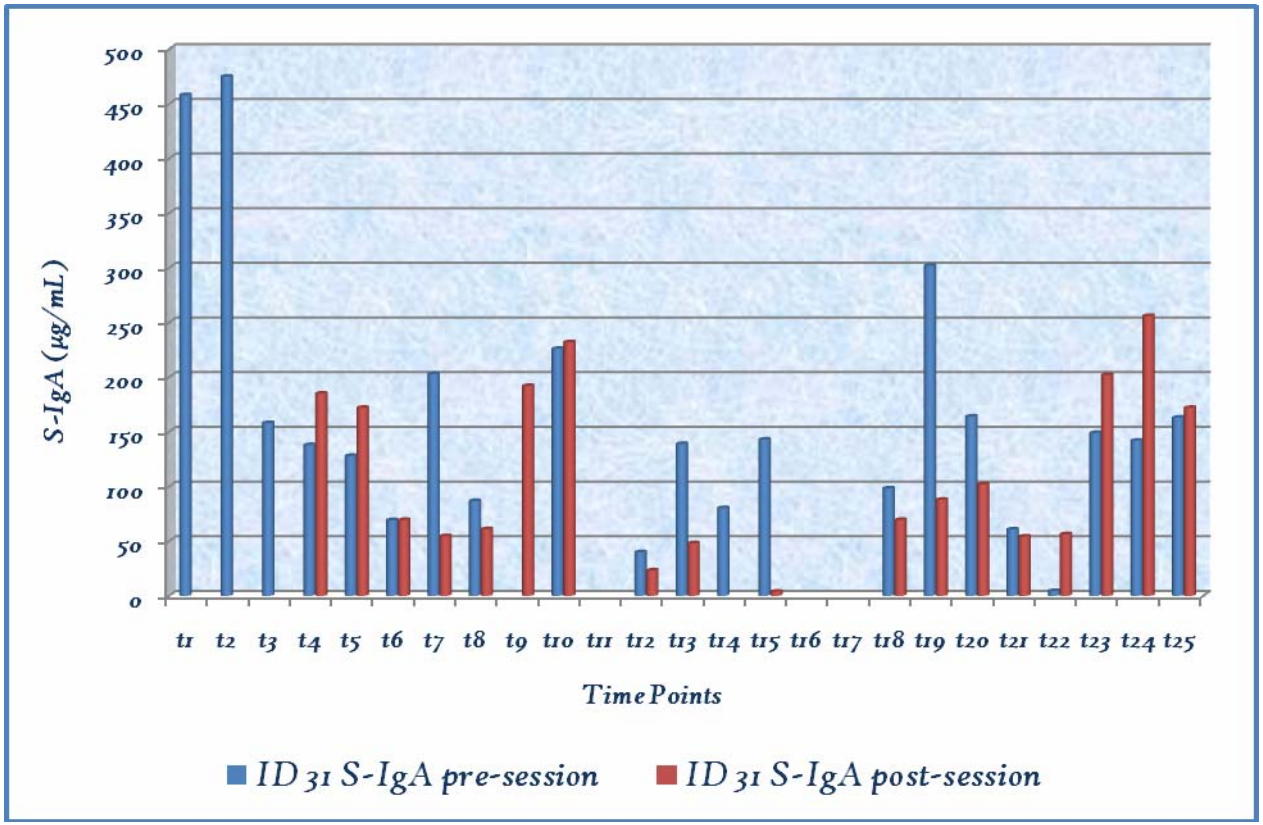


Figure 7d: ID 31 Salivary IgA

Student t-test: paired two samples for Means; two tailed:

Mean pre-session=136 µg/mL Mean post-session=109 µg/mL. p=0.2

Baseline Mean = 363.7µg/mL. Mean % Change: post-vs-pre-session=+52%

Time Points	% Change
t4	34.1
t5	34.4
t6	
t7	-73.1
t8	-29.7
t9	
t10	2.7
t11	
t12	-41.7
tT13	-65.3
t14	
t15	-97.8
t16	
t17	
t18	-29.3
t19	-70.7
t20	-37.8
t21	-10.7
t22	1147.3
t23	35.6
t24	27.7
t25	5.5

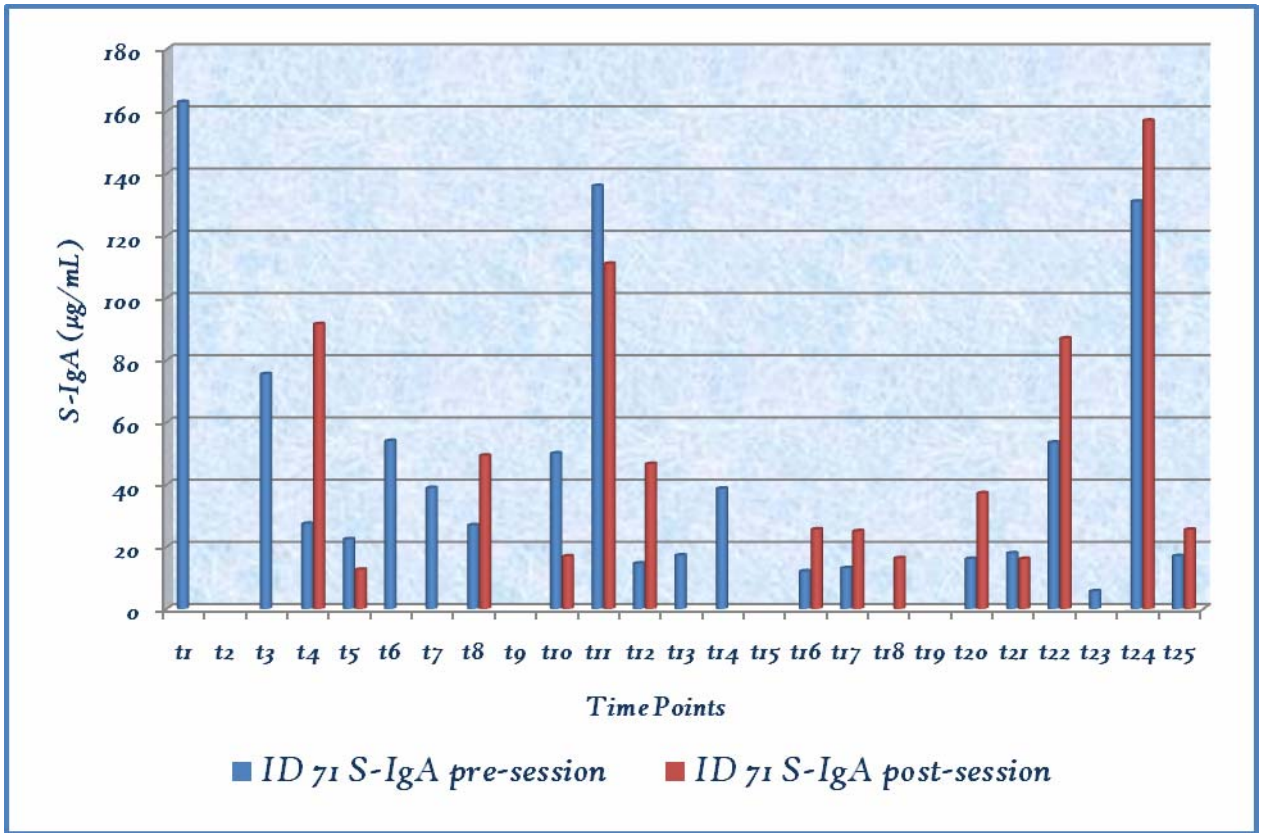


Figure 7e: ID 71 Salivary IgA

Student t-test: paired two samples for Means; two tailed

Mean Pre-session=41.4 µg/mL. Mean Post-session= 54 µg/mL. p=0.1

Baseline Mean =92.5µg/mL. Mean % Change: post-vs-pre-session=+61.6%

Time Points	% Change
t4	233.7
t5	-43.8
t6	
t7	
t8	82.9
t9	
t10	-66.2
t11	-18.4
t12	212.7
t13	
t14	
t15	
t16	11.7
t17	90.3
t18	
t19	
t20	132
t21	-9.6
t22	6.3
t23	
t24	19.8
t25	50.2

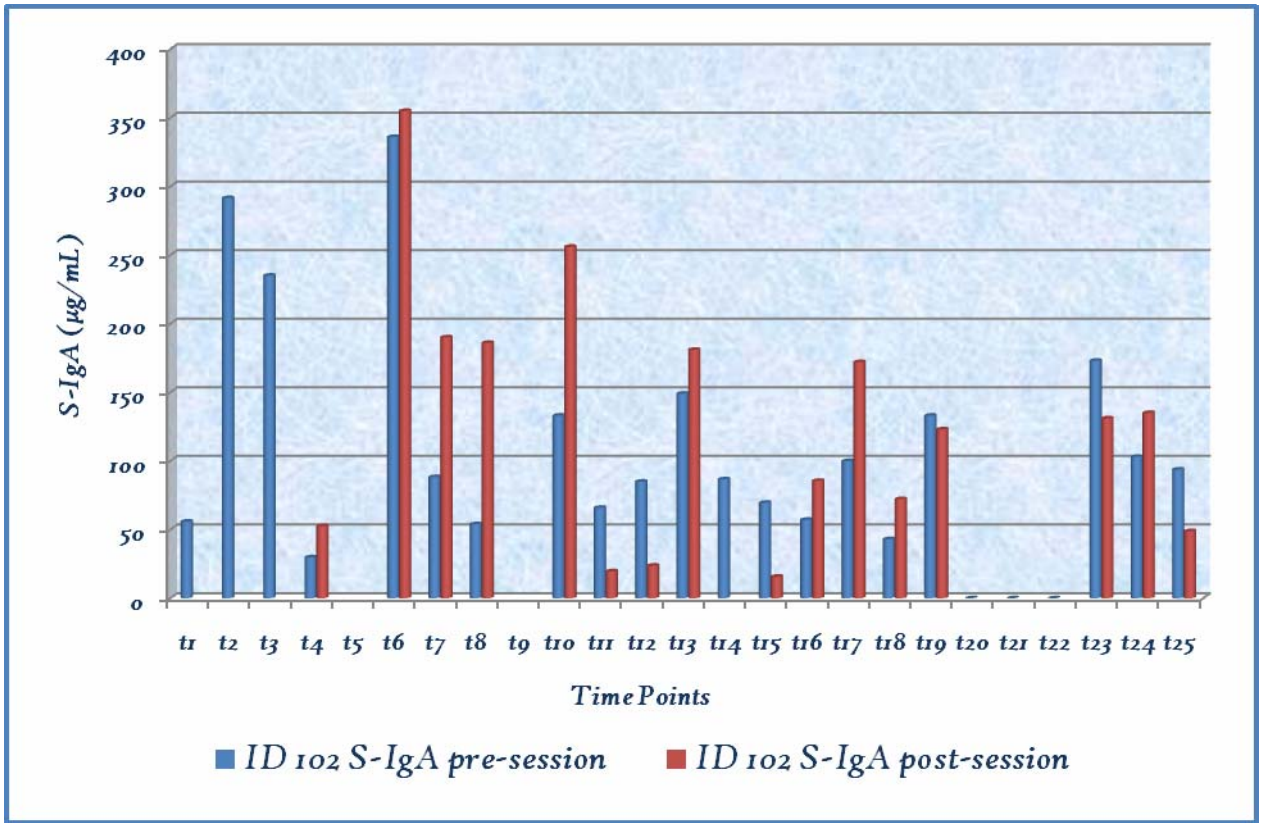


Figure 7f: ID 102 Salivary IgA

Student t-test: paired two samples for Means; two tailed

Mean Pre-session =107 µg/mL. Mean Post-session=127.9 µg/mL. p=0.2

Baseline Mean =194µg/mL. Mean % Change: post-vs-pre-session=+29.9%

Time Points	% Change
t4	76
t5	
t6	5
t7	115
t8	245
t9	
t10	92
t11	
t12	
t13	21
t14	
t15	
t16	49
t17	72
t18	68
t19	
t20	
t21	
t22	
t23	
t24	31
t25	
Time Points	% Change

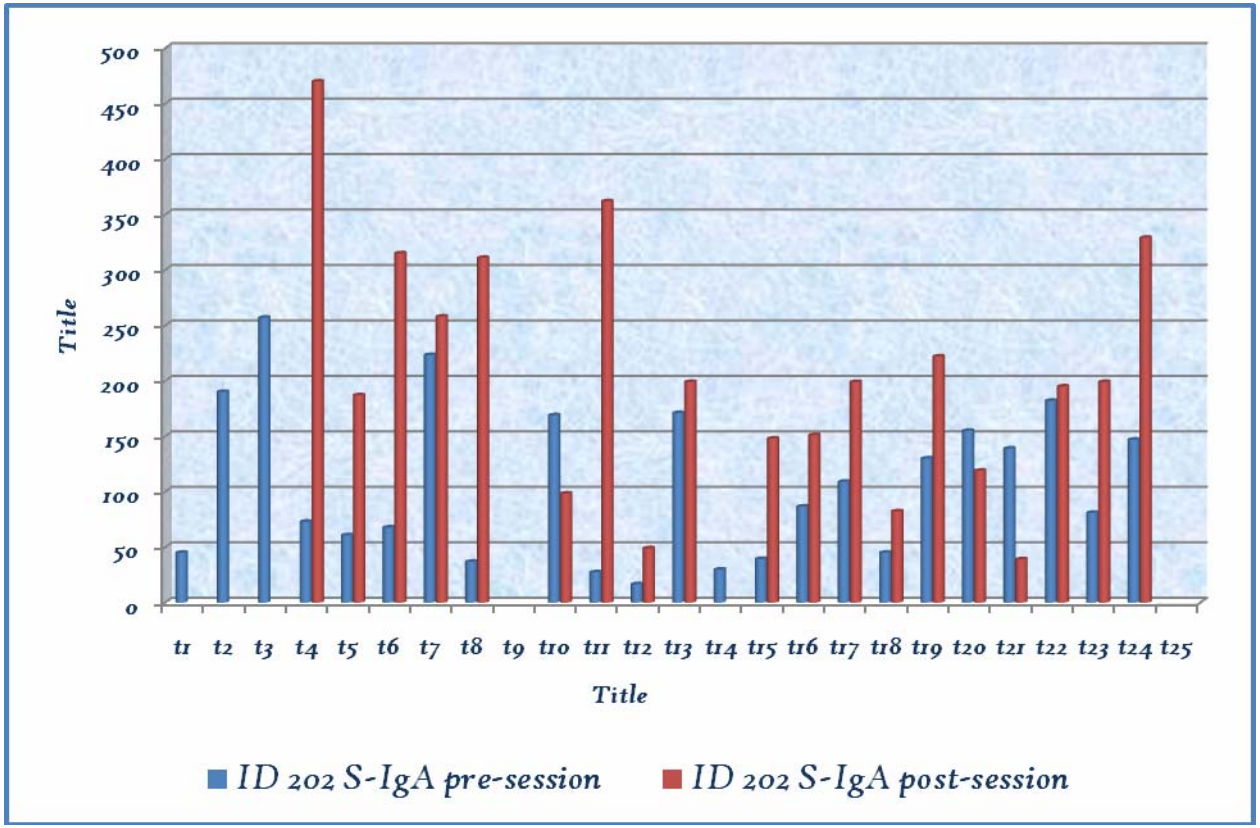


Figure 7g: ID 202 Salivary IgA

Student t-test: paired two samples for Means; two tailed

Mean Pre-session=104.8 µg/mL. Mean Post-session=192.4 µg/mL. ***p*=0.005**

Baseline Mean: 163.7µg/mL. Mean% Change: post vs-pre-session=**+213.3%**

t4	*545.5*
t5	*207.8*
t6	*364.8*
t7	*15.6*
t8	*742.1*
t9	
t10	*-41.8*
t11	***1240.7***
t12	*194.7*
t13	*16.4*
t14	
t15	*275.7*
t16	*74.2*
t17	*82.6*
t18	*82.7*
t19	*70.8*
t20	*-23.2*
t21	*-71.8*
t22	*7.1*
t23	*145.7*
t24	*123.8*
t25	

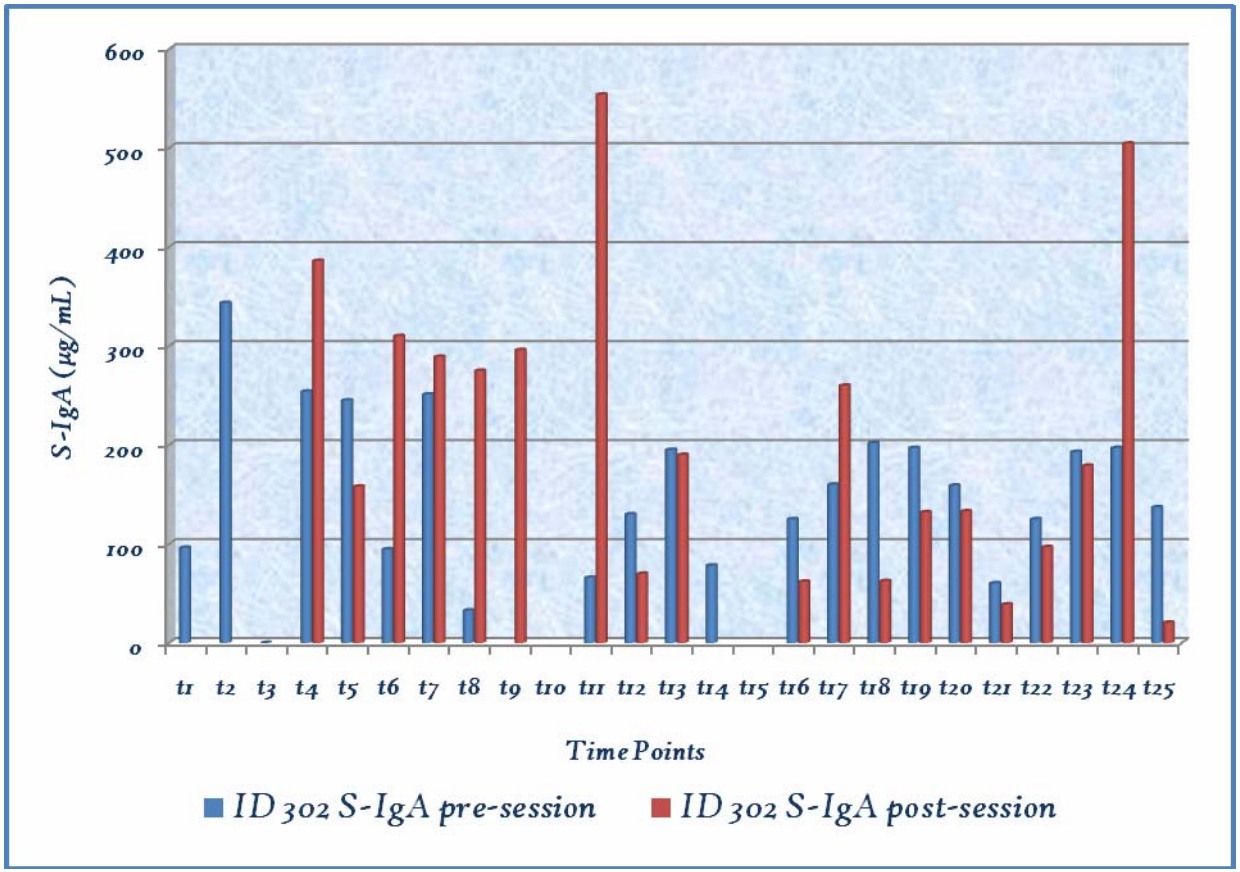


Figure 7h: ID 302 Salivary IgA

Student t-test: paired two samples for Means; two tailed:

Mean Pre-session=162.2 µg/mL Mean Post-session=193.8 µg/mL. p=0.3

Baseline Mean =269.5µg/mL. Mean % Change: **post-vs-pre-session**=+95.9%

Time Points	*% Change*
t4	*52*
t5	*-35.5*
t6	*277.4*
t7	*15.1*
t8	*738.4*
t9	
t10	
t11	*740.3*
t12	*-47*
t13	*-2.6*
t14	
t15	
t16	*-50.5*
t17	*62.5*
t18	*69*
t19	*-33*
t20	*-16.4*
t21	*-35.4*
t22	*-22.6*
t23	*-7.3*
t24	*156.1*
t25	*-84.9*

Saliva IFN-γ (S- IFN-γ) Results

S-IFN-γ was assayed in a second run from the frozen saliva samples; therefore, out of a total of **327** samples **280** (**86%)** had sufficient quantity of saliva to allow effective assay. IFN-γ **samples below15.6 pg/mL**. were regarded as **0**, as this is the lowest limit of the assay. This accounted for **36%** of total samples, leaving **64%** samples as effectively assayed.

In the S- IFN-γ group means analysis (**Table 6**) there was no change over time in the post-vs-pre session levels, group mean values of **32.6 pg/mL,** pre- and **33.3 pg/mL** post-intervention; $p = 0.89$, a mere **2 %** increase over time. There was one time point at **t10** which showed a statistically significant change in S- IFN-γ levels, indicated in **Figure 8**, as 'Ned loses the plot' ($p = 0.04$), which marked the largest decrease (**-67.6%**) in any one session, the session at which a great deal of anxiety was stimulated by his actions.,

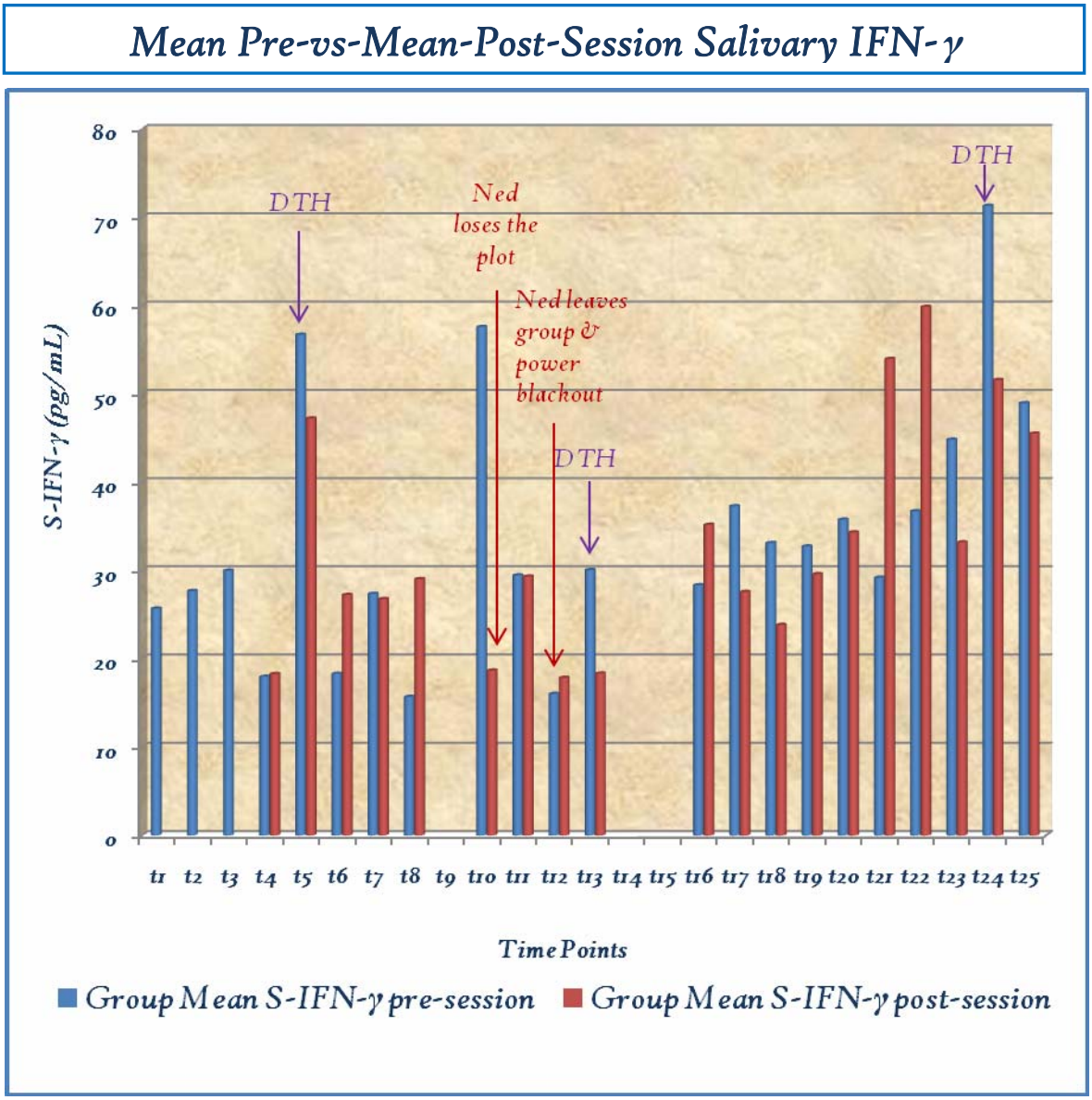
There were two time points, at **t5** and **t22** at which results approached statistical significance, $p = 0.08$ for both; a **decrease** at **t5** and an **increase** at **t22,** post-vs- pre-group means levels. These were the time points where S-IgA post-vs-pre group means level **increases** reached statistical significance; $p = 0.04$, $p = 0.05$ respectively. There was one further time point at **t24** when The Group was engaged in mask making, an extremely tactile activity requiring trust, which approached statistical significance: $p = 0.09$, with a drop of 27.6%.

Individual results are displayed in **Figures 8a-8h.** Of the time points for all individual participants (176 time points), **6.8%** (12) exhibited an increase in excess of **100%** at particular time points, with the highest increases being **338.4%** (**ID 302**).

Of the eight participants, the S- IFN-γ results, post-vs-pre-session, of one (**ID 2**)showed a mean downturn of **11.9%**, while the results of the remaining seven, post-vs-pre-session levels, showed mean increases ranging from **4.6%** (**ID 21**)to **41.3%.** (**ID 31**).
Student paired t-test for pre- and post-session data for individuals' results did not reach statistical significance. There, are however, two caveats with the statistical analysis of S-IFN-γ, firstly in the low number of samples which were assayable, and secondly in the high number which were at assay cut-off level, 15μg/mL.

Group mean post-vs-pre-session IFN-γ levels appear to be more stable over time, however, where it appears that the IFN-γ levels are less variable, week to week, in **Figures 8a, 8g and 8h**, it is apparent that there is a considerable variation, similar to S-IgA.

As stated at the beginning of this chapter, the percentage of shift following an intervention is of greater importance clinically than statistical significance of change.



*DTH=Delayed Type Hypersensitivity Test: *Ned's quantitative data deleted

Figure 8: Group Mean Post vs pre-session salivary IFN-y

This figure plots the group mean salivary IFN-γ levels, post session-vs-pre-session over the period of the intervention.

The first time point, t1, t2 and t3, were only taken pre-session, before the protocol was re-shaped.

*Baseline Group Mean S-IFN-γ levels=**27.8** pg/mL.*

*Art psychotherapy commenced at **t2.** Individual baseline mean measures are shown with Figures 8a-h*

Time (t)	Date	Mean Pre-	Mean Post-	SE Pre-	SE Post-	SD Pre	SD Post	*p* Value	Mean % Diff
t4	04.03.04	18	18.3	2.7	1.9	7	4.6	-1.0	1.7
t5	11.03.04	57	47.3	19.1	26.4	38.2	52.8	0.46	-16.7
t6	18.03.04	18.3	27.3	1.4	6.2	3.6	16.5	0.08	48.7
t7	22.03.04	27.4	26.8	10.1	8.8	26.7	23.4	0.68	0.5
t8	01.04.04	15.7	29	0.7	9.3	1.6	21.1	1	85
t9	08.04.04	*No pre-session samples collected: late start: no video recording*							
t10	15.04.04	57.6	18.7	16.6	2.8	37.2	6.2	*0.04	-67.6
t11	22.04.04	29.5	29.3	12.3	5.8	27.4	13	0.72	-0.004
t12	29.04.04	16	17.9	0.7	2.5	1.9	6.5	0.72	11.3
t13	06.05.04	30.1	18.3	6.9	2	18.3	5.2	0.14	-39
t14	13.05.04	*No post-session samples collected: no more vials: stock delivery late*							
t15	20.05.04	*Insufficient data for statistical analysis: n=3*							
t16	27.05.04	28.4	35.2	9.5	11.8	21.2	26.4	0.59	27.6
t17	03.06.04	37.3	27.6	9.6	6.6	23.5	16.2	0.34	-26.1
t18	10.06.04	33.1	23.9	7.9	2.5	20.8	6.5	0.31	-28
t19	17.06.04	32.8	29.6	11.1	12.1	27.3	29.6	0.35	-9.6
t20	24.06.04	35.8	34.4	12.5	11.1	33	29.3	0.72	-4
t21	01.07.04	29.2	54	6	20.5	13.3	45.8	0.35	84.8
t22	08.07.04	36.7	59.9	13	16.8	23.6	41.2	<0.08	63
t23	15.07.04	44.8	33.2	20.2	12.3	29	27.6	0.35	-25.9
t24	22.07.04	71.3	51.6	11.5	10.9	53.5	28.8	<0.09	-27.6
t25	29.07.04	49	45.5	32.6	14.8	25.7	33.2	0.68	-7
Overall Mean		32.6	33.3	4.6	4.8	13	13.6	0.89	2

Table 6: **S-IFN-γ Group Means Post-vs-Pre-Session Over Time:** Wilcoxon signed-rank test p=<0.05

Formula used to calculate % difference =

$$\frac{\text{POST} - \text{PRE}}{\text{PRE}} \times 100 = \%\ \text{Diff.}$$

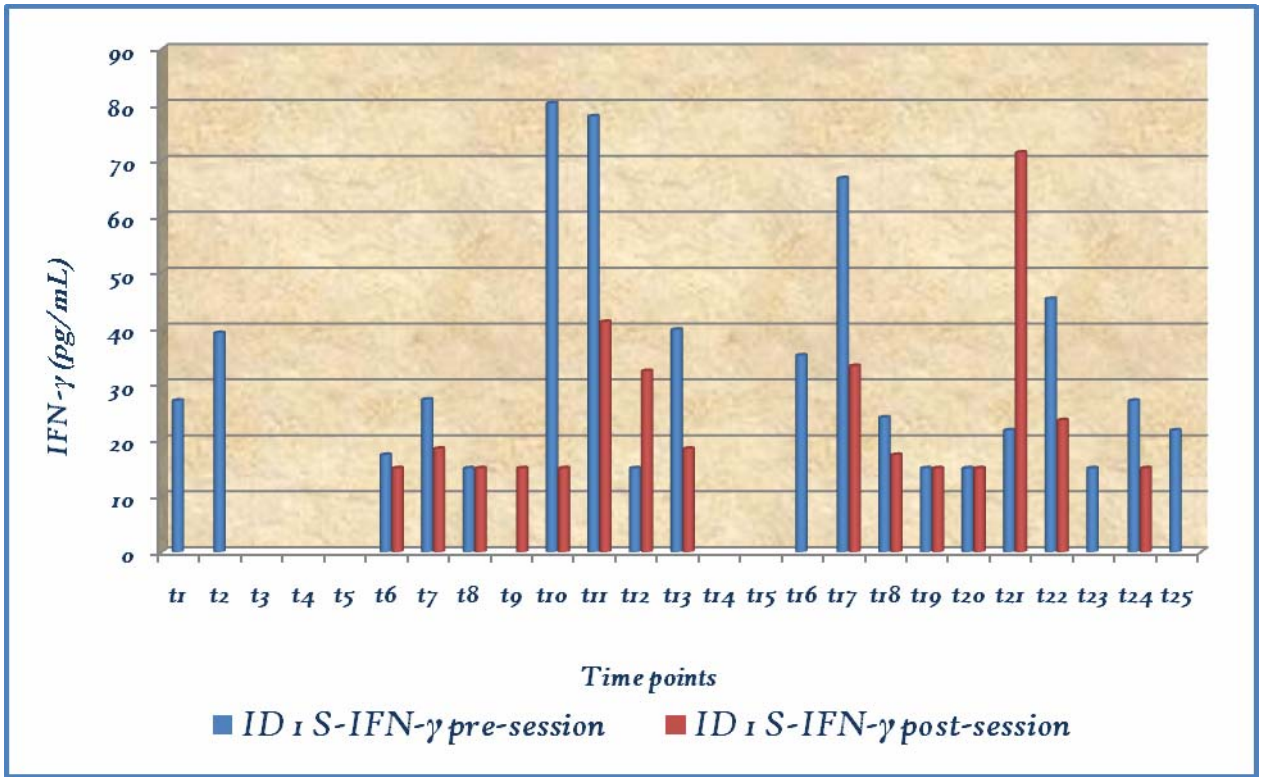


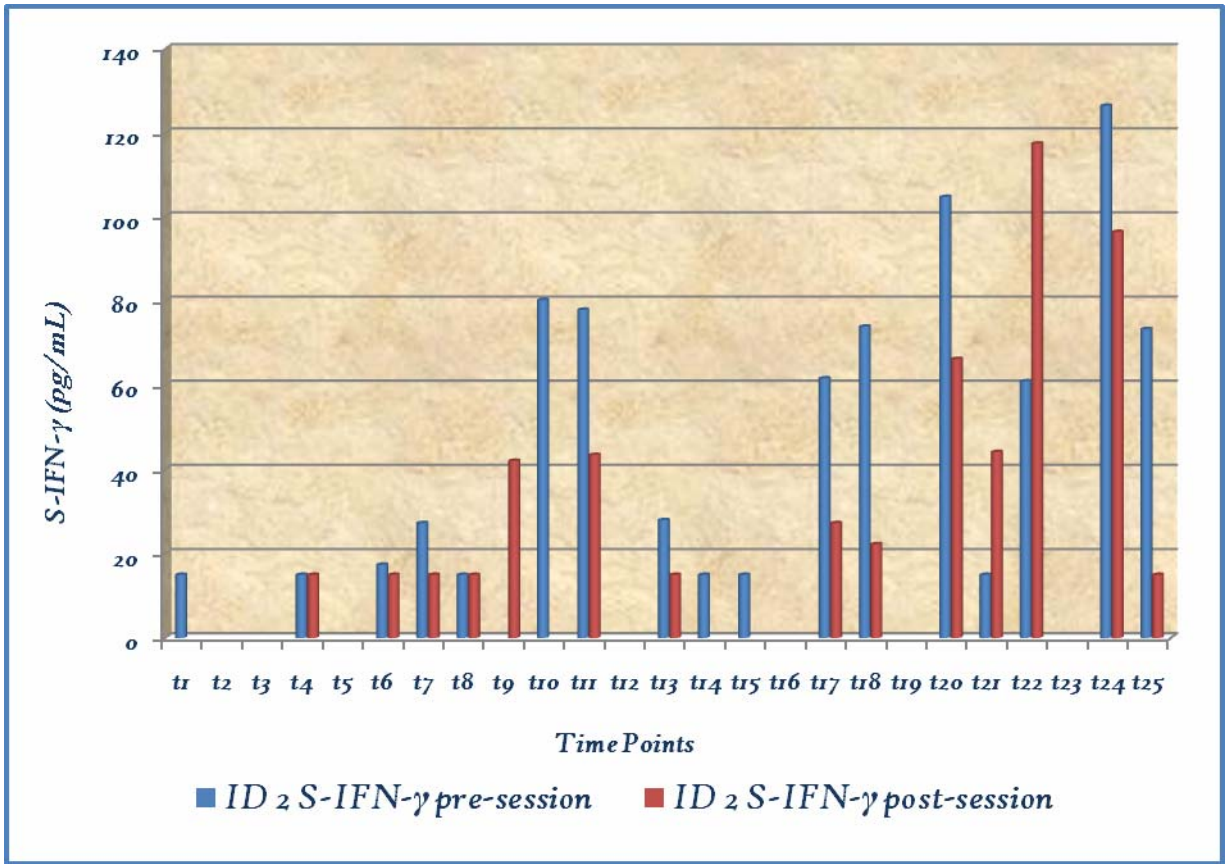
Figure 8a: ID_1 Salivary IFN-y

Student t-test: paired two samples for Means; two tailed

Mean Pre-session= 34.9 pg/mL. Mean Post-session=24.7 pg/mL. p=0.1

Baseline Mean = 33.2 pg/mL. Mean % change: post vs pre-session = -17.7%

Time Points	*% Change*
t4	
t5	
t6	
t7	*23.4*
t8	
t9	
t10	*78.3*
t11	*174.5*
t12	*116.1*
t13	*53.5*
t14	
t15	
t16	
t17	*50.2*
t18	*27.8*
t19	
t20	
t21	*227.4*
t22	*47.9*
t23	
t24	*44.7*
t25	



Time Points	% Change
t4	
t5	
t6	-13.9
t7	-45.1
t8	
t9	
t10	-47.6
t11	
t12	
t13	-46.4
t14	
t15	
t16	
t17	-55.7
t18	-231.9
t19	
t20	
t21	194.6
t22	92.7
t23	
t24	-29.3
t25	76.4

Figure 8b: ID2 Salivary IFN-y

Student t-test: paired two samples for Means; two tailed

Mean Pre-session=53.6 pg/mL. Mean Post-session=39 pg/mL p=0.1

Baseline Mean =15 pg/mL. Mean % Change: post-vs-pres-session=-**11.9%**

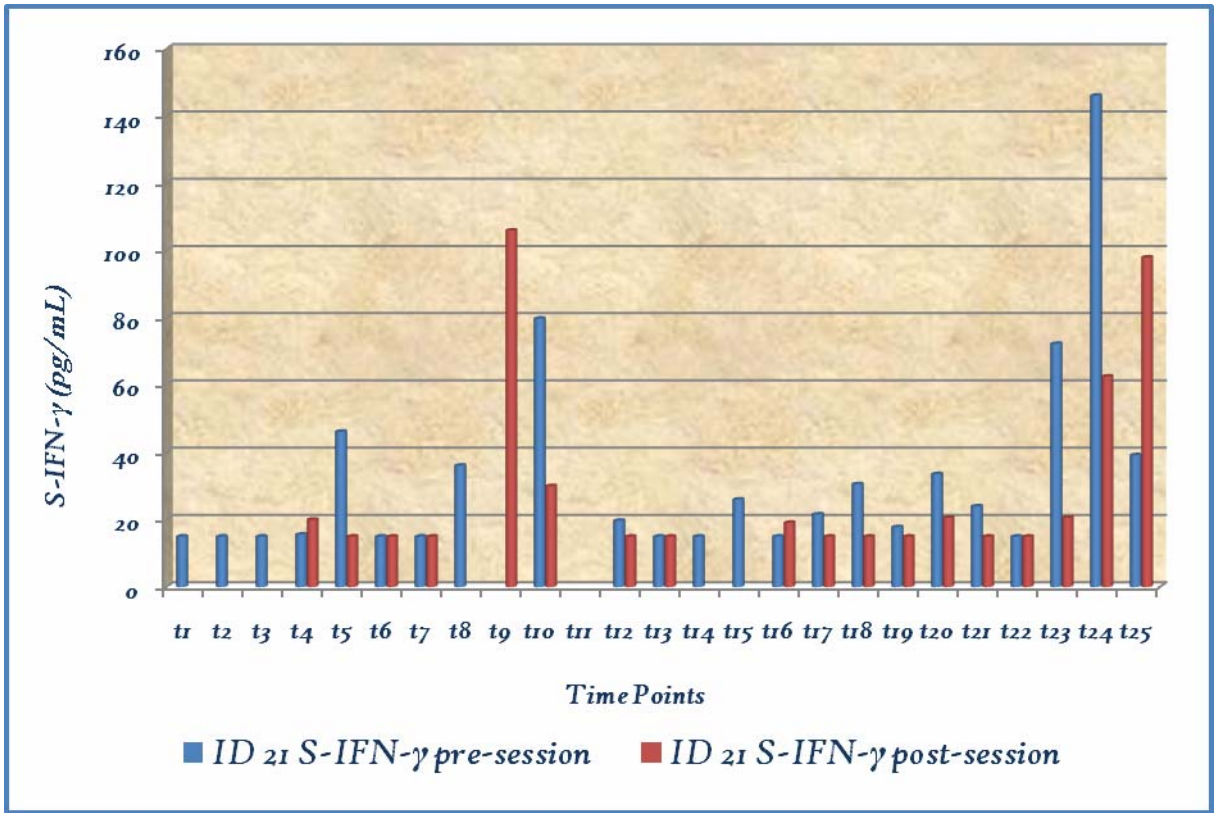


Figure 8c: ID$_{21}$Salivary IFN-y

Student t-test: paired two samples for Means; two tailed

Mean Pre-session=36.6 pg/mL. Mean Post-session=24.8 pg/mL. p=0.1

Baseline Mean =15 pg/mL. Mean % Change: post-vs-pres-session=-**4.6%**

Time Points	*% Change*
t4	
t5	*27.5*
t6	*67.5*
t7	
t8	
t9	
t10	*66.6*
t11	
t12	
t13	*-24.8*
t14	
t15	
t16	*27.6*
t17	*30.6*
t18	*-51*
t19	*-15.5*
t20	*-38.7*
t21	*-37.4*
t22	
t23	*-71.6*
t24	*-57*
t25	*149.5*

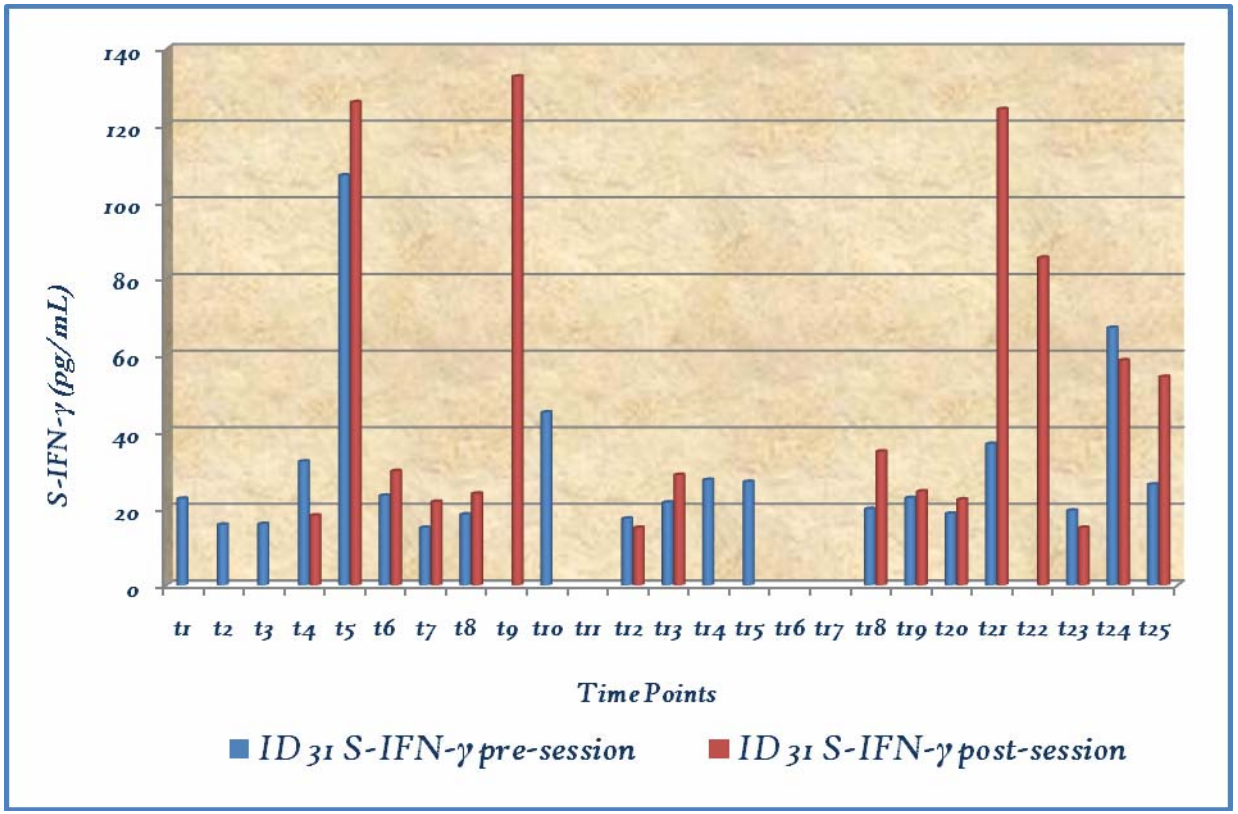


Figure 8d: ID_{31} Salivary IFN-y

Student t-test: paired two samples for Means; two tailed

Mean Pre-session=31.9 pg/mL. Mean Post-session=42.7 pg/mL. p=0.1

Baseline Mean =18.1 pg/mL. Mean % Change: post-vs-pres-session=+**41.3%**

Time Points	*% Change*
t4	*-43.8*
t5	*17.9*
t6	*27.6*
t7	*45*
t8	*28.9*
t9	
t10	
t11	
t12	*-13.6*
t13	*33.4*
t14	
t15	
t16	
t17	
t18	*75.4*
t19	*7.5*
t20	*75.4*
t21	*236.8*
t22	
t23	*23.2*
t24	*13.1*
t25	*107*

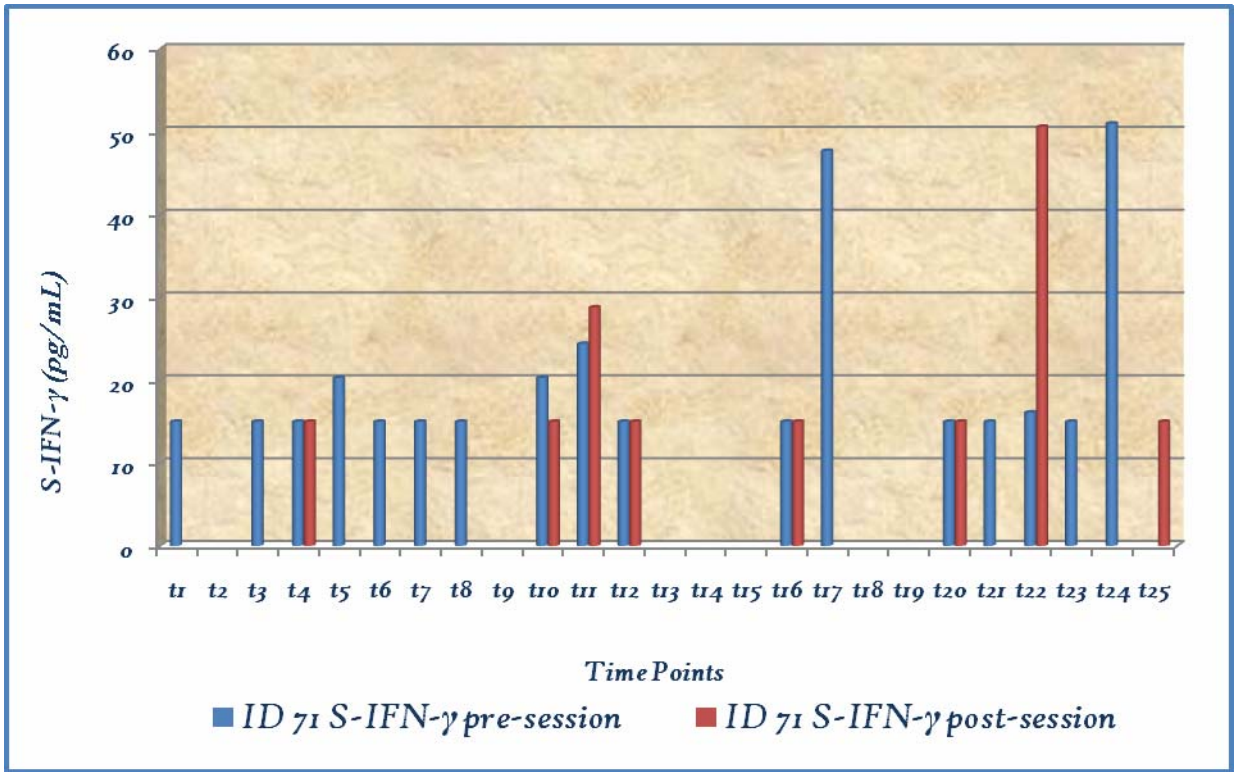


Figure 8e: ID_{71} Salivary IFN-y

Student t-test: paired two samples for Means; two tailed

Mean Pre-session=17.3 pg/mL. Mean Post-session=22.1 pg/mL. p=0.3

Baseline Mean =15 pg/mL. Mean % Change: post-vs-pres-session=+**29.6%**

Time Points	*% Change*
t4	
t5	
t6	
t7	
t8	
t9	
t10	*-25.9*
t11	*17.9*
t12	
t13	
t14	
t15	
t16	
t17	
t18	
t19	
t20	
t21	
t22	*214.9*
t23	
t24	
t25	

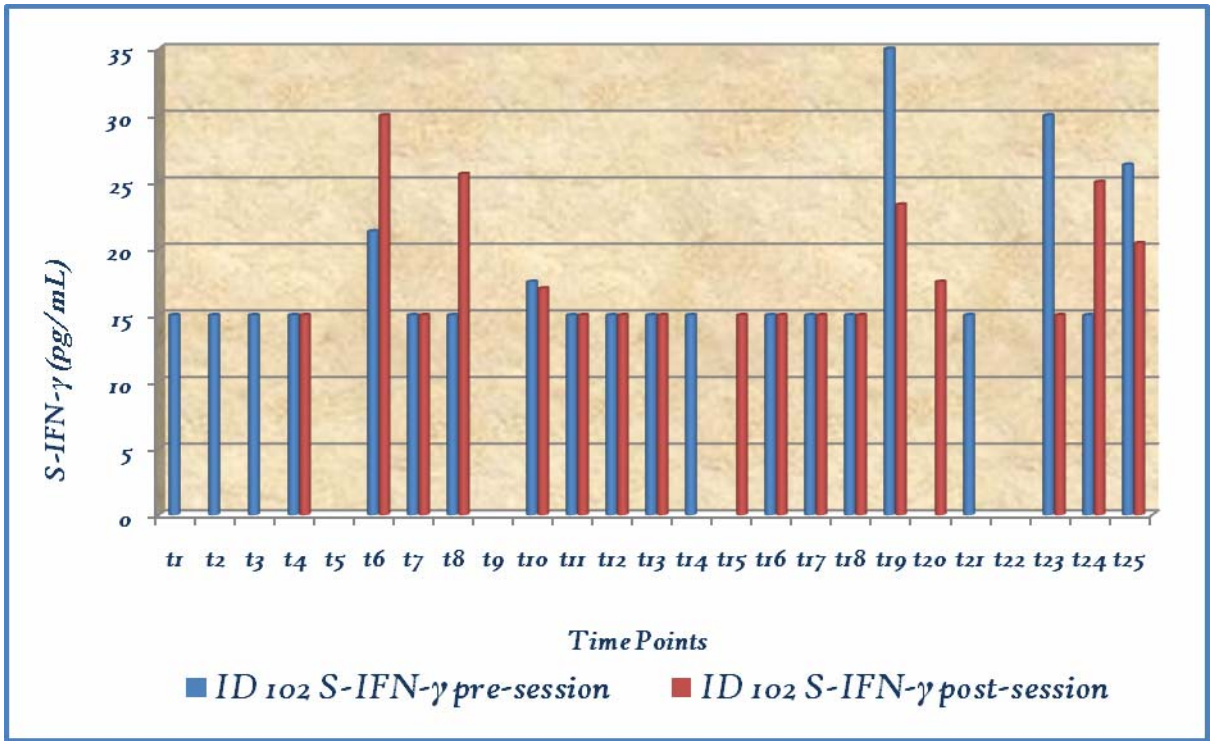


Figure 8f: ID_{102} Salivary IFN-y

Student t-test: paired two samples for Means; two tailed

Mean Pre-session=18.7 pg/mL. Mean Post-session=18.4 pg/mL. ***p*=0.8**

Baseline Mean =15 pg/mL Mean % Change: post-vs-pres-session=-**8.3%**

Time Points	*% Change*
t4	
t5	
t6	
t7	*40.8*
t8	
t9	*70.5*
t10	*-25.9*
t11	*-3.5*
t12	
t13	
t14	
t15	
t16	
t17	
t18	*75*
t19	*-49.8*
t20	
t21	
t22	
t23	
t24	*63.9*
t25	*-22.5*

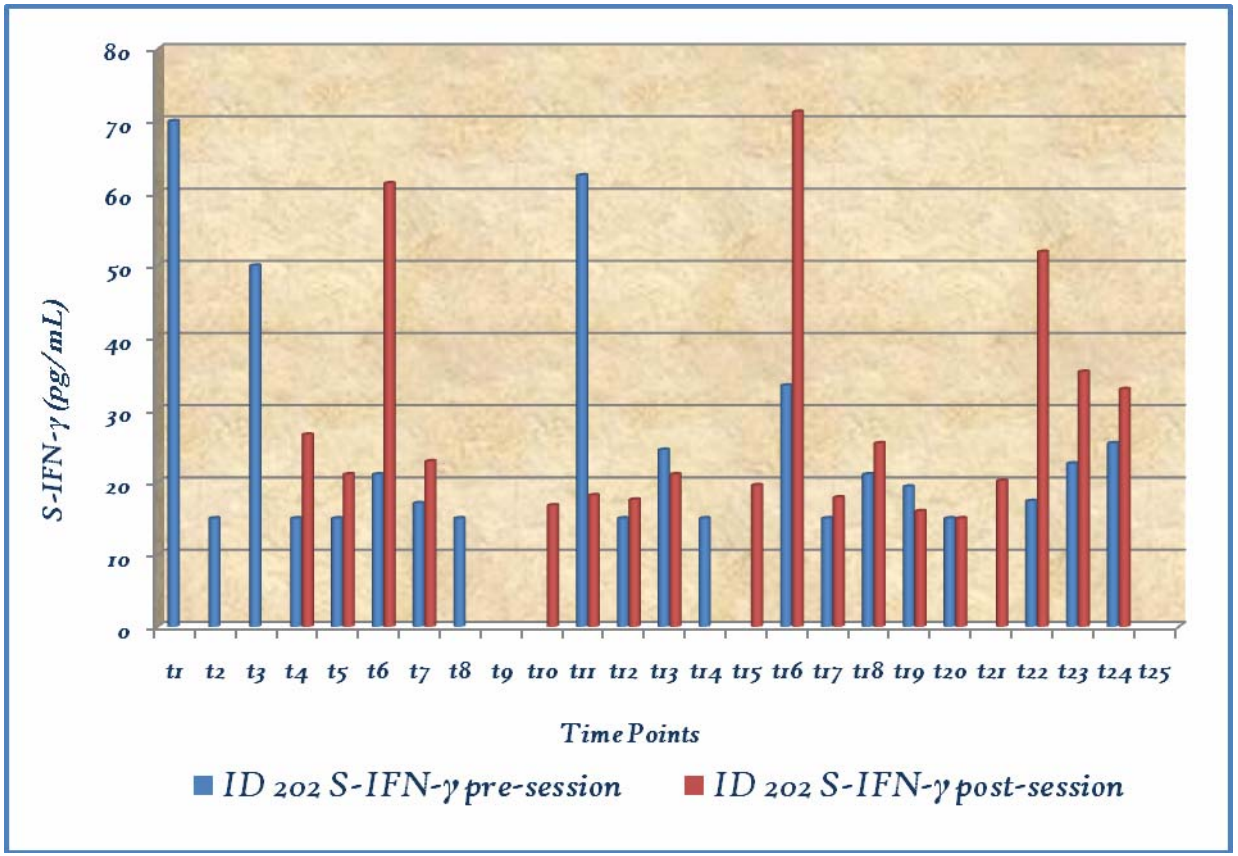


Figure 8g: ID_{202} Salivary IFN-y

Student t-test: paired two samples for Means; two tailed

Mean Pre-session=22.6 pg/mL. Mean Post-session=30.3 pg/mL. ***p*=0.1**

Baseline Mean =45pg/mL. Mean % Change: post-vs-pres-session=+**34%**

Time Points	*% Change*
t4	*77.7*
t5	*40.7*
t6	*190.8*
t7	*34.1*
t8	
t9	
t10	*-83.4*
t11	*21.3*
t12	*17.6*
t13	*-13.7*
t14	
t15	
t16	*-48.2*
t17	*19.5*
t18	*20.3*
t19	*-17.4*
t20	
t21	
t22	*198.8*
t23	*56.25*
t24	*29.7*
t25	

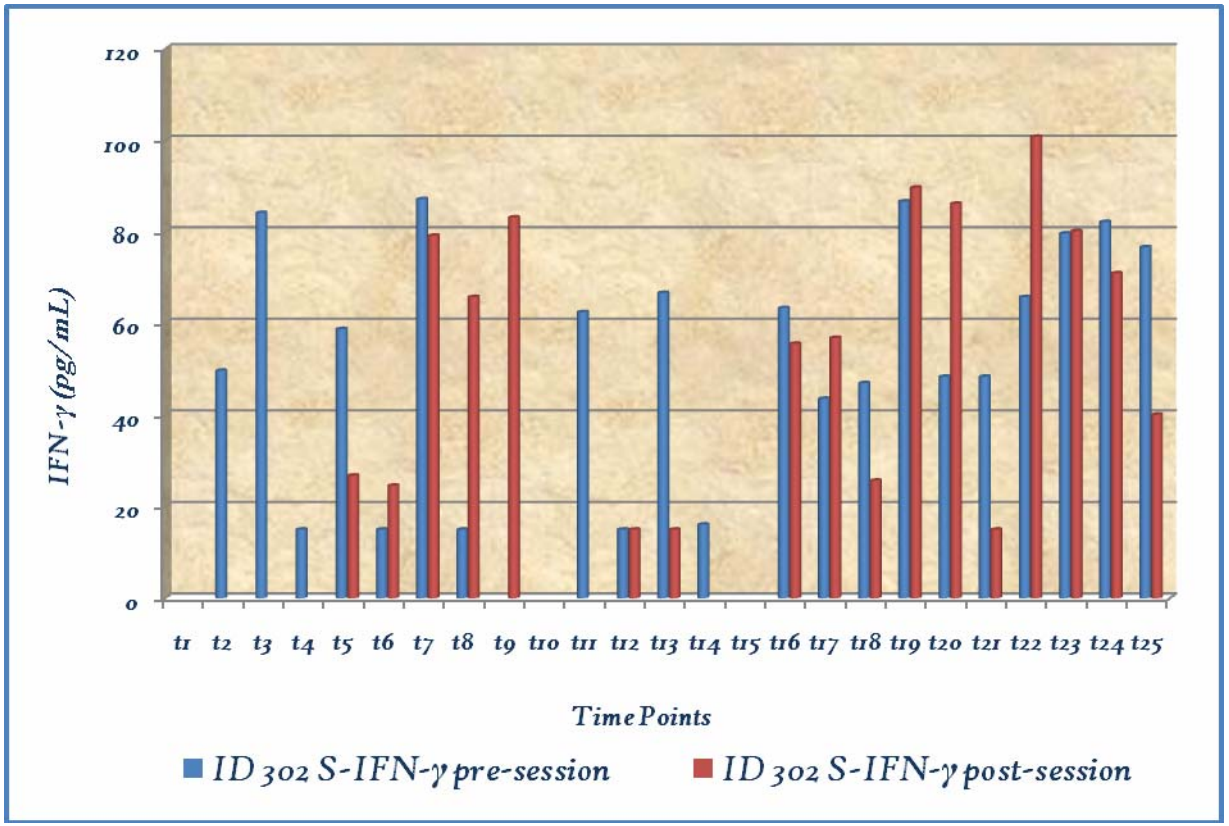


Figure 8h: ID_{302} Salivary IFN-y

Student t-test: paired two samples for Means; two tailed

Mean Pre-session= 56.2 pg/mL. Mean Post-session=53 pg/mL. ***p*=0.6**

Baseline Mean =67pg/mL. Mean % Change: **post-vs-pres-session**=-29.6%

Time Points	*% Change*
t4	
t5	*-54.4*
t6	*63.7*
t7	*-9.1*
t8	*338.4*
t9	
t10	
t11	
t12	
t13	*-77.5*
t14	
t15	
t16	*-12.4*
t17	*30.7*
t18	*-45.4*
t19	*-*
t20	*178.8*
t21	*-68.9*
t22	*53.3*
t23	*0.6*
t24	*-13.6*
t25	*-49.6*

Comparison of S-IgA and S-IFN-γ Data

A Wilcoxon sign-rank test was run, comparing the overall group mean, for each S-IgA and IFN-γ results, shown in **Table 5** (p.134) and **Table 6** (147).

A significant increase between the overall group mean post-vs-pre-session S-IgA levels (group mean pre-session =**90 µg/mL:** SD=39.79: group mean post-session = **125.5µg/mL**. SD=59.71) z=2.24: ***p*** **=0.03.**

There was no increase between overall group mean post-vs-pre-session IFN-γ (group mean pre-session=**32.6 pg/mL**: SD=13.03, group mean post-session=**33.3 pg/mL**: SD=13.63) z=0.14: ***p*****=0.88.**

Arithmetic calculations to ascertain percentage of change, from pre-session to post-session, were also completed, which demonstrated a mean increase of **39.4%** in S-IgA levels, post-session as compared to pre-session, and **2%** mean increase post-session as compared to pre-session S-IFN-γ (**Tables 5&6**).

In the group mean analysis there were two time points where the S-IgA, post-vs-pre-session reached statistical significance, and S-IFN-γ approached statistical significance (**Tables 5&6**):

- **t6**: S-IgA ***p*****=0.04**: S-IFN-γ, ***p*** **=0.08**: and
- **t22**: S-IgA ***p*****=0.05**: S-IFN-γ, ***p*** **=0.08.**

There was an almost consistent mirroring of concentration of S-IgA and S-IFN-γ, in that if one increased in a session, the other decreased.

DTH Test Results

Amongst the participants the response to the DTH tests (using PPD) was varied, (Table 7) where three were 'high responders' with a mean induration sizes of between **7.4mm** and **19.3mm**, two were 'moderate responders' with mean induration sizes of **1mm** and **3.3mms** (with no response to DTH at **t5, t14** or **t24**), two mounted responses to two of the six DTH tests with indurations of **2mm**, and one, to only one, with a **2mm** induration.

One participant (**ID 21**) showed a progressively stronger response over time, from **9mm** to a final result of **55mm**, whereas the other two 'high responders' (**ID's 102** and **302**) showed a strong response (**11mm** and **12mm** respectively) followed by a drop on the next test, and then upturn finally showing responses of **7 mm** and **22 mm** respectively.

ID	t0 04.02.04	t1 12.02.04	t5 11.3.04	t13 06.5.04	t24 22.7.04	t52 10.02.05	MEAN mm diam
1	5mm	6mm	absent	absent	nil	2mm	**3.3mm**
2	nil	2mm	2mm	nil	nil	nil	**0.7mm**
21	9mm	10mm	10mm	12mm	20mm	55mm	**19.3 mm**
31	nil	nil	nil	nil	2mm	nil	**0.3 mm**
71	2mm	2mm	2mm	nil	nil	nil	**1.0 mm**
102	11mm	9mm	absent	5mm	5mm	7mm	**7.4 mm**
202	2mm	nil	2mm	nil	nil	nil	**0.7 mm**
302	12mm	9mm	13mm	15mm	15mm	22mm	**14.3 mm**

Table 7: DTH test, Raw and Mean score

The **group mean DTH** results were subjected to statistical analysis to examine the degree of correlation (**Table 8**), in relation to the **group mean post-session S-IFN-y** levels for the corresponding sessions, showing a strong statistical relationship between the two at **t5** and **t24,** with a dip at **t13.** At **t13** there was a corresponding **drop** in **group mean post-vs-pre-session S-IgA** (**-25%:** p=0.33), and for **group mean post-vs-pre S-IFN-γ levels** (**-39%**). For S-IFN-γ at **t24,** the penultimate session in the intervention phase, there was also a drop (**-27.6%**), when the p value approached statistical significance: (**p=0.09**)

There was no significant correlation between **group mean DTH test results** and **group mean post- session IFN-γ prior to the intervention**, that is, at baseline measurement times, **t1, t2** & **t3**.

	DTH t5/ IFN-y post t5	DTH t13/ IFN-ypost t13	DTH t24/ IFN-ypost t24
Pearson Correlation	0.96	-0.12	0.86
Sig. (2-tailed)	*0.03	0.84	*0.03

Table 8: DTH and IFN-γ Pearson Correlation: Significant at 0.05 (2-tailed)

Psychosocial Results

The questionnaires were delivered and answered at the Newcastle Melanoma Unit at **t0** (prior to the intervention phase), **t25** (at the last session of the intervention phase) and **t52** (at 12 month follow-up)

nb. For all psychosocial tables:

Pre-intervention (pre)=**t0**, post-intervention (post)=**t25**, follow up (fu) =**t52**

1. Mental Adjustment to Cancer Scale

Mean scores are shown in **Table 9**, and results of Wilcoxon signed-rank tests in **Table 10** Individual scores showed that four participants (**ID's 2**, **31**, **102**, & **202**,) could be considered 'cases' in the Mental Adjustment to Cancer Scale, with raw scores at different time points of less than 47 for the sub-scale **'Fighting Spirit'** (**ID 2**: **t1=43**, **t25=41**, **ID 202 t1=45**, and **ID 102 t52=44**and more than 11 for the sub-scale **'Helplessness and Hopelessness'** (**ID 202**: **t1=14**, **ID 31**:**t25=12**, **ID102 t52=14**).

There was, on the other hand a statistically significant reduction for the group mean in the sub-scale **'Anxious Pre-Occupation'**. Wilcoxon signed-ranks test scores: (**t25/t0**) $\boldsymbol{p}$ **=0.03** (**t52/t0**) $\boldsymbol{p}$ **=0.07**.

The sub-scale **'Fatalism'**, measured by responses to such statements as *"I've left it all to my doctors"*, or *"I feel that I can't control what's happening"* showed a statistically significant reduction at the end of the intervention followed by an increase at 12 month follow up: Wilcoxon signed-ranks test score: **t52/t0** $\boldsymbol{p}$ **=0.05.**

Sub Scale	t0	t25	t52
Helplessness/Hopelessness (HH) Score Range: 6-24 Cut-off:>11	**8.1** S.D =2.8	**7.4** S.D=1.8	**8.5** S.D=2.8
Anxious Pre-Occupation (APO) Score Range: 9-36 Cut-off:>25	**14.1** S.D=2.8	**12.8** S.D =2.4	**12.5** S.D =3
Fighting Spirit (FS) Score Range: 16-64 Cut-off:>47	**49** S.D =3.8	**50** S.D =5.4	**50.1** S.D =4
Fatalism (F) Score Range: 8-32 Cut-off:>22	**15.6** S.D ==4	**15** S.D =3.3	**17.3** S.D =2.2

Table 9: Mean scores: Mental Adjustment to Cancer Scale

HH- post/pre	HH fu/pre	APO post/pre	APO fu/pre	FS post/pre	FS fu/pre	F post/pre	F pre/fu	F fu/post
0.3	**0.67**	***0.03**	**› 0.07**	**0.48**	**0.55**	**0.45**	***0.05**	**0.24**

Table10: Mental Adjustment to Cancer Scale: Wilcoxon signed-ranks test: p=<0.05

2. Hospital Anxiety and Depression Scale

Mean scores are shown in **Table 11**, and results of Wilcoxon signed-rank tests in **Table 12** There were four participants who could likewise be considered 'cases', according to the criteria of the HAD scale, with one participant having an **Anxiety** score greater than 11 which could therefore be placed in the clinically relevant range (**ID 71 t25**=13, **t52**=15) and the other three at borderline with scores of 11 (**ID 1**: **t0**=11, **ID102**: **t0**=11, **ID202**,: **t52**=11). The Depression scores, however, were all within the normal range, with the highest being **ID102** at **t0**=8. There was no statistically significant shift in either group mean '**Anxiety**' or group mean '**Depression**' scores.

Sub Scale	t0	t25	t52
Anxiety Score Range: 0-21 0-7: normal 8-10.borderline clinical 11+ clinical	**6.4** S.D =4.5	**5** S.D =4.4	**5.9** S.D =5.2
Depression Score Range: 0-21 0-7: normal 8-10.borderline clinical 11+ clinical	**2.9** S.D =2.7	**3.3** S.D =2.3	**2.9** S.D =2.8

Table 11: Mean Scores: Hospital Anxiety and Depression Scale

Anxiety post/pre	Anxiety pre/fu	Depression post/pre	Depression fu/pre
0.34	**0.73**	**0.67**	**0.89**

Table 12: Hospital Anxiety and Depression Scale Wilcoxon signed-ranks test: p=<0.05

3. The COPE Questionnaire

Mean scores are shown in **Table 13**, and results of Wilcoxon signed-rank tests in **Table 14.** On the COPE questionnaire scores there was a significant decrease in the total mean '**Avoidance'** parameter, (**t0**=6.6--- **t52**=5.8) post-session-vs-pre-session $\boldsymbol{p = 0.05}$. There was also a negligible shift, with an increase in total mean '**Engagement'** score (**t0**=10—**t52**=10.6).

These total means were calculated by adding the sub-scores:

To arrive at the Total Mean **Engagement** (**TME**) score, the following subscores were added:

- 'Focus on Venting Emotion',
- 'Seeking Instrumental Support',
- 'Active Coping',
- 'Humour',

- 'Restraint Coping',
- 'Seeking Emotional Support',
- 'Planning' and
- 'Suppression of Competing Activities',

and to arrive at a Total Mean **Avoidance** (**TMA**) score the following subscores were added.

- 'Denial ,
- 'Alcohol/Drug Use',
- 'Behavioural Disengagement' and
- 'Mental Disengagement'

There were statistically significant shifts in two COPE sub-scales with a **decrease** of '**Mental Disengagement**' (**t25/t0 p =0.02** & **t52/t0**) **p =0.05** and an **increase in** the sub-scale of '**Humour**' (**t52/t0 p = 0.04**). The sub-scale of '**Acceptance**' neared a statistically significant increase from before the intervention until its cessation (**t25/t0 p = 0.07**)

Sub Scale	t0		t25		t52	
Total Mean Engagement (TME) (FVE,SIS,AC,H,RC,SESS,PRG + SCA)	**12**	S.D =1.4	**11.7**	S.D =2.1	**11.6**	S.D =2.7
Total Mean Avoidance (TMA) (D,SU,BD + MD)	**6.6**	S.D =1.3	**5.6**	S.D =0.1	**5.6**	S.D =1.3
Seeking Instrumental Support (SIS)	**10.9**	S.D =3.3	**12.4**	S.D =2.6	**12.**	S.D =2.7
Seeking Emotional Social Support (SESS)	**10.6**	S.D =3.6	**11.**	S.D =3.5	**10.9**	S.D =4.2
Suppression of Competing Activities (SCA)	**10.**	S.D =2.3	**10.**	S.D =3.1	**9.7**	S.D =2.9
Turning to Religion (TR)	**8.6**	S.D =4.1	**7.9**	S.D=3.8	**8.3**	S.D =4.8
Positive Reinterpretation and Growth (PRG)	**11.1**	S.D =2.9	**10**	S.D =3.1	**12.4**	S.D =2.7
Restraint Coping (RC)	**8.3**	S.D =2.5	**7**	S.D =1.6	**7.9**	S.D =2
Acceptance (A)	**1**	S.D =3	**11.3**	S.D =2.1	**11.3**	S.D =4.2
Focus on Venting of Emotions (FVE)	**10**	S.D =4.7	**9**	S.D =3.1	**9.5**	S.D =3.5
Denial (D)	**6**	S.D =2.5	**5**	S.D =1.3	**5.4**	S.D =1.8
Mental Disengagement (MD)	**9.5**	S.D =2.5	**7**	S.D =1.3	**7.4**	S.D =1.8
Behavioural Disengagement (BD)	**5**	S.D =1.9	**5**	S.D =1.5	**5.1**	S.D =1.4
Alcohol/Drug Use (ADU)	**5**	S.D =1.4	**5.23**	S.D =1.4	**5.5**	S.D =2.3
Humour (H)	**5**	S.D =1.7	**5.9**	S.D =2.5	**7.3**	S.D =2.1

Table 13: Mean Scores: COPE Questionnaire

TME Post/Pre	TME Fu/Pre	TME Fu/Post	**TMA Post/Pre**	TMA Fu/Pre	TMA fu/Post
0.35	0.43	0.24	***0.05**	0.24	0.14

AC post/pre	AC fu/pre	P post/pre	P fu/pre	SIS post/pre	SIS fu/pre	SESS post/pre	SESS fu/pre
0.71	0.71	0.39	0.49	0.17	0.34	0.34	0.89

SCA post/pre	SCA fu/pre	TR post/pre	TR fu/pre	PRG post/pre	PRG fu/pre
0.41	0.28	0.25	0.57	0.49	0.12

RC post/pre	RC fu/pre	A post/pre	A fu/pre	FVE post/pre	FVE fu/pre	D post/pre	D fu/pre
1	0.68	> 0.07	0.22	0.34	0.55	0.28	0.59

MD post/pre	**MD fu/pre**	BD post/pre	BD fu/pre	ADU post/pre	ADU fu/pre	H post/pre	**H fu/pre**
***0.02**	***0.05**	0.19	0.67	0.7	0.19	0.65	***0.04**

Table 14: COPE Questionnaire: Wilcoxon signed-ranks Test: p=<0.05: pre=t0, post=t25, fu=t52

4. EORTC-QLQ-C30

Mean scores are shown in **Table 15**, and results of Wilcoxon signed-rank tests in **Table 16** On the EORTC-QLQ-C30, quality of life scale there was no statistically significant change in any of the sub-scales. The results of two sub-scales, however, approached statistical significance. For the sub-scale **'Physical Function'**, the result was closest to statistical significance, with the group mean score decreasing: t25/t0 p **=0.06**. For the sub-scale '**Emotional Function**' there was a consistent decrease over time which approached statistical significance: t25/t0 and t52/t0, both p **=0.08**.

Sub Scale	t0		t25		t52	
General Health (GH)	**11.8**	SD=1.8	**11.9**	SD=1.9	**11.6**	SD=2.7
Emotional Function (EM)	**7.1**	SD=4.2	**6.1**	SD=4.1	**6.3**	SD=0.85
Physical Function (PF)	**7.1**	SD=2.4	**6.1**	SD=1.4	**6.3**	SD=1.7
Cognitive Function (CF)	**2.9**	SD=1.1	**2.8**	SD=0.1	**2.9**	SD=0.8
Role Function (RF)	**2.4**	SD=1.1	**2.7**	SD=1.11	**2.6**	SD=0.93
Social Function (SF)	**2.5**	SD=1.1	**2.4**	SD=0.74	**2.3**	SD=0.71

Table 15: Mean Scores: EORTC-QLQ-C30 Quality of Life Scale

GH post/pre	GH fu/pre	EF post/pre	EF fu/pre	PF post/pre	PF post/pre
0.71	0.89	>0.08	>0.08	>0.06	0.1

CF post/pre	CF FU/pre	RF post/pre	RF fu/pre	SF fu/pre	SF post/pre
1	1	0.15	1	0.46	0.75

Table 16 EORTC-QLQ-C30 Quality of Life Scale

Wilcoxon signed-ranksTest: p=<0.05 pre=t0, post=t25, fu=t52

Correlation between Questionnaires

As there seemed to be a divergence of results, (for instance, a decrease in '**Emotional Function**' as scored on the EORTC-QLQ-C30 but an increase in '**Engagemen**t' coping strategies as measured by the COPE) a Pearson's Correlation test was run for all questionnaire results, matching time points.**Negative** correlations are shown in **Table 17a** and **Positive** Correlations are shown in **Table 17b**

Time (t)	Instrument	Sub Scale	Instrument	Sub Scale	Correlation	Sig
t25/t25	MAC	Fighting Spirit	EORTC-QLQ-C-30	Physical Function	-0.8	*0.05
t25/t25	COPE	Fatalism	EORTC-QLQ-C-30	Role Function	-0.8	*0.02
t52/t52	COPE	Avoidance	EORTC-QLQ-C-30	General Health	-0.7	*0.03
t52/t52	COPE	Engagem't	HAD	Depression	-0.7	*0.04
t52/t52	COPE	**Engagem't**	MAC	**Hopelessness-Helplessness**	**-0.9**	****0.003**
t52/t52	MAC	Anxious Preocc	EORTC-QLQ-C-30	Physical Function	-0.8	*0.03

Table 17a: Pearson's Correlation chart for Negative correlations between Questionnaires:

Significant at 0.05=* (2-tailed) 0.01=** (2-tailed) t0 = pre, t25 = post, & t52 = fu.

As shown in **Table 17b** (below), one of the highest degrees of positive correlation (**0.85: *p* =0.007**) was found between '**Social Function**' and '**General Health**'.

Time (t)	Instrument	Sub Scale	Instrument	Sub Scale	Corln	Sig
to:to	COPE	Engagement	EORTC-QLQ-C-30	Emotional Function	0.8	0.03
t25/t25	COPE	Engagement	EORTC-QLQ-C-30	Emotional Function	0.8	0.03
t52/t52	COPE	Engagement	EORTC-QLQ-C-30	Emotional Function	0.8	0.03
t25/t52	MAC	Fatalism	HAD	Depression	0.8	0.03
to/t52	MAC	Fatalism	HAD	Depression	0.7	0.04
to/t25	MAC	**Hopelessness Helplessness**	HAD	**Depression**	**0.8**	**0.02**
t25/t52	HAD	**Anxiety**	COPE	**Avoidance**	**0.8**	***0.02**
to/t52	EORTC-QLQ-C-30	**Role Function**	EORTC-QLQ-C-30	**Physical Function**	**0.8**	****0.01**
t25/t25	MAC	Fighting Spirit	EORTC-QLQ-C-30	Social Function	0.7	*0.05
t25/t25	MAC	**Fatalism**	EORTC-QLQ-C-30	**Role Function**	**0.8**	***0.02**
t25/t25	HAD	**Anxiety**	MAC	**Anxious Preocc**	**0.8**	***0.02**
t25/t25	HAD	**Anxiety**	EORTC-QLQ-C-30	**Emotional Function**	**0.9**	****0.002**
t25/:t25	HAD	**Anxiety**	EORTC-QLQ-C-30	**Social Function**	**0.8**	****0.01**
t52/t52	HAD	Anxiety	MAC	Anxious Preocc	0.7	*0.04
t52/:t52	HAD	Anxiety	COPE	Avoidance	0.8	*0.02
t52/t52	MAC	Anxious Preocc	COPE	Avoidance	0.7	*0.05
t52/t52	MAC	Fatalism	COPE	Avoidance	0.7	*0.04
t52/t52	MAC	Anxious Preocc	HAD	Anxiety	0.7	*0.04
t52/t52	MAC	Hopelessnes Helplessness	HAD	Depression	0.3	*0.04
t52/t52	EORTC-QLQ-C-30	**Social Function**	EORTC-QLQ-C-30	**General Health**	**0.9**	****0.007**

Table 17b Pearson's Correlation chart for Positive correlations between Questionnaires:

Significant at 0.05=* (2-tailed) 0.01=** (2-tailed)

Discussion of Quantitative Results.

"What is most meaningful often cannot be measured. What is verifiable may not necessarily be important. As the British scientist Denis Burkitt once wrote 'Not everything that counts can be counted'.."

Ornish[923]

IMMUNOLOGICAL RESULTS

Despite the small population size, statistical significance was found for various results, particularly the immunological results. Statistical significance or the lack of it, as Dean Ornish points out above, need not necessarily translate to clinical significance. In this group, however, the immunological results may well do so as there was a correlation at some time points between the degree of arousal, both for individuals and for The Group as a whole, and degree of statistical significance. Indeed the most interesting (and exciting) aspect of the distinct **alteration in immune function** was that **it mirrored specific events** within The Group, the greatest impact seen either side of the session where **Ned** 'lost the plot' (marked 'Ned loses plot' on **Figures 7 and 8**), leading in particular to an important catharsis for **Paul** (**ID 21**) and **Darren** (**ID 31**). Their catharsis also had a knock-on effect for the rest of The Group members, which was described in detail in the narrative. The **S-IFN-γ** post -vs- pre-session decrease in the group mean for this particularly anxiety provoking session, reached statistical significance (p=**0.04**), the only time point at which it did so, while there was no concomitant statistically significant change for **S-IgA** at that time. Perhaps these results indicate that **S-IFN-γ** is more sensitive to immediate increases in emotional arousal, which would be consistent with its evolutionary age. The literature is equivocal regarding the impact of arousal and distress on **IFN-γ** levels, however these results would agree with data recording a negative impact from such anxious arousal as that induced by examination performance.

The **S-IgA** did reach statistical significance, on the other hand, for total group mean post–vs-pre-session increase (p=0.02) at particular time points (t8, t21, t22 and t24, all, p=0.05) and individual mean post-vs-pre-session (**ID1, Alan**: p=0.01, **ID 202**, **Ron B**: $\boldsymbol{p}$**=0.005**, and approached significance for **ID 21, Paul**: p=0.07)

ID 302 (**Ron M**) developed a large BCC[lxxii] on his leg, within four months of the follow-up test, which necessitated surgical removal. Interestingly, while his **mean S-IgA** post-vs-pre-session levels increased over time, there was an almost consistent drop in S- IgA and S-IFN-γ levels between pre- and post-session levels in the last two months of the intervention, whereas his **total S-IgA** and **S-IFN-y** scores, both pre- and post-session were the highest in the group. This history might indicate that the salivary immunological parameters be considered for use as prognostic of potential dermal disease status.

The results of the group mean **S-IFN-γ** may have been skewed as a result of both the small sample sizes and low number of salivary samples, left for assay, after the **S-IgA** samples had been assayed. It may also suggest a lack of sensitivity of the ELISA, where cut-off was deemed to be at 15pg/mL. This may imply the need to develop a more sensitive assay than that which is in present use, particularly if the assay is to be used with people who are already known to be immunologically challenged.

There was one further time point at **t24** when The Group was engaged in mask making, an extremely tactile activity requiring trust, which approached statistical significance: ***p*= 0.09**, with a drop of **27.6%.** lending weight to the observations regarding the dampening effect of arousal on **S-IFN-γ** levels; again this corresponded to a statistically significant increase, for post-vs- pre group means **S-IgA** levels, ***p*=0.05**

The results of the arithmetic calculations of comparison of **S-IgA** and **S-IFN-γ** would suggest an overall treatment session effect of the art psychotherapy, on the **group mean S-IgA** levels, over the duration of the intervention, with these participants. No intervention effect over the duration of the intervention was demonstrated on the group mean

In the group mean analysis there were two time points where the S-IgA, post-vs-pre-session reached statistical significance, and S-IFN-γ approached statistical significance (**Tables 5&6**):

- **t6**: S-IgA ***p*=0.04**: S-IFN-γ, ***p* =0.08**: and
- **t22**: S-IgA ***p*=0.05**: S-IFN-γ, ***p* =0.08.**

[lxxii] BCC= Basal Cell Carcinoma

The first of these time points, **t6**, was when The Group was introduced to relaxation and a guided imagery, specifically designed to address the 'chakras', or major 'energy centres' contained there-in. All the participants responded with positive comments and several continued to use this visualisation as a 'stress reduction' technique. The second, **t22**, was a challenging session from the point of view of perceived control, when, serendipitously, this same visualisation was used, however in this instance the image was created using the 'wet-on-wet' technique; that is, liquid pigment was applied to wet water colour paper. Both sessions are described in depth in the narrative created from the qualitative data.

The results would suggest that, as has been demonstrated in the field of elite athletics, **S- IgA** and **S- IFN-γ** are markers acutely sensitive to change in degree of distress or arousal, **in the short term** (over the period of hours, rather than weeks), as a result of the intervention.

The intervention-effect over time is less clearly demonstrated. A trend, however, is visible after **t12,** the point which marked an important point in the group process. It was two sessions following Ned's conniption and directly followed the session at which the whole episode was discussed, at **t11,** a freeing, though nonetheless anxiety provoking session. It also marked his complete withdrawal from The Group and the point at which the remaining participants came together as a functional Group committed to The Quest involved in psychotherapy.

The positive trend is clearer in the case of the **S-IgA** results. Further, and of importance to this project, **this sensitivity is reflected in exploration of psychological content, specifically so for anxiety provoking issues, enjoyment and relaxation coupled with visualisation**. This is in agreement with literature previously discussed in Chapter 2 describing the interaction between various forms of psychotherapeutic intervention, reduction of psychophysiological distress and improved immune function, and perhaps adds weight to the steadily increasing body of literature. (**Figures 7, 7a-h, 8** and **8a-h** and **Tables 5** and **6**)

There was an almost consistent mirroring of concentration of **S-IgA** and **S-IFN-γ**. When there was high anxiety experienced by The Group (or individual members) **S-IgA** levels increased, and **S-IFN-γ** fell. This is clearly visible in the anxiety provoking sessions of **t10**, **t11**

and **t12**, and **t23.** When participants were relaxed however, shown most clearly at **t8,** a session during which The Group were in high spirits while they made completely spontaneous images (singing their 'own soul's song': see p.36) **both** parameters **increased**. Actually this session marked the greatest increase in **S-IgA** (**+225%**).and **IFN-γ** (**+85%**). (**Table 5, p.146 &Table 6, p.158**)

With regard to DTH results, one participant (**ID 21: Paul**) showed a progressively stronger response over time, from **9mm** to a final result of **55mm**, whereas the other two 'high responders' (**ID's 102**, **Jim** and **302, Ron M**) showed a strong response (**11mm** and **12mm** respectively) followed by a drop on the next test, and then upturn finally showing responses of **7 mm** and **22 mm** respectively. (see comments regarding **ID 302,** and his BCC, above). **ID 1** (**Alan**), with initially moderately strong responses decreasing to a low response at **t52**, developed a prostatic malignancy 18 months following the 12 month follow-up session. The other 'high responder' (**ID 21**) has had no further malignancy.

These correlations may reflect the response to anxiety, in the salivary parameters, resulting in reduced capacity to mount an immunological response to a 'remembered' antigen, however there were statistically relevant correlations between DTH test result and **S-IFN-γ** at **t5** and **t24**, both anxiety provoking sessions, when at **t5** the perception of 'stress' was discussed, and previous events resulting in anxiety and distress aired, and at **t24** when masks were made, a point approaching statistical significance for **IFN-γ** (***p*** **=0.09**), displaying a healthy congruence between aroused anxiety and DTH test response.

PSYCHOSOCIAL RESULTS

The questionnaires employed, (MAC, HAD, COPE and EORTC-QLQ-C30) were used as they are well known in the research literature. There is also now a large body of evidence, discussed in Chapter 2, which supports the understanding that prolonged 'stress' is a function of pathophysiology, and that a major component of 'stress' is the mediation of coping. In line with that understanding, it appeared that the COPE and the MAC questionnaires were most useful, although there was no clear trend for the psychosocial score results overall.

MAC: Some of the results from the questionnaire were consistent with my initial observations of The Group where a general climate of helplessness pervaded, although there was no apparent hopelessness. The early helplessness was, from my perception of the participants, more a lack of understanding of their own capacity for agency within critical relationships, including that with their respective consultants, than total helplessness. In addition to a lack of clinical evidence of 'Hopelessness' there was no apparent evidence of a lack of 'Fighting Spirit': the mere fact that they engaged in the research project would gainsay these questionnaire results. As mentioned in Chapter 5, however, the relevance of the sub-score defined as 'Fighting Spirit', is now in question, as no increase in survival has been associated with higher scores.

There was, on the other hand a statistically significant reduction in the sub-scale **'Anxious Pre-Occupation'** which might suggest a reduction in rumination about their cancer, a result contrary to the concerns of the clinician mentioned in Chapter 6.

HAD: Again the issue of 'case-ness' was evident. Three participants could have been diagnosed as suffering PTSD, indeed one, **ID 31, Darren** a Vietnam Veteran and long term sufferer of PTSD was thus clinically diagnosed, **ID 302, Ron M,** still suffered after his experiences as an isolated electrician, **ID 71, Rose** was still so anxious about her abduction that she could not talk about it in The Group and remembered the number plate of the car more than 30 years later. She was also disentangling herself from a marriage of more than 25 years. In other words, rather than these people being 'cases' of anxiety or depression resulting from their illness or hospitalisation, the affective states long preceded their diagnoses of cancer.

There was no statistically significant shift in either of the scales although all the remaining participants described a decrease in both feelings of anxiety and depression/sadness.

COPE: The COPE questionnaire appeared to be the most relevant questionnaire to this group intervention, as the issues of perceived distress and capacity for both agency and choice of response were actively explored. Methods of coping therefore became central to the discussions arising from their images and expressed concerns. The degree of 'Avoidance' behaviour decreased significantly from prior to the intervention to the 12 month follow up, as The Group became a safe space within which to share experiences and interact in a meaningful way with other participants in The Group, although there was little change in the degree of 'Engagement' behaviour which would appear to be counter-intuitive. If one avoids less one would expect that one would engage more, the understanding of which formed the basis of the questionnaire.

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EORTC-QLQ-C30: These results, although again seeming to be counter-intuitive, are consistent with the process of psychotherapy; a process through which people examine their emotional state, and are actually given permission to engage in the release of pent up feelings. The decrease in '**Physical Function'** is also consistent, in that during this emotional release participants also realise that they need not maintain a 'front' in order to be seen as 'strong' and 'coping', when in fact they may not be either.

CORRELATIONS BETWEEN QUESTIONNAIRES: The negative correlation, calculated by Pearson's correlation on SPSS, above (**Table 17a**), between 'Fighting Spirit' and 'Physical Function' would appear to be counter intuitive, unless it indicates an increase in recognition, on the part of the person answering the questionnaires, that a decrease in 'Physical Function' may be indicative (rather than the result) of ill health, and requires the engagement of a will to fight for survival, which is different to fighting one's disease process. The other negative correlations are consistent with the concepts addressed in the respective questionnaires, for instance that there is a correlation between the COPE sub-scale of 'Engagement', measuring the degree to which a person actively copes with adversity, is capable of re-interpreting the incident to allow personal growth, and seeks both instrumental and social support in that effort, and the immobilising feelings of 'Hopelessness and Helplessness', measured on the HAD scale and associated with 'Depression' as measured on

the MAC scale. It would seem rational that if a person were to be more 'engaged' in social interactions their degree of hopelessness and feelings of helplessness and subsequent depression, would diminish, similarly if she were to increase the amount of energy used in activities geared towards avoiding interactions with others, her general health would suffer, as a result of the ensuing isolation.

The highest positive correlation (**0.9: p =0.002**) was between '**Anxiety**' and '**Emotional Function**' which, on face value is also counter intuitive: one would anticipate that an increase in anxiety would negatively correlate with an increase in social function, in other words, people who are very anxious tend to avoid social interactions.

CHAPTER 7

QUALITATIVE DATA:

The Story Behind the Numbers; A Journey Past the Sun[lxxiii]

"Illness is one of the forms of experience by which humans arrive at a knowledge of God"
Abu Hamid al-Ghazzali, Sufi (1058-1111)

"If we see illness as a messenger of the Divine, or even as a message from our own body or mind, then we can shift our focus from the ailment to the meaning it contains"
Caroline Myss[924]

If I had to represent my own existence as faithfully as possible, I wouldn't describe myself as a case history, because I don't experience myself as a case history. Rather, I would be inclined to describe the central theme or drama of my existence and then show its ramifications into details of my experience. My existence is more like a repetitive drama soaring and falling than it is a case history with its neat categories of early development, sibling relationships, sexual history, and o forth. My existence is here – now. I would have to begin here – now. Yes, this would be reaching a faithfulness to my experience."
Wilson van Dusen,[925]

The Art Psychotherapy Process: Creation of Qualitative Data

In a fundamental sense the participants drove the sessions, although, as the art psychotherapist, I facilitated exploration and discussion. In essence the issues which were raised by the participants were those of existential angst surrounding such concerns as the confrontation with mortality accompanying their diagnosis, fear of recurrence of disease, interpersonal dynamics both within their families and at work, dependency vs interdependency and helplessness vs autonomy and feelings of isolation[926,927]; issues which, unbeknown to them at the beginning of group art psychotherapy, are recognised as having a negative impact on immunological function[928].

[lxxiii] It is received wisdom that cutaneous malignant melanoma is caused by excessive exposure to sunlight; however, there is an immunological component and recent research, has brought to light other ' causative agents' amongst which are prolonged 'stress' and dietary trans-fatty acids; hence the title.

At the beginning of each session a general discussion about whatever had come up for the participants during the intervening week, ensued. I listened for the overriding theme in this discourse and would suggest an image, representing the essence of that theme visually. The images were communally shared and discussed; hence images or models reflected issues that were important in their life-worlds. Two ways to described the process are as a phenomenological exploration to find the essence of a phenomenon, or as what Jung[929] described as amplification, where a dream fragment or story is illustrated in order to explore both individual associations and a placing of those associations in the broader context of the transpersonal and archetypal ___ and on the way connect with the essence of the experience. Individuals had the freedom to 'pass', if they chose not to engage in discussion and the degree of group cohesion, or interest in the exploratory process, was such that it was very rarely used. I have a vivid memory of one of my first Gestalt training groups where I was in the 'hot seat'; feeling trapped into exposing more of my inner self than that for which I was prepared: the end result was positive because I was determined to complete my training, and I now also know that there are less drastic ways to gain the same results. I have since developed a strong sense that it is important to maintained congruence between the practice of psychotherapy, and my stance of accepting and honouring the 'other's' (the *quaestor's*[lxxiv]) autonomy. Through the intent focusing of attention on the images, paradoxes, repeating themes, omissions or irregularities in physical forms when seen were fed back to the person who had made the image, which led to further exploration of inner content, feedback from other members in the group and a spiralling dance of ideas back and forth between us all; the hermeneutic spiral in action[930]. The degree of spontaneous interaction increased as the members gained confidence in the process and trust in each other (and me).

Some of the group images were minimally directed, the decision for this being based on several factors, first of which was the novelty of the method for the participants. A second consideration was the apparent and expressed need for direction of the participants, which lessened over the course of the intervention. Third was the advantage and economy of uniformity in subject matter to simplify analysis of images. The images which were specifically directed were the Kinetic Family Drawings, Stories from Childhood and the first Group Image

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[lxxiv] See footnote xliv, p71

In Chapter 3 there is a description of the types of materials made available in the art psychotherapy setting; the choice of medium was left to each individual. No prior experience with art was required, as the process of art psychotherapy is **not** about making art; rather, it is about engaging the capacity for creativity and using a different modality of communication and exploration, with strong connection to the 'unconscious'[lxxv], or that which is beyond ready intellectual articulation.

It was fascinating to observe a gradual 'maturation' of use of art materials and expressive style, beginning with the tentative use of either simple graphite or coloured pencils and then oil pastels, eventually progressing to confident brushwork with acrylic paints, wet on wet watercolour work, clay construction and, perhaps the most challenging, mask making.

All of the sessions were recorded, the first three audio-taped, but then subsequent sessions digitally video-taped. This decision to change from simple audio to video recording was made for several reasons, primary amongst which was my hearing impairment. I found that I was unable to take notes of the interactions at the same time as listening to what was being said. Although I use very efficient digital hearing aids, my hearing loss (80%) necessitates that I rely heavily on visual cues in conversation. In order to make this decision, I left the participants alone to discuss, as a group, the medium of recording with which they were most comfortable. Videotaping the sessions was deemed preferable to a 'scribe'. The camcorder was set up on a tripod at the beginning of the session, usually in a different place each time I decided not to interfere with the recording process for two reasons; firstly because I was active as therapist/group facilitator and secondly to reduce the intrusiveness of the recording process. It wasn't possible to include all the participants in the screen at any one time, consequently different participants were filmed at different times, although the voice recording captured all conversation. The digital tapes were transferred to DVD and a selection of the verbal transactions subsequently transcribed.

[lxxv] The unconscious is central to psychoanalytic theory: in Freudian theory it represents that which is unacceptable and therefore repressed, and is expressed through metaphor, symbolic language or parapraxes (slips of the tongue and malapropisms): in Jungian theory the personal unconscious is one facet of that function of mind in addition to which there is the Collective Unconscious though which universal psychic phenomena are expressed and experienced in the symbolic shape of Archetypes: Lacan described the unconscious as the gap between what one experiences (the real) and the expression of experience through language (the symbolic); a symbolic system of articulation and communication.

Images made by the participants were kept in individually marked A2 manila folders, locked between sessions in a storeroom at the Melanoma Unit. Digital photographs were made of these works at the end of the intervention phase, and the originals were returned to the participant. The digital copies, with identifiers removed, remain in my archive of art psychotherapy images.

I kept a journal of reflections, independent of the audio and videotapes, as would be expected in hermeneutic phenomenological research and in an anthropological setting. Group members were also asked to keep a 'process diary' in which it was suggested they write any thoughts that they wished during the intervention period. These diaries were photocopied at the end and returned to their owners. My notes, together with the session transcripts, excerpts from the diaries, and the images, form the data out of which the narrative was created, to tell the story of both individual and group processes, illustrating the Journey which all of us undertook. When coupled with immunological results this is indicative of a reflection of physiological response in psychological process.

Transcription

As there were in excess of 80 hrs of recorded group interactions, a pragmatic decision was made to transcribe only the sessions with immunological significance; a decision based primarily on cost, as my hearing impairment precluded transcribing the DVD's myself, and secondarily because the thrust of the research was to investigate the impact of art psychotherapy and the process of psychological change, on immunological function. The transcripts were retained throughout the analysis process, and the DVD's accessed for clarification of transactions of those or other sessions, if necessary.

The transcription was completed by a member of staff within the University, who had no contact with the Newcastle Melanoma Unit, and who was also aware of the necessity for confidentiality and respect for the participants' anonymity.

The Duration of the Intervention

The 6 month duration of weekly sessions of the intervention is based on the understanding that change is a complex process, and re-regulation of immunological 'behaviour' is slow to establish, as are changes in modes of psychosocial function. While immediate shifts are observable, they may not 'hold'. There is also a cumulative effect in both areas as 'behavioural' changes are embedded, not necessarily identified in the short term, and which gains solidity only over a period of six to twelve months. In psychotherapy research it has been observed that good symptom change can occur within approximately 26 weekly sessions, but rarely less[931].

It is important to understand the dynamic of the relationship between facilitator, participant, image, and the group, in order that the components of the interaction that foster change are identified and become reproducible if positive, and eliminated if negative. It is also necessary to illuminate the process through which change is established in order to transfer the research findings to the clinical setting. This can be achieved through a disciplined application of phenomenological research.

Reshaping the Protocol

As previously mentioned in Chapter 6, the necessity for re-shaping the protocol, while maintaining an ethical relationship with those who had committed to participate in the project, became obvious. The proposed change was a bit of a jolt for some, but others were relieved as they'd felt very much 'on their own' after the diagnosis and surgery for their melanoma. The first person to sign a consent form was Rose, who had waited 18 months for the project to begin!

I had been in a quandary about carrying out a randomised controlled trial and employing phenomenological analysis of the qualitative data, as they are philosophically at odds. On the other hand I recognised that the majority of biomedical research is contained within the positivist tradition. It could, however, be argued that it is in fact not possible to construct a true control arm for this study. Any other contact with participants in another group would simply be a different intervention. There was a level at which I was happy with the turn of

events and at the same time mindful that the quantitative data might well be in jeopardy. We pushed on.

We made this decision without first consulting with the Ethics Committees of either the University or the regional health authority, and were subsequently, quite reasonably, 'rapped over the knuckles' for stepping outside the research mandate which necessitated that we gain their approval for all changes to the protocol. After submitting the necessary changes, permission was granted, and the intervention proceeded

Other Modalities Used and Educational Aspects of the Intervention

At times the participants specifically asked for additional information and so other modalities were utilised in order to enhance an understanding of such things as body awareness, communication skills and interpersonal relationship issues. This also included educational content in such areas as:

- Transactional Analysis (TA)/Gestalt Berne[932], Perls[933] exercises; Rogers'[934] positive regard;
- discussions about other energy systems, such the Chakra system; integrated systems; ecology;
- basic immunology in relation to melanoma and distress related function;
- the fracturing of memory with Post Traumatic Stress Disorder (PTSD) and recovering wholeness;
- brain physiology in relation to reaction/response choices, *vis a vis* 'Emotional Intelligence'[935], and the way that we are capable of modulating our perception of social issues and opinions by reframing to go beyond 'parental' dictates;
- choice and responsibility;
- dietary and behavioural considerations in health;
- how a sense of personal identification and responsibility is created and lost;
- how and where distress is experienced and the role of perception in that experience using Frankl's[936]; concept of choice in meaning making and morality
- and how and where interpersonal dynamics are learned.

It was an interactive, iterative process of discovery between all of us. In fact each session was marked by engaged and lively conversation and intellectual exchange as well as emotional exploration, emanating from the creative activity of producing pictures and supported by the physical sustenance of a shared meal.

Recruitment and Group Structure

The recruitment process and requirements for, and excluders from, the project are described in detail in Chapter 5. All the participants continue to be regularly monitored by staff of the Newcastle Melanoma Unit and as the time since diagnosis was not an excluder in the recruitment, a range of 'adaptation' to their diagnosis to be expected.

The group structure was a complete surprise to me. Everyone involved in the study design and eventual recruitment of participants, had assumed that there would be a gender bias towards females, psychotherapeutic support assumed to be a 'female thing'. On the contrary, of the eight who completed the intervention, only two were women, and the one participant who attended all sessions was also male. This proved to be a very different experience for me, and I learned early on that the men were not particularly comfortable with unstructured time.

All of the participants were fair skinned Caucasians and several also had blond hair.
The men were either retired (usually on medical grounds) or close to retirement, although both Jim and Ron B continued to work part time. All the women were extremely active as primary housekeepers and in the workforce, either as volunteer or waged workers. Other demographic data is described in Chapter 6.

If any participant was absent from a session I telephoned them to discuss the missed session's topic and group work and to provide support if needed.

The Space

The Group met in a room at the Newcastle Melanoma Unit each Thursday evening at 5.30 for between 3.5 and 4 hours, for six months in the first half of 2004. It is a setting with which

all of the participants are familiar, and has both intellectual and emotional associations with their treatment and care. The unit, together with the Breast Cancer Unit, which had opened shortly before I started recruiting, is housed in a new building, away from the main hospital. As we met there 'after hours'[lxxvi] each person had to be let in by others in the building, usually one of the Clinical Nurse Consultants who stayed behind as the attendant staff member. This caused some problems until a bell was installed.

The room in which we met was large enough to contain all of us comfortably, with an attached kitchenette, although there were some draw-backs. It is next door to the room in which the monthly Board meetings of the Melanoma Foundation are held, separated by a movable partition, which meant that conversations from both sides could be overheard. It is a carpeted room; on the one hand this is a comfortable environment and on the other it is not conducive to 'messiness' (in fact the session where masks were made was a small disaster in that respect), or working on the floor, which I find facilitates disinhibition and greater kinaesthetic involvement with the art making process. Two joined tables large enough to accommodate the participants in **conversation** furnished the room, however it was not actually large enough to allow a comfortable spread for drawing, painting or modelling. Lastly there was no place, or wall space, where pictures could be stuck up; an important part of 'claiming space' in the art psychotherapy process.

The benefits, however, certainly outweighed the detractions.

Shared Meals

The session times coincided with evening meal time and, as the light refreshments that I provided didn't 'fill the hole'; we discussed the possibility of a communally created a meal. This communal activity, where the fellows also brought food that **they** had made, provided both metaphorical and actual nourishment to The Group. The contribution to a shared meal holds both practical and archaic metaphorical significance. By devolving the responsibility of physical nourishment on to The Group as a whole, I was signifying that we also all bore responsibility for emotional nourishment, at the same time as accepting them as functional

[lxxvi] The clinic operates between 8.30am and 4.30 pm: the building is usually locked after 5pm.

adults, and an unwillingness to take on a parental role. I was also recognising their capacity for 'self nourishment', in that actually making the contribution was important; this last point was a little difficult for a couple of the men to grasp, at first, but eventually they all created food that we shared. On a practical level the meal was necessary to avoid low blood sugar 'grumpiness' late in the evening

My Self Care

I maintained a balance between the dual roles of researcher and psychotherapist by engaging in outside supervision and by consciously focusing only on the psychotherapy process while The Group was in progress. This was greatly assisted by having the salivary samples assayed in one run **after** the cessation of the intervention, and so I was 'blind' to the immunological changes, except the DTH test results.

Analysis of Data

Smith and Osborne[937] point out that there is an interpretive relationship with the transcript (in this case, also the DVD's and images), and that *"Qualitative analysis is inevitably a personal process,* ***and the analysis is itself the interpretive work which the investigator does at each stage"*** and that the ***"Division between analysis and writing up is, to a certain extent, a false one, in that the analysis will be expanded during the writing phase"*** [lxxvii]. Kelly and Howie [938] quoting Polkinghorn[939], state that *"the actions, events and happenings"* extracted from transcripts are reconfigured to create *"stories as the outcome of the research process,"* and Rice and Ezzy[940] point out that it is necessary to acknowledge that narrative is an organised discourse recreated by the narrator, and that this is found in the **chunks of dialogue**, not in coded categories.

There seems to be no agreement on how to conduct analysis of transcripts or filmed interactions, but three things that are agreed upon across the field, are that the investigator must **connect** with, and make sense of, the story that lies in the transcripts, the story is

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[lxxvii] My emphasis.

heard, and, like any good story, it must hang together: the magic[941] is in the interpretation and reconstruction.

Borkan[942], describes an iterative process of Immersion and Crystallisation, where the researcher immerses himself in the data until themes crystallise, which are them honed by further immersion. Giorgi[943], one of the founding developers of the psychological phenomenological research method outlines 5 key steps in any qualitative research method[944], they are: **1**). The collection of verbal data. **2**.) Reading the collected data. **3**.) Breaking the data into some kind of parts. **4**.) Organising and expressing the data from some disciplinary perspective and finally **5**.) Synthesising a summary of the data and communicating it to the scholarly community.

If the discipline used is phenomenology Wertz[945]states that the **core characteristics** are that it must be **descriptive**, use **phenomenological reductions**, investigate **intentional relationships** between persons and situations and **provide knowledge of psychological essences**. He describes the process of phenomenological analysis as immersing oneself in transcribed text of research dialogue (interview or psychotherapy process) in order to grasp the broad meaning of what the participant is saying about the phenomenon under investigation, followed by an elimination of redundancy of expression and perhaps the naming of themes identified, preparatory to eidetic analysis (gaining insight) and finally an ordering of the data to be presented as a description of the situation or phenomenon in the participant's first-person language; except for the phenomenological attitude it is a process not unlike Borkan's.

In the process of performing the research, the researcher must always maintain an attitude of respect and empathy towards the participants, recognising them as co-creators of the process in which they are both engaged; the research. The phenomenological '*epoqué*' is established when the researcher maintains a non-judgemental attitude, 'bracketing' all suppositions regarding the person(s) with whom she is engaging, focusing on the experiences occurring in the encounter.

Steps in Analysis

i.

The intuitive process: reading the transcripts in their entity

As both an artist and a psychotherapist I work very much in tune with my intuition, and I spend long periods of time allowing an idea to find its own form, which is translated into a piece of text, a painting, a sculpture, a poem, piece of embroidery or clothing. I'd naturally been deeply immersed in the process of creating the data as it emerged, so I felt it necessary to gain some distance from the recordings and transcripts, before I re-immersed myself in those data. I was very comfortable with the intuitive process of immersing myself in the transcripts, reading and re-reading them, and at times watching the DVD's. I did this to feel the 'sense' of what was being 'played out' in the sessions, to re-connect with the context and body language. I also re-read my process journal to elucidate points of incongruity, wonder, or amazement. At the same time I went backwards and forwards between the graphs of the immunological results and the images.

Watching the DVD's is an advantage over simple transcript. In a lecture during my training in Sheffield this point had been made by an art therapist working in the forensic sector, who'd worked with some notorious murderers, one of whom reportedly said, *"I wouldn't kill any-one!"* We students were challenged to find how many meanings we could make of that simple sentence by shifting the emphasis and inflection; a thing difficult to do with a straight transcription. (It turned out that the guy had said that he wouldn't kill **anyone,** implying a sense of specific selection).

ii.

The analytic process:

As the themes were crystallising I worked on this pastel (Plate 7); Hecate summoning me into the depths of the earth, to tread her spiral maze, and find the

threads of the storylines. It is Hecate who has night vision, essential for working in the darkness of both psychotherapy and research.[946] Just as the wounded god, Hephaestus, appeared to sit by his forge, building up the fire preparatory to casting nuggets of metal into shapes of beauty and utility, an unconscious imaginal metaphor of the story-finding. The art making process is integral, not only to the therapeutic process, but also the therapist's personal process. It is part and parcel of an intuitive way of apprehending and responding to the world I inhabit, recognised in all creative endeavours, including scientific research.

Plate 7: Hecate's Call

This is illustrated by the well known stories of Kekule and his discovery of the benzene ring, while dozing by the fire[947], or, according to Professor Robert Winston on a recent ABC television production[948], David Bohm's moment of revelation regarding quantum physics while he watched horses galloping around a race track. The flash of intuition, however, is insufficient unto itself; it must be followed by 'the work', as it is called in alchemy, forging and transforming the nuggets of intuition into something of beauty and utility: shared knowledge.

ii.

Crystallisation:

An iterative movement occurred as I wove backwards and forwards between storylines, pastel, and the interpretations that I was making. I highlighted moments in the text where I could see a shift in perception of stress, or sense of agency occurring. Initially I found it difficult to shift my 'gaze' from that of attending to the therapeutic process as I re-entered the flow of that process, to that of analysing the 'text'. All the time I maintained a sense of openness to the process that I observed again, keeping my eyes wide open and ears attuned to the sound of the storylines as they shuttled beneath my feet[949], as I shifted from following the skeins and threads of the psychotherapeutic process to finding the core stories embedded in the experiences and associations that the participants made to life events and patterns, and their diagnosis of cutaneous malignant melanoma. A remark from my eldest daughter, when I read a piece I had written to her, crystallised the conflation of the two roles, of psychotherapeutic analysis, and research analysis, and I was able to clarify the fabric with which I'd struggled. I was then able to 'hear' the **pain** and sense the relief of **healing**, the two invariants, carried in the reality of desire for connection and relationship. I identified the skeins and threads which related to the expression of this desire and gained further insight into the storylines of each participant, and The Group as a whole, outlines of which were revealed in the first four images (the first being a collectively created group image, and the next three individual images).

Pain was experienced with the diagnosis of cancer and a sense of isolation in many facets of their lives, both pre-dating and as a perceived result of that diagnosis. Pain was experienced as early childhood abandonment, abuse or emotional neglect, revisited in the fresh, raw form of the image-memories. Pain was experiences in having to hold 'secrets' of abduction and the trauma of war; and separation from children, and the eventual healing was experienced in finding acceptance of themselves as people worthy of care and respect, sharing of thoughts previously withheld from open discussion and in the bridging of rifts with children and parents. Finally healing was a experienced through sharing with

others the pain of living with a 'Sword of Damocles' dangling above their heads, to embrace a life other than one focused on cancer.

iii.

Description:

In the process of creating the narrative I edited and made sense of the multiple stories of each participant, the group history and my own process. I culled redundant material, in this case the redundancy not only of unnecessary dialogue, but also the redundancy of session content, concentrating, as I've explained regarding the transcription, on sessions which coincided with points of statistical significance from the immunological analysis. The analytic process is included, primarily because it is the context within which the research occurred, and through which the participants explored their life-worlds.

An evocative description[950,951] of how the art psychotherapy process worked for the participants and the stories that they have told and explored is coupled with the images that they made. It is told with our voices; by me as researcher.

Where direct conversation is quoted from the transcripts, or extracts from either my journal or participants diaries used, it is distinguished in the narrative by being recorded in *italicized script*, as is done when other authors are quoted. Pauses during dialogue are indicated by "_____", and emphasis is indicated by **bold type**.

The Storylines Identified

The **storylines** of **Pain** and **Healing** reflected the existential issues which the participants brought to the Group, expressions of the **desire for connection and relationship**, and with which they dealt through engaging in group art psychotherapy. The interactions with others, and the images, facilitated a **reframing of perception of distress**, and release of suppressed energy held in inauthentic emotional expression to achieve positive transformation.

Within the fabric of **each storyline,** two skeins, and four threads appeared to dominate and were reflected in the themes arising in the sessions, although neither as discrete entities nor in a linear fashion. Often several threads overlapped in one session, the process weaving backwards and forwards, a rich cloth emerging with knots and joins and patches of glorious colour, a record of a communal work of transformation, where .the participants changed their perceptions of themselves as isolated victims of circumstance, and who had healed some deep and painful wounds.

The two skeins, which wound through the storylines were a perceptions of the **self** as **'same'** or **'other'** experienced initially as the **pain** of separation suffered in the form of relational difficulties and in a perception of being isolated within society, resulting from the process of the medicalised re-identification as 'patient' bearing a 'diagnosis'[952]: 'melanoma', 'depressed', 'PTSD[lxxviii]', 'coronary heart disease', or other such categories, and in a **healing** process as being part of a group of people with similar experiences of illness. The second skein being the weave of exploration of **emotional expression** (affect); the **pain** felt in being unable to either understand or express appropriate affect, the **healing** of gained agency in affective response; and an appreciation of **physical correlates to emotional distress**, defused through **relaxation** coupled with visualisation.

1. **Same/Other**

2. **Emotional/Physical**

Interestingly (or serendipitously), along each threads a spangle appeared, where a point of statistical significance, post-session-vs-pre-session, was reached (one thread contained two) for one, or both, of the salivary immunological parameters (time points are identified).

[lxxviii] PTSD: Post traumatic Stress Disorder.

For the skein **Same/Other**, the threads were:

1a. Validation of Self: or **'Telling my story and being heard'**,
t4 & **t8**: increases in S-IgA.

1b. Communality; or **'Doing things together'**
t21: decrease in group mean S-IgA: **t24**: increase in group mean S-IgA:
approaching sig. increase in group mean S-IFN-**γ**

For the skeins **Emotional/Physical**, the threads were:

2a Feelings: or, **'How I feel and what I am doing that's not working for me?'**
t10: decrease in group mean S-IFN-γ

2b Relaxation: or: **'How to relax and visualisations I can use to reduce stress.** **t6** & **t22**: increases in group mean S-IgA:
approaching sig. increase in group mean S-IFN-γ.

Analysis of Images

As outlined in Chapter 3, the analysis of images made during art psychotherapy sessions, is carried out, in the first instance, during that session. It is a vital function of the art psychotherapy process. In addition to this a secondary analysis has been carried out, independent of that, as a part of the research process, in order to ascertain any commonality of themes or means of representation, within The Group, and for individuals. When looking at the images I recall the context in which they were made, and I am in direct conversational relationship with them. *"There must be an initial, conscious clearing of (self) interests, an abandoning of one's usual mental processes and a movement into an inner soul region of silence"* [953]. The images are a hidden world I must enter to 'feel' the presence in the picture. What does it tell me, and the person who made it? I shift my gaze from surface story to soul story listening intently with my eyes, as I must when conversing with the participants, watching the mobility of their faces, focusing on moving lips and eyes to discern what is being said. In this 'listening' however, I must hear the story that the **image** is telling, examining colour, texture, trajectory and symbol. I search for the myth and communicate with it deep in my own soul. In concentrating on the **way** that the images were made, and **what** they contained, I identified the following themes:

- On the whole, initial images were made very 'tentatively', that is, there was a 'light touch' in creation of line, or application of colour. As participants gained confidence in the process this changed so that line and colour were more 'confidently' applied.

- Many images retained a 'diagrammatic' attribute, indicating a need to communicate clearly with the therapist and other group members and also generally repressed expression of affect, or connection with one's feelings.

- The wet-on-wet technique (**t22**) challenged the notion of 'form', although Alan was able to retain control of even that medium. Painting of the masks required a high degree of metaphorical work.

- Several participants retained a style of using rudimentary 'stick figures', particularly Paul and Ron M, when using pencil, which changed to full bodies, when oil pastels and paints were suggested and used. Common to many of these figures was a lack of hands (an inability to 'fend for ones self') or feet (inability to 'stand on ones own two feet') and eyes with which to see, all of which changed over time.

- One element which was of concern, and addressed early on, was a size differential, with the person making the image either too small (feeling overwhelmed) or too large (feeling inflated, a self protective mechanism).

- Darren seemed the most confident in his use of materials until the Under Sea visualisation at the half way point, (**t12**), when the rest of the participants also engaged in full bodied application of paint, although Jim seemed uncomfortable using this medium until **t16**. This session also seemed to mark a point of change for many participants in their use of colour and the full page, in particular Paul and Ron M.

- Darren also had many images with a trajectory from upper right quadrant to lower left quadrant, indicative of an anchoring in the past, which he expressed as important to him.

- Allan remained most comfortable with the control of media that he was able to attain with coloured pencils, reflecting his need for structure.

- Rose maintained an illustrative technique, until she was engulfed with pain regarding the 'mess' in which she found herself, with her daughter at **t16,** when she used a metaphorical medium of expression. Ron B and Jim were also able to depart from their more constrained work when empathising with her during this session. It marked a significant point of change for Jim, when he used full bodied paint. Colleen's body image also departed from simple illustrative work when she employed metaphor in exploring the issues surrounding communication.

- A significant moment in the group process occurred when several members made images using the same theme, light, symbolic of understanding, at **t19**. Such a 'moment' occurs when the participants become an organic whole, a **Group**. It is a significant point of interaction that I have seen consistently in a group which is well 'formed'. It reflects a point of coherence[954].

Wadeson[955] found that people who were able to integrate experiences used more colour, drew with greater detail and tended to depict motion, than those who repressed emotional expression and integration. Amongst the members of this group of research participants this held true, further, there was a noticeable change in the construction of the images over time, as feelings and affect were explored and released, and more functional coping strategies were learned

A Short Description of Session Themes, in Chronological Order

Listed below are the subjects of the images, or emergent themes, in the psychotherapeutic process, as they appeared in chronological order and in greater detail than presented in Table 4, Chapter 6.

1. Initial Group Image; a 1.5 x 1.5 m piece of heavy grade watercolour paper was provided for the participants and spread across the table around which they all sat. A variety of materials was also provided, from which they had free choice. The exercise was suggested

to promote a sense of group identity, and to gain a sense of how each member would work within a group situation.

2. **The Diagnostic Drawing Test**, Kinetic Family Drawing (KFD) age 5 years and Present family, was suggested in order to gain a sense of the dynamics learned in early childhood and how this is carried into the world, and thus the present, created family. If one superimposes the images on each other this is often clearly seen.

3. **The 'Favourite Story from Childhood'**, an exercise suggested by Eric Berne, creator of Transactional Analysis, as a way of illuminating the 'story' or 'script' by which on lives; this also has echoes in Jungian therapy when one seeks the archetype with which one most strongly identifies, and is a dominant force in one's life.

4. **Memory of the diagnosis of melanoma**, and as a counterpoint, what is one's 'Bliss'. It is essential when dealing with a traumatic event to provide the client with a way of 'pulling back' from flooding with painful recall, thus giving her agency and control in and of her own process, hence a suggestion is made that the client create an image of a safe or pleasant place or event into which she is able to 'retreat and regroup' in order to address the pain from a position of strength. The juxtaposition of one emotion against the other may also assist in both reframing and ascribing new meaning to previously painful memories.

5. **The perception of 'stress'**…….when did your passion become your pain? Negative stress is the internal condition created when one is forced by dint of circumstance to over-ride one's own sense of safety. Perception colours the way in which meaning is ascribed to any given situation. The situation is not necessarily amenable to change, but the way one perceives an event is an active choice, even though that choice may not have been made in an intentional manner; intentionality may be restored, and thus the locus of control returned to the self. Psychophysiology is also an aspect of this active choosing, and, as has been discussed in greater detail in the chapter devoted to Immunology and PNI, there is evidence that negative stress (the perception that one has no influence in, or there is no apparent reason for, a given situation) has a negative effect on physiological function.

6. **A guided imagery: 'The Colour Garden'**. During this guided imagery participants

are taken on a short journey through a series of coloured gardens each one a different colour of the rainbow, correlating to a different Chakra, or energy centre in the body (Appendix 4a) and reach a sanctuary in which they are given a gift and a healing drink. The imagery is both a relaxation and a technique by which participants are enabled to find an internal sanctuary. It may also give an indication of where psychological blocks are situated, and possible physical pathology through the chakra most represented in the image directly or indirectly by an emphasis of the colour or symbolism associated with that chakra.

7. The previous guided imagery proved to be a popular exercise and another guided journey was undertaken the following week; **'A walk through the woods'**. In this guided journey the participants are taken on a journey along a path (the life path) through the woods (life's mysteries) which becomes in places dark and tangled (life's vicissitudes) to eventually find a house deep in the woods (one's internal haven) inhabited by a person important to the 'journeyer' (the archetypal Wise Woman/Man, or internal wisdom), who gives them a book in which is written text specifically for her (life's message) and a nourishing meal (the capacity to accept nourishment/help). (Appendix 4b)

8. **A free image** was created by each member of the group.

9. **The 'Gift'** received from the natal family through which each participant recognised the internalised strengths and construction of belief systems gained through their family environment.

10. **Misery and Joy.** Further understanding of the choices one makes in how to respond to a given situation, and recognition of a capacity for inherent Joy.

11. **Anger and Intimacy**. Making choices about how to relate to an 'other' and understanding that these two emotions are at times curiously intertwined.

12. Another visualisation, this time an **Under Sea journey** (into the unconscious) with a pair of dolphins (life's guides) to find a treasure (one's unique gift). (Appendix 4c)

13. What do I gain from being 'good'/ 'naughty' a theme suggested by discussions surrounding authentic and adaptive behaviours and accepting responsibility for the ramifications of one's behaviour.

14. What is the result of 'no talk' after an altercation between two people; resulting from a discussion about marital discord where one participant recounted an incident where he refused to speak with his wife after she had been "*incompetent*."

15. 'Aengus' Magic Cloak'; I had spoken of a story I wrote for a grandchild to illustrate what impact aggressive behaviour had on his social interactions, and how to better recognize and manage his anger. The group members requested that I read it to them, and then they created images in response to the story. (Appendix 5)

16. How to enact the decision to experience **pain or happiness**.

17. An exercise in a different medium, wet on wet watercolour after **another 'Colour Garden' visualization**, incorporating information brought in by one of the group members regarding the chakra system and its psycho-physical correlates.

18. An exercise in three dimensions; a clay model **'A celebration of Me'** integrating significant objects brought in to the session.

19. Mask making; participant partnered up and assisted each other to make plaster face casts, which was then painted on both surfaces to show the 'Face one presents' and 'The hidden Face'.

20. The final 'round-up' session, during which each participant displayed the images that meant most to him or her from the six-month art therapy experience

The Organisation of the Story Elements

I organised the sessions and images in chronological order, and matched points of immunological significance with psychological exploration, consistent with the identified

storylines. Kelly & Howie[956], discussing narrative analysis, suggest an adaptation of Dollard's criteria for a life history, including the chronological congruence of the life story, the life plot and significant others, however, as I have written above, the congruence of the life stories unfolded in the process of art psychotherapy, whereas Kelly & Howie, and Dollard refer to the necessary creation of congruence in life history from data collected during a single interview, where stories tumble out. Three images that illustrated each participant's life plots, their goals and significant others (and the influence they had on the particular participant) were the Kinetic Family Drawings (KFD's), the Story from Childhood and the Learned Belief Systems.

My own parallel journey, not only as group facilitator, but also as a research student, is a part of the 'storying'. The storylines and categories of content are woven through this narrative. I present reproductions of **the images** made throughout this research process, **bearing in mind their centrality to the telling of those storylines**, and relate descriptions of the exploration of their content, combined with the stories and interactions they generated within the context of **this particular group**. This description, as I have stated earlier, is generally a hermeneutic phenomenological perspective, that is, **what does it mean to that person at that time and in this specific context.** This doesn't, however, negate the possibility of generalising from this experience, because there are universalities of experience within which the specifics are embedded, amongst which are the group experiences of storytelling through an interplay between word, action and image to express love, loss, grief, anxiety, joy, violence, terror, humour, morality and appreciation of vulnerability and mortality[957]. Further research, however, would be required to establish the extent of generalisability.

Verification of the Stories

After the initial narrative was constructed a complete copy was given to each remaining participant for member validation[958]. Each communicated by phone or e-mail to convey any changes they required made. If any participant didn't communicate within a week of having been given their copy I contacted them by phone. Any changes they requested were made. All but two chose to retain their own names in the narrative, expressing pride in their participation in the project. Rose (a pseudonym) had chosen this name herself, and

Darren's arose serendipitously as a 'typo'[lxxix], which he decided, would be the name he kept in the narrative. Ned's is a pseudonym. The other two participants who withdrew are simply referred to by the letters K and S. The decision to accept the participants' resolution regarding their names was taken as it is in keeping with my stance regarding participant autonomy, rejecting the concept as the researcher as **sole** 'steward of knowledge' and thus regarding the participants as 'vulnerable'[959]. Edwards and Titchen[960] point out that within the perspective of phenomenology (in their case phenomenological sociology) it is required "*that participants be given a high level of autonomy*". I whole-heartedly accept my responsibility both as psychotherapist and researcher, which classically, would demand total confidentiality. This confidentiality, however, is breached with publication, a point stressed to the participants when they consented to their involvement. In addition the pride in their involvement was an important factor in the transition from a perception of 'isolated other', to **people of worth and value**, whose stories had been heard and recorded, rather than **patients with a diagnosis.** *"..the most immediate problem of those who tell stories of illness is to be heard, to find others who will answer their story's call for relationship."*[961]

Storying

In Chapter 3 I discussed the reasons, which informed the imperative to record both aspects of this inquiry: the biological and psychosocial, quantitative data, **with** the story within which those data were created and collected[962]. This body of research is influenced by the experiences I described in Chapter 1, a phenomenological apprehension of the role of 'major life events', revealed unsolicited, by the people with whom I worked in the art psychotherapy setting in psycho-oncology. I realised that while I wanted to explore the essential characteristics of 'stress', the deciding factor in the 'life events', now with the added dimension of immunological assessment, it was important that I put that knowledge aside in order to connect with the experiences of this group of research participants, and follow where they led. The features of their experience and descriptions of those experiences will now become part of a new body of knowledge[963].

[lxxix] "typo": a colloquial term denoting a typographical error.

As was discussed in that Chapter 4, one's identity, or sense of self, and the stories one tells are inextricable; one informs and forms the other, in turn, being itself transformed.

> *"Every human body plays a key role in the constitution of the world and the establishment and meaning of our surroundings through its sensory-perceptive openness and behavioural exploration. As* ***body-subjects****, we activate historically sedimented skills and habits in situations whose meanings (eg. 'too hot', 'useful', 'comfortable', 'nearly within reach') are* ***constituted by our bodily ways of being towards them***[lxxx]*. The life-world as a whole ---- every situation in it and every moment of our psychological lives ---- entails various forms of* ***sociality*** *as part of its essential structure. Language also pervades the meaning of our surroundings and forms part of what makes the life-world more of a collective place than the product of an individual's isolated subjectivity."*
>
> *Wertz* [964]

Our stories are told in a shared language, where sedimented habits and meanings are understood.

It is through the telling and sharing of life-event stories that a leavening and transformation of pain may occur. From the perspective of hermeneutics, life and story are part of the same fabric; story cannot be created without 'Life', and similarly 'Life's meaning' is explicated through the story[965]; the implicit meaning of one made explicit in the other[966], the communal act of story telling; "*Meaning making is seen as an ongoing process of 'storying'*[967]. Most important is the centrality of image making in the context of this research.

When one's storied life is disrupted by illness, and in the case of a life threatening illness even more so, the story by which one has identified oneself is torn asunder; wrecked in the moment one hears the diagnosis Telling others about the experience is a way of reconstructing oneself; it is *"a major way that individuals make sense of disruptive events in their lives."* [968] Past, present and a hoped for future are integrated in the emplotted[969] narrative of a life; possibilities are rehearsed in the telling and events which have no congruence with the past understanding of oneself are re-formulated in order to 'fit', sometimes with

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[lxxx] My emphasis

awful consequences, when the reformulation is inappropriate, or relies on suppression of unwanted aspects of oneself.

In *"The Wounded Story teller"* Frank[970] suggests that the reconstruction of the self which occurs with the disruption of illness, is one in which one redefines oneself as a 'wounded person', wounded not only in the physical sense, by the illness or injury, but also wounded in the sense of a hoped for life, which may not eventuate. It is, he says, "*a loss of the 'destination' map that had previously guided the ill person's life: ill people have to 'learn to think differently'. They learn by* ***hearing themselves tell their stories***[lxxxi]*"*. He recognises that it is important to investigate past experiences as they relate to the present understanding of **who** the person now **is**, in order for a new hoped-for-future to be constructed. Essentially, this is the process in which the participants engaged, through their involvement in a closed art psychotherapy group. Frank goes on to suggest that there are three core narratives regarding the illness experience. They are that of 'Restitution', where the person who finds him/herself ill, minimises the experience of illness and their responsibility. They are 'in the hands' of the doctor, and must simply comply with her orders to return to wellness. Illness is an interruption to endure.

Within The Group there were two men whose 'illness narrative' was that of 'Restitution', Alan and Ron M. It is interesting that they were the two who found the psychotherapeutic process most challenging and both had further 'disruptions' with which to deal after the end of the intervention.

Another narrative is that of 'Chaos', where one loses control of one's life; things happen 'out of the blue'; there is no meaning or order. In my experience these two stories are often lived together, alternating in dominance, a chapter of 'Chaos' being lived in moments of crisis , such a diagnosis or surgery, followed by a chapter of 'Restitution' when one follows 'doctors orders' as a patient 'patient'.

When they first formed The Group Rose, Jim, Darren Ron B and Ned, lived this narrative, and all except Ned, to a greater or lesser extent, transformed it to the one which informs

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[lxxxi] My emphasis.

psychotherapy, that of the 'Quest': time and again, an experience of 'Chaos' is the 'call' to begin a 'Quest'[971].

Paul and Colleen came into The Group living the narrative of The Quest. It is a life story in which the protagonist is the 'hero(ine)' who transforms himself through accepting Hecate's call to the underworld; who 'suffers'[lxxxii] the illness and faces it square on in order to learn more about himself, and life.

Frank[972] also says that *"the story is told* ***through*** *a wounded body. The stories that ill people tell come out of their bodies",* and yet, the body is *'inarticulate'*. The making of pictures during art psychotherapy gives the body a voice, a *'personal task'* in the social setting of the art psychotherapy group, where stories are told **to,** and **shared with,** other members of The Group; and through this thesis, a larger audience.

Even though the stories did not arise sequentially; there was congruence in the way that they were revealed and explored. Extracting the stories of each individual, as one would with individual in-depth interviews[973,974 975] would destroy the integrity of the narrative of **a group of individuals in relation to each other and myself as therapist**.

> *"Narratives join events together and display their significance for one another. Plot is the organising theme of a narrative. Plot weaves together the events into a single story."*[976]

In the case of this narrative the events are joined together over a period of six months, their congruence established during that time. In fact, the incongruity of many events in Ned's plot was a crucial factor in our response to him. We were never able to properly enter his life-world because the experience was destabilising in its chaos. The *'structural whole'*[977] was not evident, and could therefore not be shared. The 'slip' between his need for inclusion and our inability to join him in his 'storying', in all likelihood increased his levels of frustration (and ours) until the outburst which led to his withdrawal from The Group.

It is not necessary to disarticulate, as Rice and Ezzy[978] say about traditional qualitative methods, the text into *"discrete content categories for coding purposes";* indeed I have great

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[lxxxii] L. sub + ferre: to bear; to bear the burden of something

sympathy with Riessman[979] when she writes *"I found myself not wanting to fragment it* (the interview) *into discrete thematic categories but instead to treat it as a unit of discourse."* The breaking down of conversations into 'memes' in order to arrive at a numerical weighting so as to gain an understanding of verbal transactions, seems somehow to miss the point that each and every transaction is a transaction embedded in **a unique context** (even when the contexts seem to be similar, they can never be the same; a moment is never replicable) performed by **individuals, each with their own history.** Similarly, as van Dusen [980] says of himself, people are not 'case studies'; they are a aggregation of stories; memories through which they identify themselves, and which verify their existence[981]

Common to all psychotherapies, analysis occurs in the flow of the therapeutic process, consequently the 'theme' for each image arose from the dialogue at the beginning of a session; 'themes', therefore came out of the process as it occurred, and provided a running thread which linked one session to the next. An essential aspect to the group art psychotherapy process, in the psychodynamic (and hermeneutic) context, is the making and 'unpacking'[982] (analysing and exploring) of the images made as a result of group interactions: in effect **researching intrapsychic reality** as expressed through visual and aesthetic symbolism[983]. This process, described in Chapter 3, is a constant iterative meandering, backwards and forwards between unconscious content, at once revealed and yet still concealed within the image[984] and the protagonists in the therapeutic drama of analysis, reflection and discourse. Two research projects are therefore running in tandem, one academic, and the other personal. During the sessions the participants are invited to investigate the meanings of events, or phenomena, in the actuality of the experience of the phenomenon, rather than relying on consensually agreed meaning; indeed, many of the images made during the six months actively challenged sedimented assumptions; one such being 'Learned Belief Systems'. One of the strengths of the image making process is that the pre-reflective state of a phenomenon is readily accessed; the image is not yet translated to fit with cultural norms through language. The description of this process, in the context of the sessions, is integral to the narrative, and relies on a content rich qualitative description[985], hopefully attaining what Clifford Geertz[986] referred to as 'thick description', with the caveat that *"Storytellers tell stories because the texture of any form of life is so dense that no one can describe this form of life; the storyteller can only invite someone to come inside for the duration of the story" Frank.*[987].

"..to include the comments made by participants in a research setting, may make the data less statistically relevant, and not so exact a method as simply analysing the content of the image, but this more (w)holistic method preserves the richness and meaningfulness of art therapy"
Wadeson[988].

The relationship between life as it is lived and the story (narrative) about it, as it is told is in the hermeneutic circle:

"..the story is based on the pre-understanding of life, and changes it into a more fully developed understanding."
Widdelshoven[989]

It is in the telling and sharing that understanding is found and the possibility of changed perceptions, that is, the meanings ascribed to events and behaviours, becomes possible through validation of individual worth within group interaction[990], where there is an exchange and counterpoint of stories between members. Fundamental to the process of identification of 'self', is the production and reconstruction of the story in cooperation with the listener(s) in a social context[991]. Another essential aspect of this process, although not often recognised, and a core concept on which this project is based, is what Frankl[992] described as the capacity to choose the meaning one ascribes to events in that story, no matter how grave the events

Unlike some other psycho-oncology interventions, which are very specifically structured, such as that used by David Kissane[993], I chose to foster autonomy of the participants in this research project. This is a position consistent with a phenomenological stance[994]. While I played the part of facilitator, I regarded them very much as creators of their own process and also active and equal participants in the intervention phase of this research project. I agree with James Hillman[995], Patricia Berry[996] and Thomas Moore[997] that there is a soul mystery in psychotherapy, which predicates that trust must be invested in the wisdom of the process. Each participant and each group creates a unique story in relation to a specific context.

This position consequently required that I recognise that the research, at least the active intervention phase, was in great part a collaborative effort, and therefore decisions which

pertained to The Group, for instance, such as those discussed below in more detail, like the need to video record the session, instead of tape recording them, and the change in the protocol amalgamating the participants into one group, were made by discussion and consensus (I left the participants alone to discuss an issue freely before I was involved in any decision making). I emphasised that while I might know about psychotherapy, they knew about their own lives, and they also had a wealth of information and experiences about which I knew nothing. I found it was a great compliment when I was referred to as 'one of us' about mid-ways through the intervention period, and when participants brought in material that they wished to share with the other members of The Group. It is not until the therapist is 'invited in' that a shift in the dynamics of the system can occur through the creation of a new relational 'pattern'[998]. I recognise, nevertheless, that as the researcher I was in a position of perceived control for some participants, and at the end of the day, it is research undertaken as part of my higher degree, not theirs.

The Narrative

"Try to re-construct a dialogue from your own life, the dialogue of a quarrel or a dialogue of love. The most precious, the most important situations are utterly gone. Their abstract sense remains…….but the acousticovisual concreteness of the situation in all its continuity is lost……the dialogue contracts into a brief summary, the setting to a few general features…….When we study, discuss, analyse a reality, we analyse it as it appears in our minds, in our memory. We know reality only in the past tense….The present, the concreteness of the present…, as a phenomenon to consider, as a structure is for us an unknown planet: so we can neither hold on to it in our memory nor reconstruct it through the imagination."

Milan Kundera [999]

"What we respond to in the greatest narratives is the quality of mind transmitted to us through the language of characterization, innovation, description, commentary---- Quality of mind --- not plot, is the soul of narrative"

Scholes R & Kellogg R, [1000]

The qualitative data is an essential underpinning[1001,1002] to any further quantitative study; it is necessary first to identify **what some people experience** before any generalisability is

possible; **how many** others have similar experiences or gain benefit (or not) and how **often**.

I have also stated previously in Chapter 3, that while my analytic observations have a phenomenological bent in the psychotherapeutic context, relying a great deal on intuition to connect with the felt experience of the *'quaestor'* and her image, they are not **purely** phenomenological, because I **do** ask questions which point to symbolism, the archetypal, and the transpersonal, I accept the unconscious, or the unaware functioning of one's emotional life, as a powerful reality. In the therapeutic setting I have found Gestalt Therapy[1003,1004,1005,1006] techniques to be potent tools for exploring somatic expressions of psychic content and the work of Eric Berne[1007,1008] an easily accessible way of understanding interpersonal dynamics

My approach to psychotherapy, naturally, reflects 'my Being-in-the-world'. I am capable of being extremely disciplined (even more so than I could have imagined, to produce this thesis!) at the same time as having learned to resist rigidity, preferring flow, and always to trust in the mystery of 'the process'. I hope that, as the story of The Group's journey unfolds, and you will be able to see how that part of the bodymind, referred to as the 'immune system', responds with the story telling/exploration/image making and emotional expression generated within each session.

To maintain congruence with the understanding that psychological and physiological functions are simply different facets of a magnificent hologram, the human 'being' (or 'becoming'), I concentrate on sessions where both immunological and psychological content, as described in the images and the group process, are clearly reflected in each other, although others have been included in the narrative to maintain flow of The Group's history. I rely heavily on description and anecdotal material.

> "*Anecdote particularises the abstracting tendency of theoretical discourse: it makes it possible to involve us pre-reflectively in the lived quality of concrete experience while paradoxically inviting us into a reflexive stance vis-à-vis the meanings embedded in the experience*".
>
> *van Manen*[1009]

An interesting, spiralling rhythm seems to have been created throughout the group process. A rhythm of general discomfort followed by exploration, mounting tension, at times an undercurrent of a barely visible 'something else', and then the AHA! of recognition, leading to release and relaxation and a 'point of change'. The 'point of change' was marked with the appreciation and integration of new content into daily life, what is identified in systems theory as a 'phase jump' when the system crosses a threshold of instability and finds a new space of stability[1010].

The Question of Change and Causality

I cannot determine, although it would be a 'neat' piece of research, that it is **only** the art psychotherapy process, which precipitated the changes. Dean Ornish, in an interview with Bill Moyers[1011], for the documentary series "Healing and the Mind" puts this in a clear context when he says that in behavioural studies one can **never** identify one independent variable, even in drug studies, which concurs with Zinkernagel's[1012]; comment mentioned previously (Chapter 2) regarding immunological studies. In behavioural studies other factors such as expectation of change and being part of an identifiable group with a purpose will generate a *"sense of meaning, a sense of empowerment, a sense of control over their lives —— which leads to stress reduction and measurable physiological changes"* in itself, perhaps even engaging the placebo effect. A chance meeting and significant conversation could occur or individual commitments to lifestyle changes made, about which the researcher may never know[1013].

As far as laboratory oriented research is concerned such factors would be profound contaminants; from the point of view of meaning oriented research, however, it's like making a fruitcake, or better yet, minestrone soup: the more tasty the additions, the richer the final flavour, although the ingredients must be in keeping with the general recipe!

In a discussion regarding the challenges of meditation research, with similar methodological issues to art therapy, Caspi & Burleson[1014], point out that causal inferences may be impossible to make, and perhaps even irrelevant. This is because such a question is embedded in a 'dose dependent' framework designed with pharmacological interventions in mind, and the RCT design which ignores individual differences. In their case the differences are in meditation practitioners and styles of meditation, which translates, in this case to differences between

individual art psychotherapy practitioners and their approaches. It is a research method which Cunningham et al[1015] have identified as obscuring important information. One of these differences is the 'client's' capacity for, what Tellegan[1016] refers to as 'absorption': the *"individual's proclivity towards total attentional involvement in perceptual and imaginative experience"*[1017], which was an issue evident within this group, as both Alan and Ron M had difficulty becoming absorbed in the therapeutic exploration of their images, and Rose struggled to become effectively committed to the group process, until at least half way through the six months.

The Intervention Phase; Fellow Travellers

"Illness is the night side of life, a more onerous citizenship. Everyone who is born holds dual citizenship, in the kingdom of the well, and the kingdom of the sick. Although we all prefer to use the good passport, sooner or later each of us is obliged, at least for a spell, to identify ourselves as citizens of the other place."

Sontag S.[1018]

"People I call storytellers tell stories to remind those who share their form of life what it is they share: people's sense of being together is enriched within the storytelling relation. Storytellers also offer those who do not share their form of life a glimpse of what it means to live informed by such values, meanings relationships, and commitments."

Frank [1019]

In February of 2004 the group of people recruited from the Newcastle Melanoma Unit, in coastal New South Wales, joined me on an adventure, although it was certainly not in a way that some of them had anticipated. Each will later be introduced in detail, accompanied by the initial images, which flesh out their biographies. Suffice to say here, that six men; Allan, Darren, Jim, Paul, and the two Rons, in company with the two women, Colleen and Rose, completed the intervention. S failed to engage for work related issues and K and Ned dropped out, but both provided invaluable 'grist to the mill'. The latter two participants are not described except in the way that they added significantly to the group process.

Six things that appeared to be consistent amongst all members of The Group were firstly, and perhaps of greatest importance from my perspective, **a sense of curiosity.**

Curiosity is a trait which will lead to exploration and risk taking; essential components of psychotherapy; in my observation it is also indicative of emotional resilience. Curiosity is also a trait necessary for active coping, and, according to Kashdan[1020] a prerequisite for intimate relationships. Recent research with primates would also suggest that this translates to resilience and an ability to adapt positively to a novel situation by engaging in behaviour through which the animal comfortably investigates and explores its surroundings[1021], further, that this ability is induced by mild early life stress. These results are an echo of earlier work of Davidson's[1022] where, in human studies, he elucidated a connection between neuroplasticity of the brain, curiosity, resilience and happiness.

Secondly, that they had experienced work lives, and in some cases also family lives, marked by **anxiety and performance pressure** coupled with a perceived **lack of either support or recognition.** As discussed in Chapter 2, this is recognised to be detrimental to health over time.

Thirdly, issues of **communication about cancer**, in society in general, and amongst their family, friends and acquaintances in particular. Participants had experienced a common perception that they were presumed already dying, or at the other extreme, that it was either minimalised, or worse, not mentioned at all.

Fourth, as an extension of the previous point, the **isolation** that such a diagnosis engendered, both as a result of their own fear and the cultural mythology of cancer and contagion.

Fifth that their respective **family units were extremely important** to all of them, regardless of their functional state, although there was an expressed desire from several participants that they wanted this to improve.

Finally, that all of the participants had **difficulty with emotional expression**, needing to 'be good', even when annoyed, which bears out Temoshok et al.'s[1023] proposition about personality types and melanoma.

In common with van Gennep's[1024] description of 'rites of passage' these people had been 'stopped' by the diagnosis, by being isolated from the community through their perception of stigmatisation, were held in a 'waiting' phase for their changed status to be recognised, and entry into this project marked a 'transition' phase prior to re-entry into the community with experience and expertise to share, recognising and valuing their 'difference'. Jung [1025,1026] and Campbell[1027]would describe the 'stopping' as the 'call' to a journey of individuation or initiation; the 'dark night of the soul'[1028], preceding an adventure throughout which challenges must be met, and following which the '*quaestor*' returns to her society profoundly changed and with wisdom which she is obliged to share.

Interestingly, all the participants were either in the process, or had already entered, the second stage of life, the task for which Jung[1029] described as a process of actively integrating unconscious creative forces into conscious life, lest they become destructive (which may be expressed as illness), an important process in a culture where conscious mind is enchanted by the external at the expense of introspective activity[1030]: it is a process often heralded by a period of disorientation and/or illness, when previously held patterns of behaviour are brought into question and sometimes reassessed.

In contrast to the people normally engaged in a psychotherapeutic alliance, **those who agree to become part of a psychotherapeutic research group don't necessarily have a clearly defined 'agenda'**. That is to say, they may not of their own volition have sought psychotherapy, *per se.*

Direct quotes from participants are presented in italics, and all remarks regarding images arise out of discussion with the participants, unless, I specifically state that it is an observation of my own.

The first three sessions, therefore, were essentially 'getting to know you' sessions; for the participants, gaining a sense of cohesion as a Group, and for me a sense of 'where they were at', what Tuckman[1031] refers to as the 'forming' phase in group dynamics, when every one is still 'on their best behaviour', getting along with others because it is expected, while at the same time still focusing on their own needs.

To facilitate the creation of a climate in which engagement and exploration could take place, it was necessary to connect with the participants' innate curiosity and introduce them to the practicality of art psychotherapy, and for me to **identify possible points of tension**.

In the first group session, I suggested that the participants get together and create a group image. I had learned from Elisabeth Kübler-Ross two decades ago, and re-iterated in my art therapy training, that the client(s) will, almost always give the therapist all the information pertaining to the 'presenting issue', or a snap shot of the 'life story', in the first image. All the rest is exploration from that point of reference. In my clinical practice I have generally found it to be true, and the Group Image, below, Plate 8, certainly bore this out.

Making a Group Image is a means of bringing people, who may not know much about each other, into meaningful interaction and bonding them into A Group, at the same time as being an exercise to give me as therapist an indication of how each member will interact within that group. Ron M was particularly unimpressed by this exercise, writing in his journal *"Our meeting with Christina on 12.02.04 seemed pretty useless e.g. giving each other a name tag and drawing pictures with crayons. But she puts on great nibblies"*

Plate 8: First Group Image

I provided a piece of heavy weight water colour paper, large enough to cover the whole table; it's a huge expanse of whiteness! I watched as the members of this newly formed group inspected the art materials, opening boxes and examining their content; pencils, crayons and the big pots of paint. The paint seemed too daunting; I'd left it in the 1 litre bottles. It needs to be poured out to be more inviting, I realised, **and** it's messy, not easily controlled. The participants didn't yet know 'the rules of the game': were they 'allowed' to be messy? The coloured pencils, felt tipped pens and crayons seem to be the safest choice, although the gouache was tested; safe in its solidity. The large box of crayons was opened by Darren and placed in the centre of the table, holding the paper down. It's a role with which he was familiar: a school master setting things up for 'class'. They chattered quietly and hesitantly with each other about what they 'should' draw. The whiteness seemed to be intimidating; where to begin? It's intimidation I recognise; the large expanse of virginal territory at once beckoning the artist to shape its identity, while holding her back with its purity. It is territory requiring 'marking' and 'claiming'.

Tentative lines were made as they discussed whether the focus should be on The Lake (Ned, top left hand corner,) or the Beach (Alan), the phallic shape of which (Nobby's[lxxxiii]!) cannot be mistaken.

The participants talked about the impact that life by the water, out in the sun, had on their health. The chatter diminished as each person became absorbed **with** the task of communicating in a new medium. Ron B sat quietly, 'staring into space'--- his internal space where memories live. Quickly and deftly he began his contribution to the group image.

Silence slowly enveloped the participants as each became absorbed **into** their inner landscape, which they then brought to the group-space as line, colour and form on the paper, enlisted as partner in creating an image.

It was interesting to see how each person identified initially with his or her diagnosis and also the dynamics which would play out in The Group 'writ large', Ned and Alan competing to make the space 'theirs', the amount of space that they used to 'mark territory' on the paper

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[lxxxiii] A 'nob' is a colloquial, or slang, reference to a circumcised penis, Nobby's beach is also the beach beneath the landmark headland marking the entrance to Newcastle harbour, atop which sits the lighthouse.

was reflected in the amount of recognition each fellow required of me and the rest of The Group.

The making of this image also functioned to give the rivalry both a contained space within which to express it and metaphorical recognition, so that direct confrontation with the issue was avoided, while I was 'put on notice' of the dynamic. The paper became the 'transferrential object' on which this was played out.

It is interesting to see the boundary explicitly drawn by Ned to segregate himself from the others, and how little space they took up, mirroring the boundary he created, and paradoxically, also the space he wanted in The Group. Ron B made an image of 8 tubas (left lower centre left), 'up to their necks in it', all playing their own tunes: (there were still 10 participants; however 8 would stay together for the entire six months, and remarkably, there are 8 tubas!) Darren (upper centre right) has made a desolate image of a 'floating' prone soldier above a question mark and of himself leaving a leaning shack with a transparent roof.

Two 'ice breaking' exercises which I have found extremely useful in practice are the Kinetic Family Drawings at aged 5 years and with the present family. Participants are asked to make images of both their 'natal' and 'created' families, with the instruction that stick figures be avoided and that all people represented engaged in an activity. It is an exercise which "*often sheds light on how this person sees his past. He*[lxxxiv] *will frequently make decisions based on past experiences. Comparing the content (of the two drawings)….. Reveals how that person may be repeating childhood ways and not responding to a new environment and new individuals in the adult world*"[1032] in a way that reflects an awareness of the situation or person in the presenting moment. The other exercise is the 'Favourite Story from Childhood', which may give an indication of the 'script' [1033] by which the person lives.

The stories we integrate are the stories, or myths, by which and through which we live, forming a map for our 'Life Journey'. As indicated in Chapter 4, philosophical hermeneutics starts with the premise that life and the story one tells/lives are inextricable from each other and that the meaning one ascribes to life is internally related to the story. "*Revisiting such stories can help adults endure confusion, disappointment and loss. They show us how to find direction amidst the ordinary chaos of our lives*"[1034]. Joseph Campbell[1035]also pointed out in Occidental Mythology

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[lxxxiv] Furth here refers to the person engaged in psychotherapy

that amongst the functions of mythology, two are to *"support the current social order, to integrate the individual organically with his group"* and another is to *"initiate the individual into the order of realities of his own psyche, guiding him towards his own spiritual enrichment and realisation."* Psychotherapy, as suggested in Chapter 1 is arguably a process of transformation and initiation, ritualised through the regular meetings with a 'guide' 'mentor' or 'psychopomp'; the psychotherapist. The remembrance of the childhood story, bringing it into the present, serves to open the way for the telling of the participants' **own** stories, while at the same time taking them into the special space of story telling, the space outside time, of 'Once upon a time', characteristic of ritual.

These first images provide another dimension to each participant's 'bio'[lxxxv]. They provide a glimpse of the issues which each participant brought to The Group in succinct format; their own images. Simultaneously the images re-introduce the reader to the nature of unconscious content potentially accessible through this medium of exploration, initially introduced in Em's story, in Chapter 1.

The Participants

Ned, Alan, Paul, Darren, Ron M, Ron B, Jim, K, Colleen, Rose and S.

Ned, K and S all dropped out of the project: S after the first three sessions, although she had actually only attended one, Ned at **t10**, and K at **t12.** There will, therefore, be no reference to their images, except in the context of the impact of their involvement within The Group. None of their images are reproduced, except their contributions to the initial Group Image (Plate 8)

> *"We're a diverse group of people with one major thing in common---MELANOMA"* wrote Ron M in his journal.

[lxxxv] "bio": a vernacular abbreviation for "biography".

Alan: aged 60

Alan is the quintessential Bronzed Aussie Surf Life Saver (SLA) (he's actually been an active member of the SLA for many years): 190cms tall, extremely fit and blond. He is of Nordic seafaring stock and had worked in heavy industry for most of his working life. Alan retired early in the intervention phase of the project. He is married with two independent adult children, both of whom live away from the marital home. Alan has a brother, and both parents are now dead. The death of his mother was a difficult period, and Alan linked the grief and mourning surrounding her death to the appearance of his first melanoma, on his leg. The second melanoma, on his forehead, was removed shortly prior to the commencement of The Group. Alan's father was a violent alcoholic and the family was subjected to years of domestic violence, with Alan often having to protect his mother. This chronic anxiety resulted in Alan suffering from a marked stutter in his youth, which he managed to obliterate through the 'Speak Easy'[lxxxvi] programme: something of which he is quite rightly proud. He has also attended sketch classes, and a person very important in his childhood allowed the neighbourhood children to come and draw and paint at her house, so for him there are very positive associations with making pictures.

Alan is passionate about his motor-bike(s), bike adventures with his wife, physical fitness, fishing, his garden and the sea. He deplores issues of perceived or real injustice.

[lxxxvi] "The Speak Easy Association is a self-help organisation that provides support for people who stutter by holding weekly meetings in their respective metropolitan and rural locations. Groups meet regularly to work on fluency techniques, discuss individual stuttering problems and develop self confidence through role-playing and public speaking". (http://www.speakeasy.org.au/index.html)

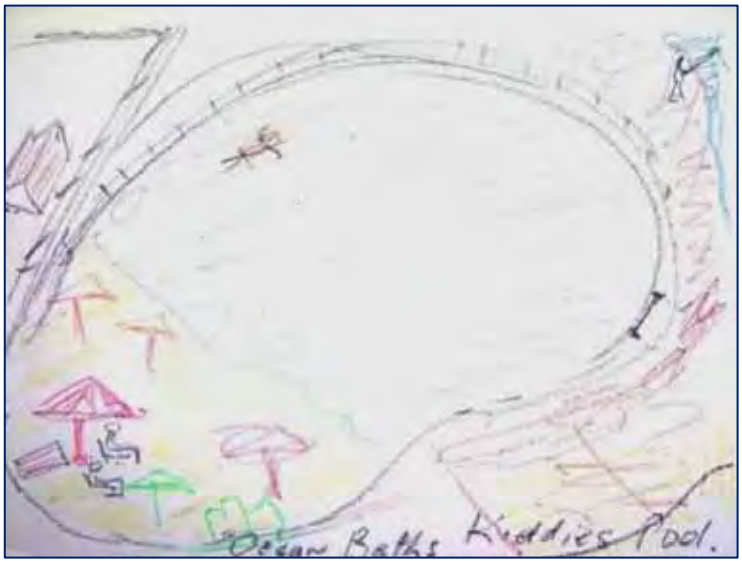

Plate 9: Allan: KFD Aged 5 yrs.

"This is Mum and me at the 'Kiddies' Pool'. We spent a lot of time there."

Plate 10: Allan: KFD Present family.

"This is all of us having a bar-b-q last Saturday. The kids don't live at home anymore so it's good when they come home and we all get together."

Alan was away for the following session and so made no image of the story that he remembered from his childhood.

The potential issues illustrated in these images, which Alan brought to the psychotherapeutic group, were an alignment with a significant female other, as seen in his placement in the picture: in the first place his mother, with whom he sits under the umbrella, sheltered from the sun and in the second, his wife, as they sit with their adult children, while simultaneously separated by the table. This may also bleed in to his relationship to me as the therapist. The

boundaries in both pictures are spatially similar: do they keep the people in /in his own world, or the world out? Alan's father was a violent alcoholic (KFD 5, Plate 9, top right, far from the family) and he often had to protect his mother from physical attack. Does drinking together separate (divided by the table) or bond his present family? Alan's brother (on the 'lilo'[lxxxvii] alone in the pool in the first image), has also become a heavy drinker, and he is the only figure, in either image, who is mobile. Alan is an extremely athletic man who has been very involved in the surf life saving scene; he was his mother's protector, so physical fitness was important, however, paradoxically, there is a lack of definable features, and in particular arms, hands and legs, which may indicate a difficulty with defining who he is; mobility in the world; and gaining or maintaining control, although it is he who pours the wine.

Paul: aged 49

Paul and his second wife have a combined family of five children, none of whom are living at home. His first grandchild was born during the intervention phase. Paul is an avid surfer, and regards it almost as a metaphysical experience to be at one with the sea. For many years he was employed as a green keeper, and is passionate about good grass, and his garden. When his first marriage ended, his father arranged for him to work in the mines (coal), of which he spoke with awe; recognising that as a deep mine 'forward cutter' he saw fossilised remains of plants and creatures no person had **ever** seen, long buried under the sea off the coast of Newcastle. He was captivated by the stories told by the older miners, and his elderly neighbour, about the history of his industry and region. There is, however, a strong paradox in this, in that Paul is very uncomfortable about being in the dark, and needed to **not** think about how far below the surface he was working.

Paul has a sister and two brothers, the older of who is a 'tear away'[lxxxviii] and the younger a 'dope head'[lxxxix], who has spent time in gaol. Paul's father, a boilermaker, was very distant and somewhat tyrannical, unable to demonstrate any affection, while it was his mother who kept the family together. After his father's recent death of mesothelioma his mother has come to depend a great deal on him while idolising his siblings and ignoring their shortcomings. Paul

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[lxxxvii] a 'lilo' is an IFNlatable rubber mat on which one may float, or use as support in swimming.

[lxxxviii] A 'tear away' is a rebel, or someone difficult to control.

[lxxxix] A 'dope head' is a person who regularly uses illicit drugs, especially marihuana.

was able to recognise his father's emotional woundedness and make peace with him before his death. As a result of his painful childhood and dysfunctional first marriage he is committed to having a relationship with his second wife and children, which honours honest communication, openness and intimacy. Paul is interested in optimising his health through means such as his diet (he chooses to drink herbal teas and always brought delicious food which he had prepared, with an emphasis on its nutritional value), and bodymind medicine. Paul's melanoma was on his leg.

Plate 11: Paul: KFD Aged 5 yrs.

"Mum and Dad and us four kids, I'm the one second from Mum, my two brothers and the littlest is my sister; there's a football field out the back where we spent most of our time."

Plate 12: Paul: KFD Present family

"Me and my wife outside our home: the kids have all left."

Plate 13: Paul: Favourite Childhood Story: Snow White & the Seven Dwarves.

The story that Paul remembered from his childhood, 'Snow White and the Seven Dwarves', (Plate 13) is one of several 'folk tales', which are known, with little variation in their structure or content, world wide.[1036] It is a deep story, that is, one bordering on the mythological, about abandonment to the elements (he, his mother and all the 'dwarves' are 'naked in the world' and he felt the emotional absence of his father sorely); the seclusion preparatory to initiation and individuation; the chthonic (of the earth) and the unconscious state of innocence in childhood; its loss through the acquisition of sacred knowledge (the apple); and the destructive nature of the Shadow depicted as the Step-Mother. There are close similarities between it and Sleeping Beauty and Robert Graves[1037] recognises that these two stories are the only European folk tales with reference to what could be construed as ritual female murder, suggesting a history of tens of thousands of years. Innocence is to be lost by eating the apple of sacred knowledge; the Dark Feminine paradoxically delivering the 'call' through her controlling/destructive aspect when she will not accept the normal cycles of life. Balance is restored 'in the kingdom' with the marriage of Animus (the Prince) and Anima (Snow White). When we talked of this image, Paul remarked that *"she would be the Ugly Stepmother"*, although paradoxically she was also held the family together. He also identified himself as 'Happy' (from the Disney characterisations of the dwarves), although he has drawn himself in orange, a colour often associated with impending danger, and he is separated from 'Snow White', who he identified as his wife, by the other 6 dwarves. Paul didn't identify the dwarves, although he and his wife have a combined family of 5 children; who is the 6th?

The possible presenting issue for Paul is either a resistance against emotional expression, or a very faint life force, suggested by the faintness of his drawings, and spare use of materials. There is a question as to how he gains sustenance, and support, as not one of the figures is supported by a 'ground', and the trees are rootless. There may also be an issue of 'staying in his head' tied to that, as the space between his head and body of his first image (as part of the Group Image) is echoed in the distance between the foliage of the trees (Arbor Vitae[xc]) and their bases and again in Snow White's elongated neck. While family relationships are important to Paul, the house which ought to give the family sanctuary is too small and it would be impossible for any but the smallest child to enter through the door (Plate 11); neither he nor his wife could gain entry (Plate 12) presenting a paradox. In his childhood story Paul is also being alerted to the necessity for individuation. At the same time there is the need to confront the Feminine, in both aspects; the nurturing aspect enacted by his wife, and the devouring aspect enacted by his mother.

In his first several images everyone's hands are up in the 'surrender/I give up' position, suggesting that he may have an issue with confrontation, or that he doesn't feel that he is able to 'win'. The mismatch between this and the 'Surrender/give up' signal was explored during the subsequent six months. Similarly there is a confusion of gender roles and being equipped for those roles, as his mother has a small penis (not visible in the reproduced image), and he and his mother are naked. Paul said of this gender confusion, *"Mum was 'tough', she did a man's job and held the family together"*: he also has taken on that role.

Ron B: aged 57

Ron has an extremely demanding schedule both in his building work, and at home, where his wife expects a lot of him. He suggested that she has a great need for control, and both he and his children felt that this threatens his marriage, although they are still together after some thirty years: in the image below (Plate 15) it is be suggestive that the control that he says she exerts, may be a projection of his. His wife has made an issue of remaining closely connected to their children, because he was quite separate from his parents, and while she is very caring of other family members, *"A Bloody Florence Nightingale"*, he experiences none of that expression of love; he has illustrated this with the 'gashes' that portray her breasts. Ron was

[xc] Arbor Vitae: Tree of Life.

the younger of two children, and regarded his mother as quite emotionally abusive: her breasts are sharp triangles. He said that his parents were not supportively involved in his life; play was discouraged, except when the family went on its annual holiday to the north coast.

He has two independent adult children, and a grand daughter; his daughter *"much to our displeasure is still living with her husband"*. Ron has a strained relationship with his son-in-law and his son lives in another state. His wife often cares for their grandchild, to whom he once ruefully referred as 'Panadol'[xci], because the mere idea that she was coming to visit would cure the worst of his wife's headaches.

Like Paul, Ron has spent several years of his working life in the mining industry.
He enjoys life on the lake (Lake Macquarie), fishing, the sea, surfing, and is passionate about golf! He is a competition grade player, and enjoys 'golfing holidays' in which he attempted unsuccessfully to draw his wife, who prefers to stay at home. Although appearing to be a happy-go-lucky person Ron is actually quite lonely.

His melanoma was on his lower left loin and he has also suffered a heart attack.

Plate 14: Ron B:KFD Aged 5 yrs.

"Going on a holiday to the North Coast"

[xci] a brand name for paracetamol, an analgesic

Plate 15: Ron B: KFD present family:

"Our kids have all left home; my son is in Queensland __ my wife wants us to stay close.

Plate 16: Ron B::Favourite Childhood Story: Little Toot

'Little Toot' is a 'coming-of-age' story popularised in the 1950's, when Ron B was a child. It begins with the sentence *"Little Toot the tugboat doesn't like to work."* He disgraces his father with pranks, which he must give up (Ron often clowns around) and in shame and sorrow as he decides to show that he can be a hard worker, but finds himself far from the harbour, out at sea, when a tremendous storm blows up. He is the only tugboat able to come to the assistance of a stranded ocean liner, and therefore redeems himself. The tug in the picture, may be drifting on the river's current out to the ocean, where unconscious issues must be

confronted, although appears to be somewhat 'cock eyed'[xcii], and is heading in the wrong direction., a theme repeated in subsequent images. In the West we read text from left to right; eyes seek the undisclosed words to the right; in the future. The trajectory of figures within images which go in a contrary direction to this flow, are hence often significators of a pull to the past; that which has already been 'read'.

It would seem to be a post War (1950's) morality story extolling the virtue of the 'work ethic', and the assumption that if one tries 'hard enough', even against apparently insurmountable odds, one will 'Win the Day'. The theme has echoes of older Hero Journeys, where the protagonist must sacrifice outmoded behaviour and endure many tests in order to return to the community, transformed and initiated into adult life. The story very accurately reflected Ron's seemingly endless battle to 'get it right', and the tremendous pressure that he puts himself under in working 'hard enough' in order to provide for his family (to be accepted in the adult world), and be 'allowed to play'(the prankster child).

The possible presenting issues, as seen through these images are a feeling of entrapment and imminent danger; someone perhaps ahead of his time (the TV aerial in KFD5, Plate 14, not yet introduced), or in need of an intermediary in relating to the world. There may also be tension between being 'the clown', keeping everyone happy, and having his own needs for love met as a responsible adult in the world. He seems to have issues with his relationship to women, whose recognition he craves, and yet also experiences as unloving and abusive. In addition, he would appear to have an issue of being 'boxed in', clearly seen in Plate 15, where he and his wife are completely enclosed by their house, as are his daughter and granddaughter by their house, which, although he has drawn them close to each other, are in different suburbs. The proximity, however, may be a reflection of the issue of remaining connected to his children. The houses in the 'KFD, present family' (Plate15) are large enough to contain the occupants, whereas they aren't in 'KFD aged 5 years' (Plate 14)……but, apart from his son's, which has no floor, **there's no way out**. The awning which 'connects' the houses, Ron realised looked like 'Hangman's Noose'[xciii], and would pull the marital house over, crushing his daughter's house. Perhaps his son is his connection with the outside world

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[xciixcii] 'cock eyed':colloquial term to denote squinting, or having crooked eyes: soemthing which is not straight.

[xciii] 'Hangman's Noose' is a children's game, played by two people, where one must guess a name held secret by the other: each mistake creates another portion of the gallows and noose for the opponent..

(compare the placing to the anachronous, partially erased TV aerial in Plate 14), who may also be in a 'mad house' (the same placing as the family house in Plate 14), as his son hangs in mid air, ready to 'fall to earth'. Ron identifies with his grand daughter, the only person with any colour, and is jealous of her father's freedom. She occupies the same placing in the picture as his sister, although is of equivalent size as he is in Plate 14, where he is falling out of the picture (like his son?): the need to 'stay connected' to his children, at his wife's behest, seems to have trapped him, and may prove disastrous to the family

Ron's wife and daughter have 'scratches' for breasts, and his mother, sharp triangles; breast which can give no succour (he identified his mother's with her abusive parenting). None of the people has a face as such; although Little Toot does (Plate 16), perhaps reflecting his sense of freedom when he goes fishing on the lake, and sense of identity when doing a good job: Ron B and his daughter look as if they have had a severe fright. Both he and his son have gashes in their chests (similar to his parents): Ron has had heart problems; his son only one eye (Cyclops in his cave?).

In Plate 14, Ron B has drawn himself, his older sister and parents getting ready for their annual holiday to the coast. The only colour is in the 'frightened' looking holiday house, which the train (on one track) may knock off its (stilts) path. Ron B is almost falling off the page and not on the same the path as the rest of the family, (perhaps not really feeling a part of it?). He, like his grand daughter, is the most defined. All the things are arranged in groups, except the lone, abandoned (or waiting) tricycle, centre front. The houses are far too small to give shelter or safety to the family. Ron B, in the boat with his father (? in the same boat?), is catching a fish (providing sustenance). The anachronous TV aerial suggests that there may have been an issue with communication with the outside world for this family, an issue often apparent in abusive families, who tend to be isolated.

Ron M: aged 70

Ron M is married to his wife of fifty years, and they also have two children and a grand daughter, on whom Ron M dotes. She is his sunshine! Ron M is a self taught man in many respects. An avid sailor until it became necessary to sell his much loved boat, Ron took a correspondence course in order to gain his Matriculation (University entrance exam) when he

was a parent; he and his daughter studying together. He has a life history of picking up the pieces of other's mistakes and dishonesty, two such events having a severe impact on his life and health. He was an electrician and for many years the **sole** electrician on one of Australia's island territories. He and his family experienced the Island inhabitants as extremely parochial, so much so that his daughter refused to go to school at one stage. It was a job which created intense distress and anxiety, particularly as the island was often in the path of severe storms, and his repeated requests for assistance went unanswered: the lack of support extended to his being unable to go with his wife when she was hospitalised on the Mainland. This eventually led to Ron experiencing a complete breakdown and aborted litigation against his employers. His next job ended disastrously, when, recovering from the removal of his first melanoma, a workmate offered to bank some work funds for which he was responsible……which she embezzled, resulting in Ron being under suspicion until she was arrested. As Ron is an **extremely** upright man, this was a tremendous blow to his sense of self worth.

He and his wife enjoy travelling and have made several trips to various parts of Australia and New Zealand. He is extremely proud of his daughter, a social worker, although their relationship was very strained for many years as a result of their period on the Island and her experiences there. His son is married and works in the merchant navy.

Ron M has a brother, and his mother was a dominant force in their early life; they were terrified of girls; his wife is quietly dominant.

Ron M has had several melanomas removed from his back and legs. He was also erroneously diagnosed with lung cancer some 20 years ago. In his diary Ron M wrote that during his work life he was exposed to a variety of carcinogens, including asbestos, carbon tetrachloride, polychlorinated biphenyl and other cleaning solvents and insulating varnishes. He doesn't feel that he can lodge a claim for asbestos related injury, because his previous experience with litigation was far too painful, and he dropped a case against his employers for the damaging impact of work related psychological disturbance.

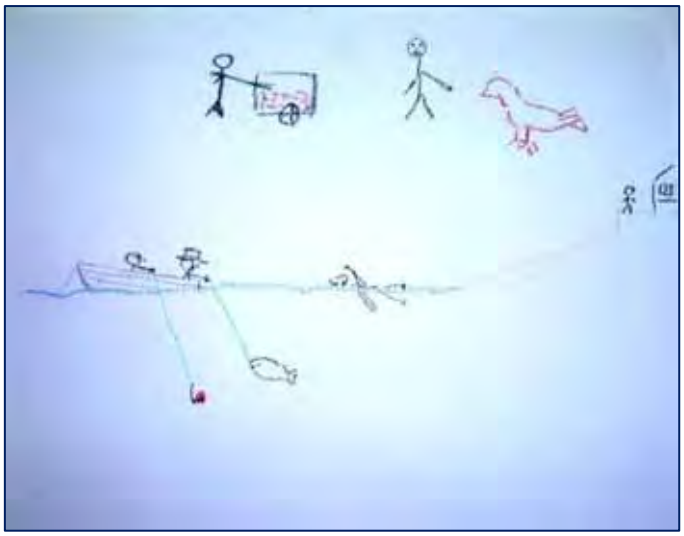

Plate 17: Ron M: KFD Aged 5 yrs: *Summer holidays "my brother and I were terrified of girls"*

Plate 18: Ron M: KFD present family: *"My wife and I like to travel"*

Plate 19:Ron M: Favourite Childhood Story: The Three Little Pigs

The 'Three little Pigs' is a story popularised by Walt Disney in the 1930's with an animated cartoon; the older and wiser pig saving his brothers from the brute strength and wiliness of the Wolf.

While this story appears to extol the virtue of the 'work ethic', as does the previous story, it is very old and seems to be built on the story published by the Grimm's in the 19th century, 'The Wolf and the Seven Kids', and has similarities to Red Riding Hood. In the Grimm's version the wolf eats all but the youngest kid, who together with the mother, rescues the others by cutting open the sleeping wolf, releasing the eaten kids and substituting stones. When the Wolf wakes and goes to the well to drink he falls in and drowns. Being taken from the belly is symbolic of rebirth, and an ancient story motif, for instance the Biblical tale of Jonah and the whale. The pig is an ancient trans-cultural symbol of the Great Mother and is one of the oldest sacrificial animals, known to have been sacrificed at the Delphic Oracle to Demeter[1038], sacred to the Celts[1039]and a symbol of wealth and exchange amongst the Melanesians[1040]. In this story the domesticated pigs build houses of increasing strength; a reflection of the change in human civilisation which necessitated the 'taming' or outright destruction, relegating the Wild Wolf to the unconscious (drowning), when it attempts to *"huff and puff to blow the house down"*, guarding civilization against chthonic forces, and propitiating the Goddess, which certainly resonates with Ron M's life

The possible presenting issues for Ron M are recognition of the power of his 'feminine' aspect, which presents as an idealisation of femininity and a need for 'discipline' and 'authority', manifesting in appeasing behaviour, particularly passive aggression. Both his mother and wife are dominant women. He sold his much loved boat in order to pay for a bathroom renovation; and placate his wife; he also thereby put himself in a position of having **no** 'time out' doing what gives him pleasure. An overriding theme in Ron M's life is that of unsupported overwork, and concomitant inability to say *"No"*.

In Plate 17, Ron M has also made an image of the summer holiday on the coast: he is in **4 places**; consistent with his adult work history of being expected to be in several places at once. Similar to Ron B, he is 'in the same boat' as his father. He had to feed the chooks[xciv]

[xciv] Chook is an Australian colloquialism for a hen, but originated in England, particularly from the north, where the term was is still used as an endearment, like 'flower'.

(enormous and threatening) and pick up the manure: be a gentleman to look after women (frightening creatures) and 'pick up the shit' for others. The only place where there is support is in the water, and for his mother, standing on the deck outside their house (far mid right). He and the hen are unsupported.

When he was making the image for the 'KFD present family', (Plate 18) Ron M had quietly asked Colleen how to draw 'a nagging wife'; she replied that there were "*reasons women nag*". Together, he and his wife are centre front preparing for a bus trip, but a great deal 'looms over their heads': the bus (directly above them, and if it follows the rules of gravity, will crush them) their daughter (upper left) and the ship on which their son works; his daughter has taken on his role of 'chook' tending, rescuing a vagrant[xcv], and his son 'picks up the shit' in his marriage. Ron M is very disparaging of his daughter-in-law. Like Paul, he stands 'naked in the world', while his wife is well clad. Again, there is an issue of support, the only support being provided by the water beneath the ship, and the ground under his daughter and the vagrant woman.

Jim: aged 67

Jim is married and has two adopted children, and like Paul, a grandchild born during the intervention phase. He was not born in the Hunter Valley, but on the Northern coast of NSW, where his father was a baker, and is one of five sons. Jim's father was called up to serve in the army during the Second World War, and was away for several years. This had a profound impact on Jim. His mother was a devout Christian, and whilst undoubtedly a very caring mother, undemonstrative of her affections. The family was quite poor, and as Jim was a very bright child a great deal was expected of him; too great a load was placed on very small shoulders. When he was close to finishing primary school Jim sat a scholarship exam, which he failed. Jim continued to feel the guilt and anxiety of letting his family down until we explored this event during one of the group sessions. Jim's career has been in banking, and he became a manager, working in many different places. He was retired from his banking position, but was involved in other business until the end of the intervention, when he retired, but six months later returned to part time work. He shares with Ron B a passion for

[xcv] Chook may also be used in a derogatory sense, for an old woman.

golf, also at competition level and they became 'buddies'. Jim was very actively involved in the governance of his Golf Club.

Jim's first melanoma was on his scalp and a second on his back. He had surgery to remove his uvula as a treatment for snoring that he wishes now he hadn't undergone.

Plate 20: Jim: KFD Aged 5 yrs, *"My dad went off to war when I was five: we didn't see him for years"*

Plate 21: Jim: KFD present family: *"We're all having a bar-b-que at home"*

Plate 22: Jim: Favourite Childhood Story

Jim didn't remember any one particular story, although an important part of his childhood was to go to the local butcher shop in the morning, before school, and buy a piece of steak for his father's breakfast, when he came home after a night of baking, as he was one of the local bakers. The butcher told *"story, after story, after story"*. The butcher and the block, directly hanging over Jim's head, are **LARGE**, (and floating in space) and 'Little Jimmy', as he referred to himself, so very **little**; far too small to carry the responsibility of the family's reputation! The counter against which he rests his hands seems to be cutting through his head, perhaps reflecting the anxiety which was already a factor in Jim's life early on.

The possible presenting issues for Jim are a sense of burden and responsibility in conjunction with a terror that he 'isn't up for it', illustrated quite graphically in Plate 22, above. He also has a tremendous sense of loyalty to his mother, which prevented him recognizing his own pain. This resulted in a chronic deep pain in his belly (he's had a 'gut full') and a sense of impending doom and recurrent depression, which was later explored. The description he made of his mother, and not wanting to 'burden' her with his worries, is consistent with Temoshok's Type C personality discussed in Chapter 2.

In his 'KFD Aged 5 yrs', Plate 20, Jim has made an image of an important event in his life: his father going off to war. Jim wasn't to see his father for several years, and he returned, like all active servicemen, a very changed man. Jim's mother is the central person in the family, although the whole family hangs above him, particularly his older brother Barry, and Jim

certainly had an issue with 'carrying' them, as a great deal was expected of him because of his intelligence, in the image Jim's head is too large for his body. His mother seems to have something across her throat (echoing the line through Jim's head) and a large red hat; perhaps reflecting her constant worry at being poor and alone with her sons, while her husband was away fighting; 'keeping a lid on it[xcvi]' all

In the 'KFD present family', Plate 21, Jim and his son are at either end of the family, with his wife beside him, together with their daughter and son-in-law; his son looking away from the rest, as if looking at something very frightening. Everyone's legs are distorted; his son's swollen and the other's too thin to support them. As in the other image, Plate 20, no-one has hands, and they have unseeing eyes (what is it that they don't want, or can't see?), except his wife who has one eye open (an eye open for what?). They are quite genderless. His daughter carries a plate of food across her belly, and was pregnant at the time.

Darren: aged 56

Darren was a primary school headmaster, until his retirement on medical grounds. He suffers from a congenital cardiac malfunction, as well as having had several melanomas removed. Darren is also a Vietnam Veteran, and suffered PTSD
and related alcohol problems. The alcohol abuse resolved in his thirties; however the PTSD is slower to resolve and he has been granted a TPI[xcvii] pension from the Army. (Melanoma, hearing loss and PTSD)

Darren's father was a tailor and self made man, who had Paget's disease. Darren's grandparents lived with them, and his relationship to his grandfather was of tremendous importance to Darren: "*he was a bit of a larrikin",* which gave Darren a release from the repressive 'proper-ness' of his grandmother, and his grandfather's death was a severe blow. His parents were always busy, and his mother chose not to see some very important issues which affected Darren, like the effect of the trauma of war (he is a pacifist, but could not avoid the 'Draft'[xcviii]), and the breakdown of his first marriage. He has remarried and now has

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[xcvi] Keeping a lid on it: colloquial term intimating the repression of something/feelings: a 'lid' is also a colloqial term for a hat.

[xcvii] Totally and Permanently Incapacitated

[xcviii] The 'Draft' was a system of randomly conscripting young men into the armed forces for the Vitenam War

a combined family of 6 adult children and 6 (9 at the time of writing) grandchildren, one of whom spends a great deal of time with him and his wife. He has a similar relationship with this child as he had with his grandfather and a very difficult relationship with his wife's son, who was asked to leave home when he refused to stop using recreational drugs at home.

Darren, like Ron M, felt unsupported by the department for which he worked, and battled to maintain a sense of his autonomy. He recognised that he defined himself at the same time as separating himself from his family through work, and is enjoying a much closer relationship with them all, particularly his wife, since his retirement. He and his wife now enjoy travelling and are consciously addressing communication issues.

As a young man Darren was an A grade tennis player and coach, however he ceased playing when he could no longer play to the standard that he had set for himself.

He is a committed Christian, and his belief system is very important to him, although he is by no means a fundamentalist.

Darren's melanoma was on the front of his chest, and a lymph node resection was also performed.

Plate 23 Darren; KFD Aged 5 yrs. Darren on his rocking horse

Plate 24 Darren: KFD present family. Darren and his wife and combined families

Plate 25: Darren: Favourite Childhood Story: Little Red Riding Hood

Red Riding Hood has been sent to help her ill grandmother, but is waylaid by a crafty wolf, who subsequently eats the grandmother. Red Riding Hood 'out foxes' him, and together with a woodcutter's help, kills the wolf, fills his belly with stones and throws him in the river (or well). The wolf here is indeed BIG! Red Riding Hood is giving him a 'mouth full' to avoid becoming a mouthful! Although the path is clear, neither can enter the house, as it has no door (or it is hidden): there are 6 trees, and Darren is father (and stepfather) to 6 adult children. This image is a complete counterpoint to the previous images, Plates 23 & 24; vibrant, alive and colourful!

Like Snow White, Red Riding Hood is a deep and very old story; fragments have been recognised in oral stories of Anatolia, where it is associated with initiation of girls into womanhood (the red cape of menarche), when they must dance with the Wild Wolf and tame him. The Wolf also conveyed people to the Land of the Dead in its stomach; ritualised as a symbolic re-birth as with Jonah and the Whale. In Christian iconography the Wolf represents evil, the Devil, craftiness and stubbornness: Darren is a committed Christian: perhaps here his Seeking Feminine aspect is *"telling off"* his Wild Child Wolf?

The possible issues which Darren brought to The Group were a need to find balance between work/responsibility and play: between being himself and the 'golden child' of whom perfection was expected, an impossible goal. Being the 'golden child' also prevented him from expressing his anger appropriately; he had an *"evil temper*" (the large wolf), and perhaps this temper impacts on a rare cardiac arrhythmia from which he suffers (he's all 'out of synch'). The archetype of Golden Child (or Divine Child) is an aspect of the Child typified by purity and ultimate potential. The Child is also the guardian of Innocence whose challenge is to find balance between responsibility and light-heartedness, a challenge whose call was denied him by his parents; it is also the force which leads to wholeness, issues with which Darren worked during the intervention.

In Plate 23 Darren has drawn his family, only using a graphite pencil, as with the second of the KFD's in Plate 24. Darren's father, a tailor, 'looms large', although he is missing one leg (legless?), and the cutting table floats midair. The dark area on his back is consistent with Paget's disease. Mother is sightless and *"sweeping things under the table"*. Darren rides a rocking horse, out of the picture, directly beneath his grandfather. The number of bars around the play pen corresponds to his age at the time of the break up of his first marriage: he regarded his wife as a 'baby', with whom he couldn't communicate.

This is a **very** crowded, though colourless, image! Everyone is busy! Darren recognises that he finds it difficult to find a balance between his larrikin behaviour and busyness (messages from childhood). His father still looms large; both Darren and his 2nd wife are blocked in (and have had legs cut out from under them) by work, and recognised that he kept himself separate through work. He has a special relationship with the grandson precariously held by its mother (same position in image as he takes in KFD5).

Colleen: aged 48

Colleen is married and has three children and a grand daughter. Two children were living at home at the beginning of the Intervention Phase, but her elder daughter and grand daughter subsequently moved out. Colleen has 2 sisters (the younger born when Colleen was 14) and a brother. She remembers that their parents occupied very traditional roles, something with which Colleen struggles in her own marriage, as she also wants to contribute to the outside world through activities such as a voluntarily run exercise class for other women who are undergoing treatment for cancer, finding that extremely rewarding. Although traditional in the sense of gender roles, Colleen's mother left her alcoholic husband and went to live with the father of Colleen's younger sister, before they were married, and while she was carrying that child. Colleen admired her strength and was tremendously fond of her step father and said with pride: *"He always used to wait up for me, when I went out, and we'd have a cup of tea together".*

While Colleen's older daughter was living at home she was also caring for **her** child (Colleen's grand-daughter), from whom Colleen gains much pleasure but the care involved is an activity which ties her to the home.

During her childhood Colleen was sexually abused by her grandfather and her uncle, and recognises that this has had a significant impact on her in her adult life, although her husband is very supportive in this respect; there was, however, initially considerable tension between herself and both males in the household (and juvenile 'acting out' on their behalf) when she became involved in activities, such as the research project, which required time away from home, necessitating that they accept some minor aspects of the running of the household.

Colleen's melanoma was on her forearm, and required a deep resection, leaving a significant scar; she is passionate about people, especially her family, and gains great satisfaction from dancing, music and conversation with others of like-mind.

Plate 26: Colleen: KFD Aged 5 yrs *"Me and my sister playing in the yard"*

Plate 27: Colleen: KFD present family. All sitting together watching television.

In Plate 26, 'KFD aged 5 years', Colleen's parents are both engaged in gender specific activities: her father is part of the fence, and her mother enclosed, unsupported, in the kitchen, both 'bound to' their 'jobs'. Colleen and her younger sister are playing. Her father, who died 20 years ago, overhangs her sister, while Colleen is suspended from the clothes line. Although everyone is active, no one is interacting with anyone else. There are 18 fence palings; Colleen's age when she married, and 6 now under her roof (6 triangles in roof). Is her marriage also what keeps her safely enclosed, or the world at bay?

In contrast to Plate 26, in Plate 27, 'KFD present family', no one is active, and they are all passively watching TV: watching the world without engaging with it, in contradiction to her professed desire of being involved with things outside the house. Her husband is central and part of the settee (as was her father part of the fence), begging the question that there is a similarity between the two men, and how they perhaps are part of the barrier between their families and the world outside the household. Everyone is floating, encapsulated by furniture, which is unsupported; held in their inactivity. Colleen looks 'frazzled', the lamp above her echoing the clothesline. Her younger daughter is excluded (travelling around Australia). The door and picture are vacant holes.

Colleen's presenting issues seem to be around the issue of finding a balance between exercising her autonomy and being a wife and mother; and letting go of active parenting This is complicated by the gender specific expectations with which she was brought up, and which she experienced in her marriage at the time that these images were made: a sense, also, that they are all 'part of the furniture'.

Colleen was not present for the following session and therefore did not make an image of a childhood story.

Rose: aged 51

As the intervention phase commenced Rose was separated from her husband of thirty years, after he had finally been caught out with a mistress.

Rose had a difficult childhood in that her mother was frequently hospitalised with bronchiectasis[xcix] , and from the age of 7, Rose was virtually responsible for the running of the household and care of 4 younger sisters. Her mother died when Rose was 19, and her father married somewhat hastily afterwards, about which Rose was quite angry.

During one of her mother's hospitalisations an uncle sexually abused Rose, and two years after her mother's death a man attempted to abduct her, by dragging her into his car and

[xcix] bronchiectasis is a symptom of an underlying degenerative lung disease, where thick sputum is coughed up and which also causes frequent lung Infection.

driving her to a secluded place. With great courage, Rose managed to escape. To this day she vividly remembers a detailed description of the car, even its number plate.

When she was 26 Rose was delivered of her first child, a full term still birth. She has two other children, both adult; a son in the Navy and a daughter who was still living at home throughout the period of the intervention phase, but at follow-up time had moved out. The transition was tumultuous, which Rose experienced as very distressing and which she actively addressed within The Group.

Rose works in the caring industry, as a homecare nurse, and can see the connection between that and her childhood, and relationship with her husband. Towards the end of the Intervention Phase she decided to engage in a university degree in order to gain professional accreditation, and had formed a new and meaningful relationship.

Rose is passionate about her children, her home, her financial independence and Harley Davidson motor bikes!

Plate 28: Rose: KFD Aged 5 yrs. *"Mum was a very sick lady"*

I didn't see this image until our last session together. Like Paul's it is very faint, the image having been made with a pencil. Each member is named. Rose, like her father, is a *"very hard worker"*, and the people she looks after, *"very sick"* like her mother. There is no interaction between family members and each person 'bears a cross'; her mother with the most defined cross; her eyes terrified or distended, as if she is strangled (a sensation common to people

with lung disease). Rose's father's eyes are blank and he was oblivious to her experience of sexual abuse, and it would appear, his wife's suffering. Rose is the only one with an arm out; no one has feet or hands, therefore incapable of control or 'taking anything from life'.

The story that Rose remembered, but didn't illustrate, was Cinderella. Like the previous two stories this is also a deep story with an extremely ancient history, and would again seem to be an echo of female initiatory stories. The first written version goes back to approximately 860CE, from China. It is interesting to note that foot binding and veneration of women's feet has a long history in China. The slipper/shoe is a female sexual symbol *"the bride's shoe gives her into the possession of the bridegroom"*[1041]

The story also has some similarities to the myth of Demeter and Persephone, in that Demeter, bereft of her daughter after Persephone's abduction, was given shelter at the hearth of a noblewoman's house, and there placed the child with whom she was entrusted into the hot night time ashes, in order to bestow on him immortality. Like Persephone, Cinderella is initiated into womanhood, and family life is sustained. Deprived of her rightful status in the family, although her mother continues to help her 'in spirit' form, Cinderella must perform 3 feats (3 is a powerful number, being the number of synthesis), 3 women come into the house after her mother's death, the King announces a 3 day festival for his son to find a bride and there are 3 balls to attend. Cinderella loses her shoe after the last; in the rites of Artemis/Persephone young women had to run races: Cinderella must race the clock. The 'Fairy God Mother' of later versions creates wonders out of apparently lowly, undervalued things: mice, rats, pumpkin (the vegetable of the Sun) in order to transport her charge to the ball, and all ends well, as when Persephone is returned to the upper world, transformed by her stay in the mysterious underworld, the world of the ashes of mourning, now a woman.

Rose could see very distinct connections between Cinderella's life and her own; particularly her father's hasty re-marriage to an unloved step-mother. Her presenting issues were the re-orienting of herself as a single woman, and a shift in her role as 'Mother', a role with which she had been identified since early childhood, and therefore extremely difficult to abandon, or transform.

Christina: aged 57

I am the art psychotherapist/research student and group facilitator. I've been an active practitioner of art psychotherapy since my training in Sheffield in 1990/91, although my introduction to the field came through attending training workshops with Elizabeth Kübler-Ross in 1981 and Greg Furth in 1983, while I was a co-counsellor with my psychiatrist husband. In 1984 my husband died as a result of cancer of the bowel, and I became the sole carer of our four children, now all adult and living away from home. I am also the grandmother of four children who are a continuous source of joy. I am the eldest of three children, and although born in Australia, spent my childhood in Holland and returned to Australia as a migrant when I was eight. Both parents were emotionally scarred, which led to a difficult family life and problematic relationships in my adulthood. I originally studied nursing, and along the way have added naturopathy, psychology and various counselling modalities, fine arts, Waldorf teacher training, anthropology and my training in art psychotherapy.

My passion is fired by the wonder of the depth of exploration possible through the art psychotherapy process, the transformation which that fosters, the incredible BodyMind nexus where **nothing is forgotten**, mysticism and mythology, my creative enterprises in many forms (drawing, pastel, water colour, photography, poetry, sewing and embroidery, sculpture, woodwork and building), my children and grandchildren and the constant delight of Life, in **all** its manifestations, even the painful bits

The images: all 200 or so!

Consistent with the concept that the images made during art psychotherapy are dynamic participants in the process they must therefore be included in the 'cast of characters' in this Story. Many will be introduced individually at various stages of the Plot; however, not all will be given equal 'air space', and some must needs remain un-shown.

The Core Childhood Stories

The Archetypal pattern of the stories remembered from early childhood is that of Initiation: enacted through separation, transformation and return, in which the hero(ine) must deal with the challenges of life[1042]. One of the things that were spoken of early on, when the stigmatisation of a cancer diagnosis was brought up was the experience that the diagnosis of melanoma was as 'Wake Up' call; recognising that priorities might not be in life affirming places.

Kearney[1043] points out that the guiding Archetype of Western medicine is that of the 'Hero' *"…the motto of which might read, 'We shall (always) overcome. Just give us enough time and your complete trust'. It is not surprising, therefore, that this should remain the basis of the unspoken contract of all medical care…"* For medical practitioners to enact this archetype, as previously described (p 112), the recipients of their ministrations must necessarily be those who require rescuing, that is in some form or other, Victims. Victims can't be Heroes, and yet the core stories of all these participants represented a 'hero's journey', while they also expressed feelings of having been 'demoted' from capable adult to 'compliant patient'. It was therefore necessary that a shift of perception be facilitated in order that the participants engage in their own Initiation…….their **own** Hero's Journey, recognising the call inherent in their idiosyncratic 'mythological' stories. The core narrative of psychotherapy, as stated before, is that of 'the Quest'.

The Therapeutic 'Doing'

"….there is little in the literature that reflects the psychotherapeutic experience of those who have been diagnosed with cancer, and how they view their therapeutic work……..exploring the experience of the patients seems a useful addition to the literature……Absent in the majority of the evaluations and assessments are the direct views of cancer patients, from their unique and generally untapped perspective….."

Butow.P [1044]

I had found it difficult to find a way of connecting the participants with any emotional content with these first four images, and wrote in my journal that "*this is hard going*"; working with a predominantly male group was a whole different 'ball game' to the mainly female

groups that were my previous experience. *"Men don't show emotion, only women",* was a comment Colleen later made. (t8). Women are socialised to allow for the expression of most emotions other than anger[1045], and to dealing with their feelings (affect made conscious). Women generally seem more ready to engage in psychotherapy and according to Brod[1046], are better decoders of emotional stimuli than men, while men are socialised to express only frank anger or disgust, whereas surprise, curiosity and joy are blunted. As a rule men have been taught to reframe fear and sadness so as to appear 'strong'[1047,1048,1049], which inhibits the exploration of feelings, an essential component to psychotherapy. It was this socialised repression, particularly strong amongst a group of men who had, in the main, been brought up to be 'good ocker blokes', which was making connection with the psychotherapeutic process difficult.

As stated previously, K and Ned left the group less than half way through the intervention. I had some concerns about Ned. I felt that he had needs which could not be met in group psychotherapy and had not made any provision for the eventuality that I might need to ask a participant to leave The Group. Ned exhibited much behaviour that Yalom[1050] describes as the 'monopoliser/help rejecting complainer:' an exceptionally difficult person for a group to accommodate, as the person demands the group's entire attention while at the same time challenging both the group and the therapist to help him by bringing in a seemingly endless stream of complaints, advice or empathy for which he then rejects. In consultation with my supervisor, we decided that I should let the group process unfold of its own accord while at the same time maintaining a 'holding environment' for The Group as an entity and providing feedback for Ned. I also dealt with this issue in clinical supervision.

The drawings made in these first sessions provided an exchange point by which the participants broke through their sense of isolation and 'difference'. At the same time as gaining an understanding of each other, their respective natal and 'created' families, they were able to recognise shared experiences. I gained a snapshot of the family dynamic aspects of their lives as well as the stories in which their lives were embedded, in order to find a point for a therapeutic connection.

The lack of communication about cancer within the general public, and within their families in particular; was painfully experienced when their confusion and fear was unheard, nobody

seeming to want to talk about it candidly. Others, they felt, preferred to pretend that everything was either normal or that they were already consigned to the end of life. Alan described his shock when one of his mates said *"Oh, I thought that you were dying"*; Paul's father had patted him on the shoulder and told him *"You'll be right mate"*, apparently oblivious to, or not willing to see, the shock and fear accompanying a diagnosis of a potentially life threatening disease, with which his son was dealing, and which he himself would also face.

There was a general agreement about, and identification of a connection between cumulative grief, hostile work environments where they were not validated[c], and feelings of helplessness or oppression preceding the appearance of their malignancies. Alan told of the death of his mother not long before the diagnosis of his first melanoma, Darren was dealing with an accumulation of unresolved grief and distress, culminating in his retirement and a sense that he was no longer in control of his life. Ron M told a harrowing story of how, while he was recovering from the removal of his first melanoma, he had been duped by a supposedly helpful female work mate, who had embezzled work funds, while pretending to do the banking to help him out. Rose had very recently separated from a philandering husband and Jim said that nothing troubled him, while at the same time saying that he suffered recurrent bouts of depression.

K asked, after the KFD's had been completed, *"How deep to we have to go?"* with the exploration of the images, and self disclosure. I responded flippantly "*To the depths*" and then noticing her discomfort, reassured her, and all the other participants, that they were entirely in control of how much they chose to explore. As she left the group 6 weeks later her images have not be used, however her subsequent disclosure had a profound effect on The Group. K professed not to have any memory of any event prior to age five, and therefore didn't make a 'KFD Aged 5 yrs', however, in her 'KFD present family' there were five prominent trees on the other side of a turbulent stream, so I asked her what happened when she was five. K disclosed that both she and her older sister had been sexually abused by her father, and her brother by their neighbour. The father had apparently boasted about what he had done in the pub, and was subsequently charged and sentenced to gaol; her older sister was then metaphorically (at least in K's 5 year old child mind) also 'sent away to gaol' when she

[c] The interchangability of the word 'invalid' meaning one who is ill, and 'invalid' meaning not recognised, or untrue, is of semantic importance, I feel.

was sent to live with an aunt in central NSW. Both her father and brother eventually committed suicide. K said with an incongruent smile that she had "*put it all behind me, and I don't dwell on it*" and also that she had never told any other member of the family. It was a painful 'secret' that she had shared with us, but more importantly, perhaps, with six men. At the same time, however, she showed no willingness to engage in the feelings generated by such a traumatic experience, distancing herself from the pain with the smiling bravado of her statement and an apology for bringing the story to The Group. She appeared quite proud that her mother didn't know. Given what had happened to her sister, it was small surprise that she had kept her experience secret, but it left her isolated from the rest of the family. The guys were noticeably moved by her story and reassured her that there was nothing for which she ought to apologise, and several of them told her that they admired her strength in such adversity, Ned saying quietly *"I think you're very brave"*. Colleen spoke of the unrecognised frequency of childhood sexual abuse. K had brought in another dimension of 'otherness', one with which some of the men, particularly Ron M and Alan, had difficulty. It has occurred to me since, that the 'sympathy' that the men expressed may also have been an inferred silencer, (much as passing tissues to a crying person may signal that they ought to stop crying), signalling their discomfort at the confrontation with a dark side of their maleness; a 'Shadow' aspect of the masculine. Rose's and Colleen's silence at the time would seem to corroborate this supposition; as they both disclosed their experiences of sexual abuse later on, and both one-on-one with me; Colleen after Ned's conniption, another manifestation of the 'Shadow', and Rose not until the end of the intervention phase, when we were going over her images again, so that I could clarify some points for myself, before I began analysis of the data. I was glad to have taken the opportunity to do that in order that Rose could finally share such a painful secret (noted above in her 'bio').

We talked about how coping strategies are developed in childhood, functioning very well to maintain the child's safety while in the natal family, but that they also, perhaps, become frozen and dysfunctional in adulthood and become 'the things that don't work for me'. I told the group of an analogy that I had developed to clarify a need for understanding these dynamics.

> "*If you were to consider each learned coping skill to be like a porcelain cup created from the clay of your perceptions and baked by the heat of experience. When it is intact (learned) it is stored in a large cupboard from which it can be retrieved, either at will, or more often, without even thinking about it. Sometimes the cup may be shattered as when a 'major life event' occurs, and because there is perhaps neither time nor the skill to mend it (integrate the experience as a whole) the cup is put away in pieces. There are some jagged or sharp edges amongst the broken pieces. Each time one reaches into this 'Cupboard of Coping' there is the risk of pain from a cut from a* ***piece*** *of the cup. At some point one may acquire the skills, as we are doing in this group, to mend the cup, or realise that it is best to break it entirely so that it ay be 'returned to the potter's floor' to be remade,. When the cup is whole it can be put back in the Cupboard for future use, and creates no further injury.*"

K said, *"Yeah, I can see that…that makes a lot of sense"*, but stayed 'on the surface' of the story, rather than exploring the paradox between the content of what she had told us and the emotion that she had expressed in the telling. This paradox robbed the story of true 'storyness', the listeners being unable to 'join' her in true empathy as they were not actually 'invited in'. In effect their discomfort with the story may well have been a result not only of its expression of 'otherness' and a confrontation with the 'Shadow', but also a response to the 'lack of fit' between content and affect in the presentation.

The following week K (**t3**) was not there and Ron M articulated his discomfort, telling us that he had been awake until 3am going over everything in his head. He asked, *"Do we need to hear all this stuff?"* I explained to him that the nature of The Group, being a closed psychotherapy group[ci], was such that it afforded each member the safety to air whatever came up for them as a response to group discussions or image making and that it was important to connect the feelings that accompanied emotions with how these were felt in one's body. It was that awareness which gave one the capacity to release armoured muscular tension, reducing the secretion of 'fight flight' 'chemicals, enabling immunological function to improve. Some weeks later he told us of his extremely painful experience of a psychological assessment interview as part of intended litigation. Again this was something with which I could find an intimate identification, having taken legal action against the hospital at which I was given a

[ci] A closed psychotherapy group is one in which no new participants may join, once the group has convened, in comparison to an open group, where participants may join and leave at any time, with no defined commecement time.

drug which destroyed my hearing. The adversarial nature of litigious psychiatric assessments can be experienced as quite abusive, particularly as there is no de-briefing.

Leading out of these images was a discussion about their experience of, what they felt, was the stigmatisation of a cancer diagnosis, and in the following session (**t4**), their experience of the diagnosis of melanoma. The stigma was felt by several in perceived social isolation, and a premature death sentence. Through the 'stigmata' of their surgical scars and diagnosis they had been transformed very quickly, and without preparation, from 'normal' (same) to 'different' (other), almost, one might say, branded. The reality of the diagnosis, surgery, regular check-ups and self examinations intrudes into their life space; they are no longer able to live in fluid time. With the medical diagnosis, the conceptual horizon is suddenly circumscribed by a label which infers vigilance towards one's skin, the visible demarcation between oneself and the world. By such a diagnosis one is prevented from feeling 'comfortable in one's own skin' confronted by an ever present danger of recurrence of disease and truncation of life, while paradoxically feeling healthy and well.

> "*When a doctor gives a diagnosis of illness then we are given a way of knowing our embodied being that contrasts with the immediacy of our body experience.*"
> *van Manen*[1051]

> *"Diagnosis is an example where knowledge alone can profoundly change people's lives….(it) seems to be based on a distinct kind of knowledge, a form of knowledge relevant to our scientific culture…….diagnosis seems to be a form of naming…..a clinical judgement brought to bear ….it makes us transparent to expert 'others."*
> *Hayne*[1052]…..

A naming changes the identity of a person. The name given by her parents, whispered by her spouse or giggled by a grandchild, is forgotten; she becomes a diagnosis

In the intervening week I'd mulled over the difficulty that I was experiencing in engaging some members of the group in a therapeutic exploration of their work, rather than simply talking about incidents, as K had done. "*I decided to 'go back to 'their territory'; the intellect*", I'd written in my process journal, retreating from what appeared to be too threatening at that

point. We went over the logic of the research protocol again, and explored the interdependence between immunological function and the 'mind', and, "*there was an immediate change in the energy of the group*", with lively interactions and intelligent questions bubbling up. Direct information exchange seemed a way past the men's guardedness against 'unmanly' behaviour: emotional expression.

I had been impressed by the size discrepancy in many of the images made in the first three sessions, and reflected this to The Group members (**t5**), observing that the main protagonist in the images of remembered childhood stories, was very small (especially 'Little Jimmy'), and that most people portrayed in all the images made thus far were handless. I asked them how they could 'work' in the world, or 'grasp' anything, without hands. They were intrigued by this and **really** 'looked' at each other's work, focussing intently and engaging intentionally with the images. A moment of true connection had occurred. I told them that I'd wondered how helpless or overwhelmed they had felt when told of their diagnosis, and asked if they could translate that feeling into an image of the experience. As a balance and counterpoint to enable safe 'distancing' from possible flooding[cii] with painful memories, I suggested that they each also make a picture of their 'Bliss', a term coined by Joseph Campbell[1053] to denote being at one with one's life purpose.

I took this stance for two reasons, firstly there had been an implicit expression of discomfort with intense feelings and secondly I have found, when working with traumatised people, that if a person knows that she has a 'safe place', (such as that represented in the image of Bliss) into which to retreat if there is a danger of flooding and where the intensity of emotional connection is within the individual's control, (generally not the case in the original event), addressing trauma becomes manageable and recollection of fragmented memories is achieved. When these fragments can become a congruent whole the event is no longer experienced as overwhelming; it can safely be put in the 'cupboard of experience'.
The participants set to and created a series of profoundly poignant images, with some ribald chuckles about the subject of 'Bliss', defusing the pain of recollection of the utter desolation that they had all experienced when told of the malignancy of a section of their skin.

[cii] 'Flooding' refers to the experience of being overwhelmed by feelings with which the person finds difficulty in dealing.

In their silence these images are a heart rending validation of each person's experience of pain in isolation and fear, of being 'other', and yet finding 'sameness' in the shared experience. They require little further description, but do require empathic connection.

Plate 29 a-f: Diagnosis

a: Colleen

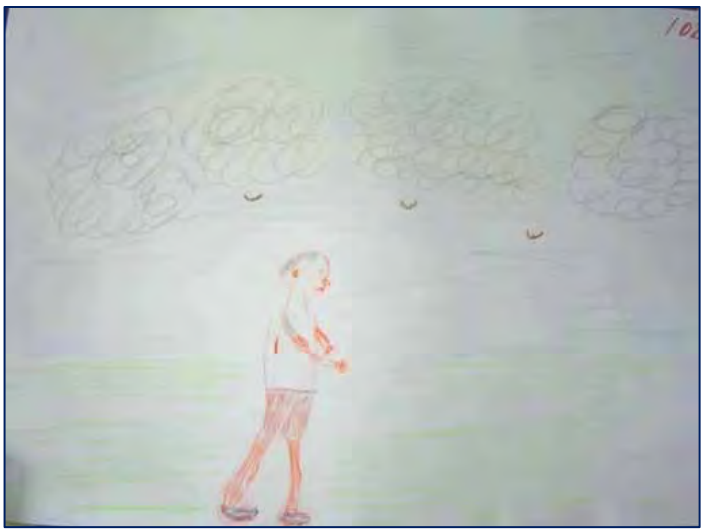
Colleen is **alone**, being 'a man', the tears coursing down her face, hot coals heaped on her head, thinking that this would lead to her death and praying for help. There are 8 stripes on her shirt, and 8 'rays' coming from the praying hands: her age when she was abused by her grandfather: The paradox between her actual adult shape and the childlike/masculine shape would suggest that in some way this diagnosis evoked the same fear as the abuse had done, and that simultaneously, she had to take on a very strong masculine role in this situation

b: Paul

Paul and his wife in their box (coffin) like bed, **isolated**; he thinking of death and how to honour his responsibilities, and that there is yet a great deal of life to live.

c: Darren.

Darren, also alone --- with a 'broken wing', his life suddenly out of control, everything happening so fast! The gurney careening down hill, pushed by the red bodied (angry) faceless doctor, or perhaps God? "Why! What did I do to deserve this?!"''

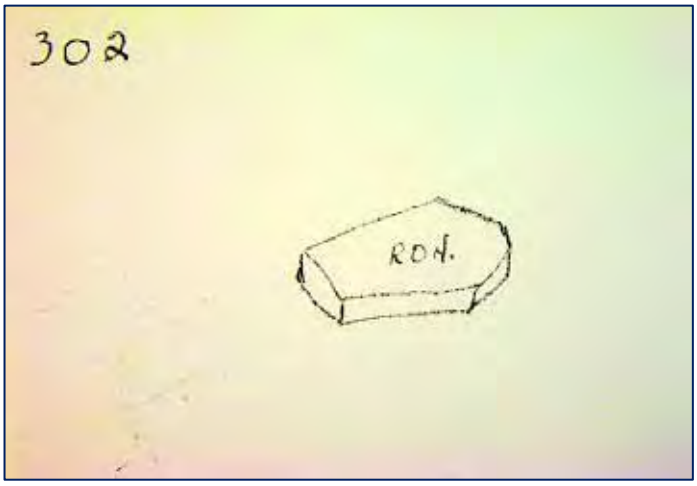


d: Jim

Jim with raw, red scars on his back and head, sadly walking **alone** under a stormy sky; his family 'free as birds' flying above him.

e: Ron B

Ron B 'got it in the back', struck by lightning and taken a- back, stopped 'in his tracks' naked and **alone** on an empty plain with bare, steep, high mountains ahead, an unyielding, non-nurturing 'Mother Earth', his mother's sharp unloving breast in the KFD 5. He is overshadowed by dark storm clouds, and he must carry the "*weight of my errors*" on his broad shoulders



f: Ron M

Ron M is not even 'in the picture', there is a coffin marked with his name, unsupported and totally isolated.

As a counterpoint the pictures of their experience of their diagnosis with melanoma, the pictures of **their Bliss**, show what held these people 'together' through an extremely frightening and challenging time, that they defined as a 'wake-up call'

Plate 30: a-f, Bliss

a: Colleen

Colleen's Bliss is dancing with her husband (although he doesn't look too happy), shared cups of tea and conversation with friends, and going to the 'movies'

b: Paul

Paul's Bliss is *"My wife, she pulled me out of a major hole. She hung in and had faith in me…when I had no faith in myself…she could see ahead. All five kids respect her."* When I asked him about the significance of 17 (the number of rays around the sun) he realised that it was the number of years that they've been together. Her arms, as in many of Paul's images are held up, but in this case, they appear ready to embrace him.

c: Darren

Darren is sitting on the deck of his house, looking at the river flowing past in the sunset, watching a lone water skier and the birds going home to roost. He is removed, above the others in the picture. The representation of a sunset may indicate the end of a phase, or actual end of life. The phase of life that had come to an end was his teaching career. He and his wife have a combined family of six children=8 people: 8 birds. The dark clouds have a 'golden lining'. Darren associated the clouds with three health scares: his melanoma, his heart condition and a strangulated hernia. At the time of making the image, however, only the melanoma and heart condition had been evident, the hernia occurred some months later. Like the representation that he had made of his father's Paget's disease in 'KFD aged 5 years', these are examples of the unconscious understanding of physical function alluded to by Susan Bach and Elisabeth Kübler-Ross. The heart condition gave him a severe scare early in the intervention phase as he fainted several times and it necessitated the implanting of a 'pace maker'.

d: Jim

Jim said after these images were completed "*I knew immediately what I was going to draw when you asked us about our Bliss!*" It is a picture of his family returning for a holiday to an island in the Pacific where they lived for several years; He was 27 (the number of rays around the sun) when they first went to take up a posting with the bank for which he worked. He has made a point of including hands, even to the point of identifying them with an arrow **and** text, after I'd commented about the lack of hands in the previous images.

e: Ron B

Ron B's sources of joy are his family, although the kids are here represented not as the adults that they are, and his grand daughter is missing, the home he has built, his golf and tennis. He wears his heart on his shirt and has a huge red smiling mouth of a clown, echoed in his heart.

f.:Ron M

Ron M's Bliss is his grand daughter, although playing bowls, sailing and his wife of fifty years are also part of that picture.

This exercise, and the discussion which ensued, created a '**point of change'** for the group as a whole. Trust in each other, the process and myself was being established when the gist of what we were doing was fully grasped. A sense of stagnant anxiety gave way to active

exploration. Following the sharing of their images and associations to both the terror of this diagnosis **and** the counterpoint of 'Bliss', a lively dialogue about their experiences of 'stress' spontaneously arose. Jim outlined his history of work related anxiety prior to the diagnosis of his first melanoma, where he had been tyrannised by a boss who refused to recognise his worth in the bank, and blamed him "*even if it rained*". After actively and intentionally engaging with, and exploring these images, he could make connections between the two. A point of integration was reached! In my notes I wrote *"Hallelujah! I left absolutely buzzing! 'Singing in the rain'—a corner has been turned*". The discharge of tension, arising from having to hold onto this painful 'stuff', being **heard by others** who **actually** had a real appreciation of their experience, and being validated in that experience, seems to have been of benefit. The group mean S-IgA increased by 120% after the session, and approached statistical significance, suggesting that the efficiency of salivary immunological function was improved by the release of tension.

Darren also recognised, through the intervening week, that he was able to make choices regarding responsibilities so that "*they don't run me*", and Paul spent time thinking about his *"lack of hands*" and how he *"gave away*" control particularly in his previous marriage. Integration occurred in the interval; in the space of contemplation. Life stories had been shared and heard, the story tellers therefore implicitly recognised as worthwhile by the other members of The Group. The session precipitated the painting on the cover of my thesis.

I include parts of the following session (**t5**) as it builds a picture of the forming group, and gives a fuller understanding of each participant and their experience in the world, providing a context for the understanding of the identified storylines and the gathering storm which erupted 5 sessions later, although there was no significant shift in immunological parameters resulting from this session.

In order to gain a comprehension of how people function in their world, it is necessary to appreciate how those worlds are constituted, and this understanding is best gained through an attention to the subjective descriptions of the experiences they have amassed; their stories[1054]. It is also an important session in gaining an understanding of how these people defined and experienced the distress, frustration, despair and anxiety that come under the general rubric 'stress'.

By the time of this session we were all becoming frustrated with Ned's need for attention and his digressions and "*yes, but*" and *"I'm worse off/more hurt/more successful"* strategies. After he had made a comment regarding his black and white photography, and that he "*found colour difficult to handle"* Ron B challenged him by asking *"I'll ask a question here. How come, and I'm not qualified to make this observation,… someone might help me,… you're saying you're so black and white in everything, but when you tell a story it's so colourful?'* to which he responded inappropriately, but also tellingly, "*never ruin a good story with the facts"* completely oblivious to both the compliment he'd been given and the challenge to engage, while discounting Ron B's input. The emotions brought up from the previous week were still floating close to the surface, and I asked everyone to articulate what 'stress' meant to them, because Jim had made the connection between the anxiety and distress under which he had worked and his melanoma:

For Ron M it meant "*a lack of appreciation; not being appreciated; and a lack of 'time'*. (Plate 31d)

For Ron B it meant exhaustion, working too hard, too long with too many demands made of him. (Plate 31c)
For Darren it was "*a feeling of incapacity when I get all churned up.*"(Plate 31b)

For Paul it was "*not recognising my own boundaries, not listening to myself, my father's voice wasn't exactly right.*"(Plate31a)

For Rose it was "*finding it hard to cope, other's expectations of me*" (no image made).

When I listened to all their definitions I recognised that, in common with most people in our society, a generally negative perception was held regarding 'stress'; a perception in Western society which is, one might say, obsessed with both 'fun' and 'now', and I asked them to 'check this out'. Ned then gave a very good description of stress, using a permutation of the original engineering definition, being that 'stress' is an external force exerting pressure on an object, like a bridge, which **holds it together**, and 'strain' the opposite force that **pulls it apart**. Going by this definition what we suffer from in our current society is **strain**, not **stress.** The original definition, however, first suggested by Robert Hooke, and from which Selye derived his is that **stress is the area on which a load impinges** translated in current

usage to infer the external load which impinges on physiological, biological and psychological systems[1055] (see also Chapter 2).

We talked about the concept that 'stress' is only negative, and I suggested that there was also positive 'stress', such as falling in love, or riding a big wave; pointing out that it is impossible to live in a world without encountering 'stress'. This was directly challenging what Schutz termed their 'natural attitude': "*the sedimentation of all man's previous experiences, organised in the habitual possession of his stock knowledge at hand*" (Schutz A[1056]). The challenge of this assumption was necessary on two counts, firstly that we all gain an appreciation of those assumptions and secondly that the phenomenon be apprehended anew, in its essence. This is consistent with one of the major tenets on which the project was built; that it is not simply physiological 'stress' but the **perception** of an event, creating psychophysiological, or bodymind, distress, that has an impact on immunological function and general health. In addition one of the objects of psychotherapy is to challenge habitual assumptions in order to live authentically and with awareness. I suggested that one of the major determinants of how one is affected by 'stress' and the perception of an event is the degree of congruence with one's world view the event has and whether we perceive that we have any impact (or can exert any control) on the event; that one feels overwhelmed or out of control.

Paul told the story of how he became a miner, and what that meant to him. When his first marriage was in "*serious trouble*" he was working as a green keeper, a job that he loved; he was outside, tending grass, about which he is passionate, and pretty much his own man, however he was feeling overwhelmed and unheard at home. His father interceded and found him a job in one of the Hunter Valley's many coal mines; it was a deep shaft mine going several kilometres under the sea bed off the coast of Newcastle, and Paul became a 'forward cutter' driving a machine which chews into the coal face at the head of a tunnel. The machine cost him his knees and he was forcibly retired, but he told of his feeling of wonder at seeing fossils of plants and creatures never before seen by any other humans. He described the camaraderie of working in closely knit 'gangs', entrusting his life to his mates, his feeling of admiration for the old miners and his enjoyment at listening to their stories. He absorbed their knowledge, learning to "*listen to the Earth breathe and talk, creaking and groaning as the coal shifted*", making a conscious effort to not think of the tremendous weight of millions of tonnes of earth above his head, the feeling of tremendous vulnerability deep in the Earth ;

the feeling of the air compressed by a cave-in; a force great enough "*to knock big men over like grass in the wind*", learning about the sizes of pit props; understanding that it is important that they not be rigid and so strong that they not move or ultimately crumble, because the force of an eventual cave-in, if they'd been there too long, would be devastatingly destructive. It was knowledge that he had taken in to his life, recognising the destructiveness of *"coping too long"*.

When Ned added to Paul's story that his uncle, a Welshman from the Rhonda Valley had been a pit miner lying in a 'slot' to dig out coal with a pick, Paul replied; "*I imagine that situation too, laying in confined spaces like that, the way they ____ must have got around that is that you don't take into your mind the fact that you are in underground, two miles underground and you have got so much above you ____ I mean, you crawl into those little spaces and you have to get on your knees. I mean if you stop long enough and actually take that perspective and, yeah, take that line of thought, that'd scare the dickens out of you!* Several sessions later Paul revealed that he was afraid of the dark! His fear of the dark had to be contained in order to support his family, and please his father. The balance between positive 'stress' and negative 'stress', the balance of the allostatic load, was lost with the destruction of his knees (brought him to his knees) and the effect on his health of years of shift work.

In their subsequent exploration of how their 'passion' had become their 'pain', therefore leading to a feeling of chronic distress and anxiety, Paul recognised that he had actually been *"freaking out"* as a green keeper while his marriage disintegrated and even though the job in the mine was extremely well paid, exciting and working together with "*great blokes*", it was terrifying, and as he said earlier, *"my father's voice* (in his head) *wasn't exactly right."*

Plate31 a-d: 'Stress'

a:Paul

On the left Paul has drawn himself; passionate about his job, but when we **looked** at it we saw that it actually looks as if he's wetting his pants, even though he's smiling. The arrow points to himself, 'stressed out', when he went mining, dealing with the constant fear of being underground, even though it was also tremendously exciting to see virgin coal with ancient fossils, and be so intimately in touch with the Earth. The melanoma is marked on his leg

b: Darren

Darren's passion had been teaching but it became a 'Procrustean Bed', when he was placed in an invidious position by the department which governed how and what he did, in a way directly contradictory to how they dictated he behave towards his pupils.

The first thing that I noted in Darren's image, was that the trajectory of the buildings above Darren is such that they would crush him (and it repeats the trajectory of his image of his Diagnosis; perspective notwithstanding), which in fact the incident that he illustrated, and told us about, very nearly did, emotionally.

Trees which were the pride of the school were cut down despite the Parents and Citizens Committee (P & C) and the school having paid for a tree surgeon's assessment of their health; they were cut down during a holiday break without any consultation with anyone associated with the school; an argument had arisen as to the placement of a covered walkway, for which the P & C had paid, and also about a sewerage line, which Darren had warned was too small. His attempts at communicating with anyone in the department met with no success (see the telephone wire going nowhere); and the sewerage pipe did the same; the issue of "*shit*"! The department also "*cut him down*" as he was retired on health grounds, despite doing "*everything by the book*".

He felt completely unheard and undervalued, let alone validated! Being 'The Golden Child' that he had been brought up to be wasn't working as it should and his passion and commitment to his profession went un-acknowledged! It was a pattern which he had experienced before as a draftee in the Vietnam War.

Darren spoke about his anger, but in the second person. I suggested that he accept that it was himself who felt the anger, and to recognise the difference **in his body** by using the first person, reiterating the importance of connecting the physical sensation with the intellectual process in order to address and change both so that they are congruent and ultimately 'manageable':

D-"*When I get angry, it's hard to express it*"

CV- "*Can you feel in your body the difference between when you say 'When* ***you*** *get angry' or 'When* ***I*** *get angry'?*

D-"*No, I guess I use that impersonal, sort of* ____"

CV-"*Yeah, but you're not impersonal. You are your* ***own person***"

D-"*No, I didn't feel any change*"

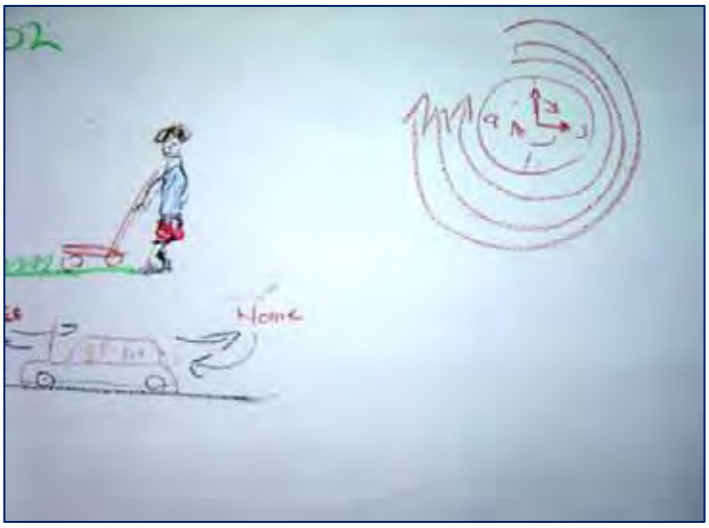
CV-"*OK, try it now then. Can you say it again? Say the two things differently.*"

D- "*What, when* ***you*** *get angry*?"

CV- *"Yes?"*

D-*"..and When **I** get angry ____ **Oh!** ____OK, point made!"*

Darren had reframed a perception of his feelings so that there was **congruence** between the physical response and the affect. He achieved a small AHA! by engaging in a process of connection with the sensations associated with emotions, the **feelings**, from which he had distanced himself. As he'd said when talking about his KFD 5, anger was not accepted by either his parents or grandmother. Darren has also been a long time sufferer of PTSD resultant from his term in Vietnam and has learned to further avoid emotional expression, by such tactics as withdrawal and in the immediate aftermath of his discharge, alcohol consumption, fearing the possible flooding of painful memories and overwhelming fear. In this situation he'd gained a great deal of empathy from The Group, thus beginning to establish a sense that his 'otherness' would also be acceptable, as Colleen's and K's had been.



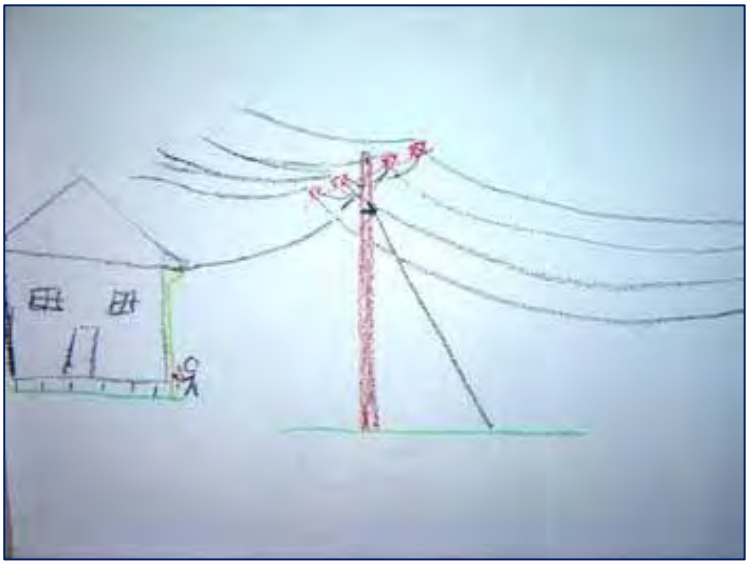
c: Ron B

Ron B spoke of his passion for building, which was turned into a nightmare by the constant pressure of 'time', the crazy clock in his drawing dictating never-ending cycle of work, even at home when he finishes 'work' there is more to be done!

Ron B spoke of feeling completely unheard and unacknowledged by his wife of 35 years, and of having no idea of how to re-kindle the passion in his marriage. He craved affection and was confused as to how to negotiate physical closeness, without sexual contact.

Empathising with Ron B's sense of exasperation and pain, Paul bridged the gap of loneliness and explained that communication was different for men and women, and that perhaps Ron B would discover that it was possible to gain a great deal from the sensuous contact of a cuddle. He went on to suggest that this would foster **emotional closeness** between him and his wife, rather than confusing his need for warmth and affection with sexual gratification.

Rose joined them and re-iterated this, adding that she would have given anything for a cuddle from her Dad when she was a kid, but not to confuse that need with what her partner could give.



d: Ron M

Ron M's story was also a harrowing tale of unheard needs, feeling completely overwhelmed, lack of validation and utter isolation, which for him, was also geographic.

Ron M had been the **sole** 'leckie[ciii]' (see 'bio') on one of Australia's coastal islands, and was responsible for maintaining the power supply to the entire population of several hundred families.

This was particularly onerous during the cyclone season. Ron M asked for back up assistance from the Mainland, but his pleas went unheard, and eventually as a result of his complete exhaustion after a series of storms, he cross wired the connection between a house and the

[ciii] Leckie, is an Australian colloquial term for an electrician.

grid supply, resulting in a child in the house receiving an electrical shock, thankfully, not lethal.

This, plus his inability to accompany his wife when she was hospitalised on the Mainland, led to a feeling of entrapment and eventually and inexorably, to a nervous breakdown following which he was retired from the department for whom he had worked, feeling completely demoralised and undervalued.

After the first month (**at t5**) I was finding it increasingly difficult to write up my notes, as *"there's so much going on with each session!"* I discussed this with my supervisor, because I was also coming home after the sessions exhausted, though often also very excited. Having to focus intently for several hours at a time, on conversations that I had to see in order to hear them was wearing, and it often took a couple of days for me to recover. We agreed that there was an enormous amount happening, and keeping Ned applied to the reason for this research, that is, art psychotherapy, rather than story telling, was diverting my energies from the task. Issues with Ned were becoming more difficult to accommodate, however, as it did for me, the processing continued for the participants through the intervening week; a good indication that we were all very much engaged in the process[1057].

The session had a significant impact on some of the participants, particularly Ron M and Darren who, again, had very little sleep afterwards. (*"Thanks for the sleepless night, Christina,* was Ron M's wry comment). Both felt they'd left these issues in the past but realised that there had been unrecognised ramifications. In the ensuing dialogue (**t6**) the others also shared what they had been able to 'process' during the week.

Paul had spoken with his mother about the relationship with his father and that he'd "*sort of decided to make changes as to the way I was brought up"* (and in particular, how he would relate with his children) how he'd initially modelled himself on his father and realised that it didn't ring true for him, which resulted in a falling out between them. He was relieved to have been able to make peace with his father "*just before he passed away"*. It also felt good to have been able to clear this all up with his mother so that she had the chance of understanding what had happened, from his perspective, building a bridge of understanding to reduce his feeling that she didn't appreciate who he was.

Alan had been away on a biker holiday in Tasmania and told the others of his adventure, and "*talking about that stress sort of business, I had a terrific time"* but there had been an episode when late in the afternoon they were caught on a winding road between towns in very mountainous terrain with driving, sleeting rain. They'd pulled into a cabin and met with some other bikers, who had a fire going. These guys told Alan and his mates that the road ahead was difficult. He wanted to stay put, and his wife agreed "*but then my mate said 'C'mon Al, I think we ought to move on', but I didn't really want to and that sort of built up stress and ____", "How did you deal with that?"* I asked, *"Oh. I was swearing and carrying on inside my helmet, you know", "How did you resolve it?" I asked. "Well I had to be careful ____"* The safety of the uninsured bike was paramount____ and that of his wife. To add to his distress it was suddenly also dark and foggy. *"So it was a bit scary"* I reflected to him. *"Well scary, but I just wound off. I backed off and went slower ____ but if you say building up stress, it certainly was ____ I felt uncomfortable* (contradicting his opening statement).

The others were completely engrossed in his story, his description **inviting them in to his world**, Ned becoming a co-story-teller by identifying what he was riding ; "*He's on a motorcycle, by the way*", and complimenting his expertise "*Well, you're experienced, I know*", and asking for further particulars. Colleen, in the meantime, picked up on the issue of the **distress** and asked him "*If that guy sort of hadn't pushed you to go, would you have gone, or would you have stayed?"* Alan replied that he would have stayed. I wondered if he'd had to learn to suppress his fear very early in the midst of constant domestic violence in his childhood home, and consistent with that assumption he denied that he'd been in danger, going back to the details of the value of the bike, the weight he was carrying, the speed at which they were travelling, and I observed that if he rolled the bike it was not simply a matter of needing a tow, "*If you come off a bike at 165km/hr there's not much of you left", "Yeah, but you worry about the bike.* ***You don't worry about yourself****"* Ned added, maintaining an alignment with Alan, who went on to tell us, "*We picked the cream of the roads",* implying that he was very brave and **not** afraid. "*It was stress you could manage"* reflected Colleen. Alan agreed, and then identified the physical sensation of the "*adrenalin rush"* after I'd pointed out to him that what he was perhaps experiencing was the **positive** 'stress' that every athlete knows, at the same time acknowledging his athleticism. "*I'm 60 now but I still get a good adrenalin rush ____ if I'm not training you know, your endorphins drop off; and when I train I feel really good"* he responded. When he recognised that I wasn't questioning his competency he was able to go with the exploration

and connect to his bodily sensations. I told them of the enormous 'stress' experienced in many tribal healing ceremonies, and that the 'stress' is, like athletic training, recognised to be a necessary component of the ritual, contained within a social structure **and** it is known to be efficacious[1058]. Again I reiterated that 'stress' related damage often results from a sensation of 'no escape'. The exchange again highlighted what Temoshok[1059] has identified as interpersonal dynamics shared by people who have a diagnosis of melanoma: Ned spoke of thinking only of others, and Alan had been unable to say 'no' to his mates, important people in his life, even when he felt that he, his wife, and his bike might be in danger.

This resonated for Ron M, who had again been awake "*until the wee small hours*", going over the stuff, which he'd not wanted to dredge up, telling me that **I** had brought it up. I pointed out to him that it had been **his** picture, which **he** had created and brought to The Group; an issue that he had, perhaps unconsciously, needed to explore.

"*I know",* he replied *"and when I did it I realised that you were going around the table, I thought: I don't want to talk about it",* at which point I realised that it was important to re-state that they were in control of their process, and if they chose not to explore the content of their picture they need only say *"Pass"* and that would be honoured.

Ron replied "*But we're not coming here for the fun of it. We're here for a reason",* (with a subtext of: *'If it's good for you it must hurt/taste awful'*) voicing the same dilemma which Alan had described between honouring his need to hold his boundary and accept the authority of 'the group', highlighting their need for being 'same' and not 'other' ____ risking inauthentic adaptation rather than exclusion and isolation. It is interesting that these two men felt it very important to impose 'discipline' on youngsters, and that there is currently a lack of respect for authority, i.e. external control. This may be a reflection of the neglected or suppressed 'feminine' aspect of the psyche[1060], and a lack of understanding of their inner resources of strength. I challenged another of their 'natural attitudes' by reinforcing that it is important to recognise the need for, and honour, one's safety, that saying *"NO"* is OK and at times necessary. I suggested that, never having been given the opportunity of learning that they had a right to acknowledge their instinctual need for safety, they had also been denied the opportunity of exercising that right, recognising that inability as source of inner turmoil.

I recognised that tension was increasing within The Group at **t6**. Not only had they become well engaged in the exhuming and exploration of painful issues, they had also made significant connections between their distress states; anxiety, depression and feelings of helplessness, and ill health and a couple had expressed a need to '*go deeper*', and a frustration with Ned's stories. On the other hand, in the process the participants had also made connections of empathy, compassion and friendship with each other. This was no longer a group in the process of 'forming'; individuals getting on together for the sake of politeness, nor had it yet reached the stage of 'storming', although the thunderclouds were steadily building; they were now definitely 'norming' and working together effectively[1061]. It was therefore important to introduce them to practical ways of addressing distress, other than bottling it up, *"putting it behind me*" as both K and Ron M were want to say, or shutting down. To that end I introduced them to Guided Imagery. (The full Guided Imagery may be found in Appendix 4a).

Following a much needed 'natter break' we began the Colour Garden Guided Imagery.

I asked that they find a comfortable space, close their eyes and allow themselves to relax their bellies so that they could breathe slowly and deeply, to relax their buttocks, their legs, feet, arms, shoulders and faces. I then took them through the Colour Garden, based on the chakra system, each colour representing a chakra, in ascending order from red to violet, coccyx to crown, and at the end brought them 'back to the room' asking that they make an image of any part of the visualisation that they remembered, without talking to anyone. I ask participants to do the exercise in this way in order that the image is not lost or re-constructed in conversational comparisons with group mates after a visualisation.
All the participants found it easy to relax with the visualisation, both Alan and Ron B actually going to sleep. Ron B had difficulty staying with the visualisation beyond the orange gate and descended into a deep sleep, a reflection of the exhaustion that he had talked about the previous week. Alan said his neck completely relaxed, and he drifted off to sleep for a short time after the final garden, in which there is a small temple.

In each garden there is a symbol specific to the associations of the chakra of the same colour. In the red garden a memento from childhood and grandparents (base chakra: emotional well being, belonging; ego strength). In the orange garden a token of significant relationships

(partnership and integrity, sexual drive, manifestation of the physical, choice). In the yellow garden (will to power and relationship to the World and the unconscious, understanding needs) a reminder of a person admired with a plaque and an inspirational message. In the green garden (Love from the Heart, joy and grief) a bubbling spring, or well, and a large tree, the person's *arbour vitae.*[civ] In the blue gate (translation of feelings and emotions through the voice, the release of the individual will to that of the Universal Will and surrender) through which a small stream flows, fed by the spring of the previous garden are memories of one's Soul Song with an ability to say what needs to be said. In the purple or indigo garden (recognition of I and Thou, 'Mystery', intuition and inspiration) where one is greeted by a wise old person who gives the person a gift and finally a white garden (Unity with the Divine, Life force, Interconnectedness) in which is a temple where one is guarded while resting and a revitalising drink is available.

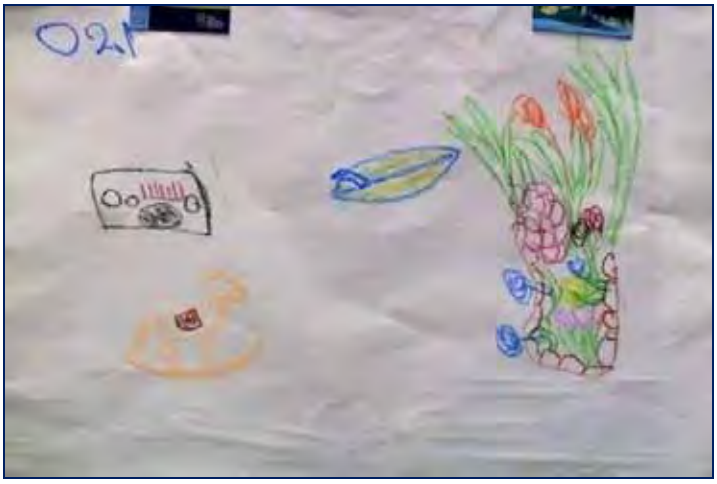
Plate32 a-f: Colour Garden 1

a: Allan

The gardens in his image are disconnected; the most important gardens for Alan were the first garden, Family (red garden/base chakra), the third, Will (the yellow garden/ solar plexus) and finding his Voice (blue garden/ throat chakra) in the fifth garden. Alan is lying on the couch deeply relaxed. He couldn't remember drinking from any of the liquids: suggestive of an inability to connect to his unconscious and source of self nourishment. The tree is a weeping tree; a blue jacaranda and Alan has had to overcome a "*terrible stuttering problem I got from me Mum*"; a woman who had learned to "put up and shut up" in order to survive a horrendous marriage. There were conflicting memories of grandparents, one set being great fun and adventurous and the other very strict, echoing Alan's difficulty in finding a balance between these attributes in himself.

[civ] Arbor Vitae: (Latin)Tree of life: OED

Colleen took her picture home but remembered being given a bracelet, and her grandmother's ever present lace edged linen hanky, with which she waved good-bye, (she had died only recently) a childhood teddy bear and a silver coin. She'd had trouble remembering what happened in what coloured garden and had allowed her intellect to maintain control and re-arrange the inner journey "*I couldn't understand why you said a stream, when first there was a fountain? Why are we drinking from the stream* ____ *I saw the bubbles of water come up* ____ *(laughing)* ____ *and then thought, well, where did this stream come in, 'cause it wasn't here in the beginning."*



b: Paul

Paul's gift was a new surfboard (freedom). He included all the colours, transposed onto his garden at home, of which he is very proud, although this is very small and crowded. His gift of childhood was a rocking horse and the grandparental memory was of the family radio, which brought everyone together. Paul did remember taking in the various drinks.

c: Darren

Darren's gift was a Celtic cross (his Christian faith), which seems to impale the doily which his grandmother insisted on using for very prim afternoon teas. The little yellow boat was one he had as a kid, with which he played for hours; it doesn't sit quite in the river (of life). The trunk of a tree correlates to the person's life span and wounds on it may suggest major events. There are several on this tree trunk; between 6-18 he moved house and his grandfather died, 20-23 left home to go teaching and experienced the Vietnam war, 27-30 his second wife, and his heart condition (central scar) became a problem, parallel to a heart shaped leaf.

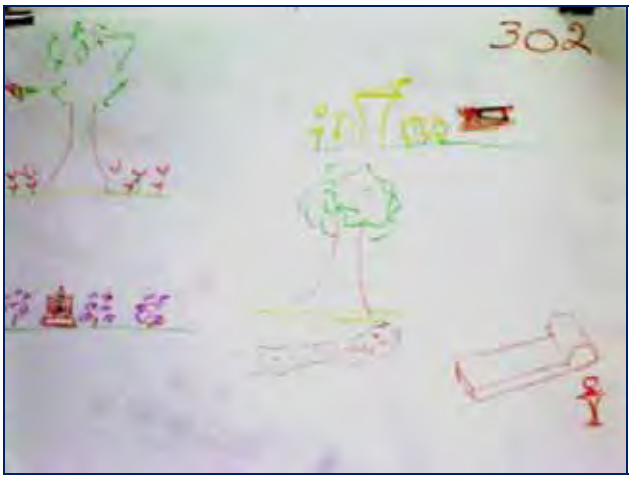
d: Jim

Jim also included all the gardens, stretched out **down** the hill[cv], the top of which was a favourite place for him and his mates to congregate and just lie in the grass and look out to sea, in between chores. The childhood memento was a wonderful red 'billy cart' (base chakra 'belonging') made to make his delivery round easier by a person to whom he delivered newspapers. Jim mowed his lawn in payment. The purple trees are mementos of his mother (a devout Christian) and grandmother, who lived in Grafton, the 'Jacaranda City'. The gardens are very small in a very large space; may he not "take up space ?: a confusing mixed message from early childhood, where his mother asked little for herself, and yet a great deal was expected of him; to better himself, and give the family a place of honour in the community. The contra directionality of the energy system is a worrisome imbalance.

e: Ron B

Ron B could see nothing but this shadowy figure, and went to sleep. My concern with this is a question of the strength of his life force, however this lack of substance is an aberration amongst his other images, so is it perhaps a 'shadowy figure' from his past? He had mentioned that there were dark family secrets surrounding his parents, one of whom had been adopted.

[cv] This is in the opposite direction that they take in the body: red is associated with the base chakra, at the base of the spine and white is associated with the crown chakra, above the head:



f: Ron M

Ron M remembered a prized possession, a wooden sled with which he slid down grass hill, and his grandparent's clock, which he still has at home; a deep connection with tradition, associated with the base chakra. It is interesting to see that there are 'faces' in the foliage of both trees, in the green garden (Heart chakra); the upper left somewhat feminine and smiling and the central one disapproving and 'pointy nosed'.

I wrote in my journal that Ned *came out of left field with tears of sadness about someone of whom he was very fond having been beheaded in Ambon in the very last part of the War."* Ned said he was 12 at the time "*He was special because he was an officer. They made him kneel down and they beheaded him ____ they killed my grandmother ____ They came back here near the end of '45 ____ special mission out of Townsville and then crashed and were all captured. That was the end of it"* and this person, Jack, whose name was in the grass near the watering can, had been a very special friend (there was confusion as to whether he was an uncle or a friend?), but was 20, which is a large age difference (unless an uncle). I asked him how this person was special and Ned replied "*I used to feel him and cry"* and then jumped on to tell us that when he returned from the War, his father had become violent towards him, but never his mother: "*I only got what I deserved'*. Ned then asked if we could "*go to somebody else please?"* The rest of The Group held this, the first expression of tears, in silence, and within the space of silence a transformation occurred: the 'surface tension' of the bubble of his resistance to engage had burst with the ancient curative magic of tears. Alan voiced his discomfort with "*We're getting pretty in depth here, aren't we?"* When I asked him how he felt about that, he denied feeling anything just that "*I didn't think it was like that"* (Alan consistently referred to the art psychotherapy group as a 'course'). The others explained to him that they had already begun to explore things in depth; K said *"You weren't here last week: I bared my soul, 'cause I asked Christina, 'how deep do we go'?". "As deep as you like"* Ned interjected, and K finished with *"and it all went blert ____ and it was out! I don't know*

why it did; ____ ***I did feel a lot happier when I went home****";* it was an aside, which was of great import, as K was letting the others know that there was a positive pay-off to the '*blert*' process. After some further talk about how this related to the melanoma and that he didn't want to dwell on it, Alan suddenly said *"See,* ***nothing*** *happened today. I'm actually finishing next Friday* ____ *my job.* ***My work****. I'm now* ***finished****. I finish on Friday, and that actually took a while to do,"* voicing his fear of retirement and the loss of the companionship of his mates at work. Without his identity as a working man to validate his sense of 'self' or the 'sameness' as being with his workmates, I guessed that Alan was finding the prospect of this important transition somewhat daunting. He acknowledging the impact of the diagnosis on him, as that had been a deciding factor in the timing of his retirement; it had been the 'wake up call' that the others had talked about. It also connected with his earlier resistance to exploring the anxiety of the motorbike adventure, as competency is common to both issues.

Colleen asked an important question, which provided a point of contact with the underlying issue of coping with stressors and the fear associated with their illness, which had suddenly been brought very close to the surface again by Ned's tears; *"When you realise though, and you look back on your life, you see the stresses that you've had- like, you think you've turned off from them, but you obviously haven't because you haven't forgotten them. So how do you deal with them?" "Well",* I replied *"I guess the first part is actually looking at them again"*, and then reiterated the metaphor of the cup working to recognise that the event has had a purpose in one's life "*And it's probably made you a stronger person sometimes"* Colleen added.

The following week (**t7**) Jim came in to tell us that he had used the visualisation in order to deal with a stressful situation, and had begun using it regularly, several others joined in, saying that they'd gained a lot from the relaxation. I was 'chuffed'! They were very much more relaxed and talked of a television programme that they'd found interesting, which gave me an insight to their normal everyday lives, away from the therapeutic process. It also illustrated their apparent comfort with each other and how they were gelling as a Group[1062], although K missed that week. With his expression of pain, the others seemed more able to connect with Ned.

I used two other visualisations with The Group during the intervention; The Forest House Visualisation (**t7**) (Appendix 4b) immediately after the Colour Garden, as the participants

specifically asked for another 'go' at relaxation exploration, and the Undersea Journey (**t11**) (Appendix 4c) When the immunological results were completed it was apparent that neither of these visualisations had the same impact that the Colour Garden visualisation did, however, what was note worthy was that the Under Sea visualisation, which I've found triggers deep issues, marked the nadir on both S-IgA and S-IFN-γ group mean post-vs-mean pre-session graphs (**Figures 7 & 8**, Chapter 6). The Group had already made it clear that they found exploration of unconscious content difficult, and their anxiety was reflected in the immunological results. The session of the Under Sea visualisation was also the point at which it was recognised that Ned was no longer part of The Group. In Eastern traditional medicine it is understood that an imbalance of energies along the spinal meridian, where the major chakras are placed (metaphorically explored in the coloured gardens), results in a disturbance of both physical and emotional health, so energising this through both relaxation and the focused intention on each of the 'colour gardens', would be expected to have a positive effect.

"*What an evening! It's been the most dynamic group to date ____ Paul said that he thought something quite significant had happened: The Group is working well together."* I wrote in my journal.

The next time the Colour Garden visualisation was used (**t22**) the technique of image making had an added twist! I provided each participant with a 30x40 cm sheet of 200gm watercolour paper, prepared and mounted on a board. I then presented a range of high quality liquid watercolours and brushes.

The images made in this session were all particularly beautiful. Using fluid colour on wet paper had enabled the participants to create clear, vibrant images ____ and as Rose said, the lack of control over the medium reflected that one has little control over life; one can control one's perception of events and chose how to respond, but the wind will blow where it wants, and the tide ebb and flow as it will.

Plate33: a-g: Colour Garden 2

a: Allan

The visualisation reminded Allan of the backyard of the house he had lived in as a child, which he'd always liked and saw himself reflected in the pond; the waves moving with the wind; the sun, warm. At 30 he became a parent (30 bricks). Alan came to know his own value through parenting. There are four stepping stones in the path, on both sides of the fence, and Alan had 4 people in both his natal and created families: the gate separating them. "I'm more relaxed, people thought I'd never settle down, but I did. I'm more relaxed and tolerant than before I had my kids."

b: Colleen.

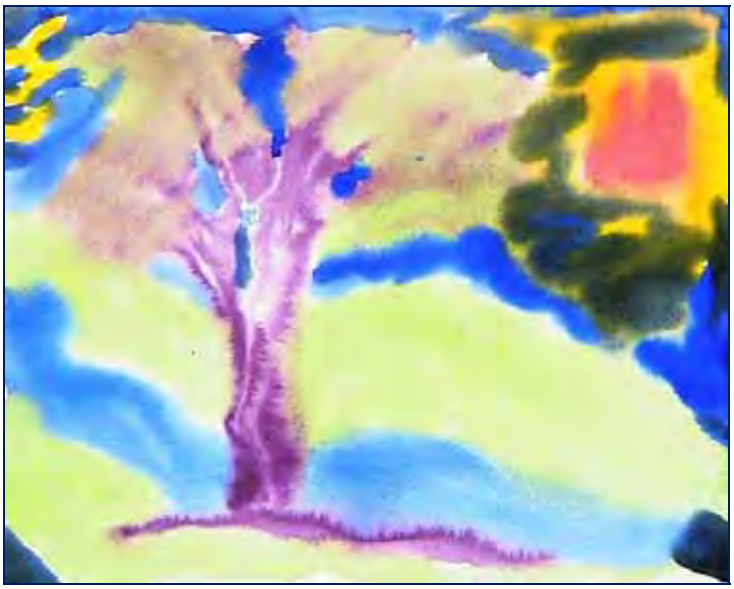
Colleen has painted herself in the blue garden, with a big jacaranda tree, giving Voice to her "Song" *"I'm allowed to be happy";* the three song notes represent her children. 31 blue stones in the garden border; she moved away from family and fiends which forced her to be stronger to go out and meet people; she used to be very shy. Eight green stalks, the age when she was abused. Her stepfather had Huntington's disease', and watching him disintegrate was very difficult. *"Your problems make you stronger."*

c:Rose

"This reminds me of my Nan's garden. There was a horse drawn cart in the front of the garden and as kids we used to sit in the cart in my grandma's garden and count the flowers on the poinsettia tree." The paradox here, though, is that Rose is outside the garden, and while she "tied" it to her head, there's no way for her to get in to the garden, the boundary is almost completely solid.

d: Paul

"I enjoyed the whole experience, the big tree in the green garden, and the fountain, and in the purple garden I felt just like I was part of it…..like a ball of energy."



e: Ron B

"It was a very tranquil setting; I just focused on the tranquillity, because if I thought about the rest of the visualisation I would have lost that." The tree looks similar to the drawing Ron B made of himself in 'diagnosis', except that in this one he is facing towards the sun, the future, with a softer and rounder body. Although there is a barrier between the tree and the sun, protecting the tree from the sun's heat, the shadow in the previous visualisation is now transformed into a strong tree. The difference between the two images is tremendous. Where the first was nebulous and monochrome, this one is strong and vibrant.

f:Ron M.

"I enjoyed it, but I wish I'd had a bigger page!" I'd never heard Ron M ask for more of anything! *"The journey was great."*Sixteen bricks in the wall': marked the start his apprenticeship, which gave him a doorway out to the world (the connection with the 'bigger page'). When I asked him whom he had met there, he realised with a broad smile, *"Oh! I might have met my wife about that time!"* The tree trunk is split in two, and yet joined, like his wife and himself.

g: Darren

"I started with a rainbow, and the colours all sort of melted into each other. I had a very clear picture of this little chapel….meeting The Beloved….where my wife and I were married…and it's not so clear any more."

As a token of thanks for their participation in my research project I framed all the pictures and gave them back in the last session before the six month break. Jim was away for the second Colour Garden session, and so I framed his response to Rose's difficulties with her

daughter, (**t16**) because it was a significant point of change for him to recognise that he was also allowed to be happy.

Plate 34 Jim:

"There's always sunshine somewhere, even if you can't see it"

There are five black tears, his age when his father left for the war, hiding his sunshine; his father still there, even if he couldn't be seen.

The group mean difference between post-vs- pre- session levels at **t8**, when The Group made spontaneous, undirected images, were the greatest in the entire intervention with an S-IgA increase of **225%:**, and an S-IFN-γ increase of **84.97%.** It seems that, despite their protestations to the contrary, working on their own in fact had the greatest positive impact on their immune function. In this session the participants engaged in spontaneous active imagination, finding a voice for their 'Soul Song', and as Robert Sardello[1063] remarks, this is the quintessential method by which the soul communicates in the world; through fantasy, metaphor and myth, transmitted in story or image. It is this communication with the world, which validates oneself in the most profound sense, and, as depth psychologists have been saying for the last three quarters of a century at least, we ignore the soul at our peril[1064].

I'd been running late for this session (**t8**) and rang ahead and asked the Nurse Consultant, who usually stayed behind after work, to ask the participants to make an image of anything they wanted.

Plate 35: a-h: Free Image

a: Alan

b: Colleen

c: Paul

d: Darren

e: Rose

f: Jim

g: Ron B

h: Ron M

Everyone was well engaged in their drawing when I arrived, and they were in high spirits and engrossed in animated conversation, Rose had brought a bottle of wine, and she and Ron B were chatting amiably with each other. I had an ear Infection so hearing was more difficult than usual.

It is a significant time point in a group's maturation when they are able work on their own, when they reach the stage of 'performing'[1065] expressing their autonomy and interdependence at the same time and jettisoning the Victim's tattered garb with which many people arrive in psychotherapy, recognising and becoming comfortable with their value firstly as human

beings, and secondly as companions to each other in an adventure. Ned, however, was determined not to relinquish it, holding it securely around his shoulders, turning it inside out at times to show the 'Bully', the Shadow of this Archetype. An interesting aspect of this session is that Ron M said almost nothing the whole time, but nattered happily with me when we cleaned up: he'd made another image of 'the Chook', this time labelling it distinctly, and I wonder if he was feeling 'hen pecked' or overwhelmed?

Alan had made a picture of a recent trip to the ACT[cvi] to deliver a motorbike to his son-in-law; it's interesting to see that in the picture one would imagine that it is a father teaching a small child to ride his first bike. It was a trip which ended, again, with Alan "*feeling pissed off*". We talked about choices and the individual's capacity for making them, and then also needing to take responsibility for those choices. I asked how it would be if he were to enjoy what he has, instead of complaining about what has gone wrong, and that he check out with the others in The Group for alternative ways of dealing with a man who he felt had given him a "*raw deal"* on the van he'd hired to transport the bike.

- *If you keep saying you're pissed off, that's what you'll always be.* (Rose)
- *Take things with a grain of salt.* (Colleen)
- *You're a very nice person, and you carry the problem internally rather than have any confrontation.* (Jim)
- *It's OK to speak from a place where you're real, and just say "I can't do such and such". You don't have to live in a double bind. You can be assertive.(*Darren)
- *Your wife said to "put up and shut up" really, and that was what your mother did. It seems to me that you wear your Dad's toughness on the outside, and your Mum's softness on the inside* (Paul)

I added to this that in his family he'd never been able to learn the difference between assertiveness and anger, and that each week so far he's brought a story of grievance. It occurred to me that he was asking us all to hear the pain of the little boy keeping warring parents from killing each other, and by extension asking us to protect him from the people who he perceived as being abusive, as no-one had protected his family from his father's

[cvi] Australian Capital Territory

violence; to recognise and validate him both as a competent protector and worthy of protection himself. I suggested to him that when he goes into the *'pissed off'* space, he gives away his power, and Paul added that he could be **authentic** with his anger.

Alan could relate to that; telling us that he'd had to work like that when he was a 'bouncer' at a local club. We talked again about the difference between *"It makes me feel"* and *"I feel"* being more than semantic; where the first removes responsibility for one's responses, and one remains the focus of another's control, whereas with the other one finds/regains autonomy. I also suggested that 'stress' was experienced when tension occurs between behaving as is expected and behaving in congruence with one's needs; when one behaves in-authentically in order to avoid isolation and rejection. I added that one of the functions of this enterprise, the group art psychotherapy, was to get to know **oneself** in order that active choices can be made about how to respond in 'the present moment' as far as possible.

Darren showed his vibrant picture of a surfer. He doesn't surf and looking directly at Paul, while he explained that he could connect to Paul's love of it and has used it as a symbol of freedom; he'd received his superannuation payout and with part of it paid off his house; he was free of debt: This was greeted by a general round of applause, a wonderful validation of his achievement

The frisson between Rose and Ron was clear; both of them chuckling when he told us about his picture of the two of them "*happily heading off into the sunset*" ____ going north to Queensland for the Easter break ____ although Rose is sliced in half by the road, something that was repeated in another image (**t16**) when the distress she was experiencing with her daughter was explored. He'll "*grab any colour*" in his life that he can, he later said, and realised that her openness may well have been a mask, which he recognised unconsciously in the inclusion of her large black suitcase (baggage) and a 'baggy' dress which she was unlikely ever to wear, (I'd not seen Rose wear anything other than elegant close fitting clothes). The shadow is not in alignment with the direction of the sun, but is very similar to the 'shadow' that he drew from both Colour Garden visualisations; perhaps alluding to an ever present 'shady secret', his 'Shadow'.

I asked Rose how she received 'nourishment' from The Group (the shared meal that she had illustrated). She replied that "*It's good company, there's a great depth of connection; it's about sharing."* The activity of sharing on many levels bringing out the communality of the experience, and a way of breaking out of the perception of isolation while also being recognised as a worthwhile person with whom to share, healing the wounds of her early experience and the recent pain that she had experienced with her marriage break-up.

Jim made another image of his much loved lagoon in the Pacific and we talked about the difference for him between being there and here, which led to the memory of his scholarship exam and the weight on his slight shoulders of living up to his family's and teacher's expectation of great things. He had initially been stigmatised as 'other' because of his intelligence. He failed, and has had a sense of debilitating tension in his stomach ever since ____ "*You've had a gut full?"* I asked, and he nodded ____ *"It must have been a bitter disappointment"* I reflected. "*Oh yes, to me , my parents, my teacher* ____ *I don't know if this is related to my anxiety, but it's there all the time, even when I play golf. The only place it goes is here*" he said, pointing to his picture, referring to the island. It has been my experience that if a person says "*I don't know if* ____ " then there is a fair chance that that is exactly what they do know, but may be embarrassed to articulate, and shared this with The Group. Colleen talked about having returned home after the last session to a mess, where no one had cleared anything up, waiting for her to *"do her job"!* She was furious, as can be seen from the fiery cloud erupting from her head; and the empty 'bed of roses'! Colleen felt that her husband and children were punishing her for going out and that her husband expected her to make their meals, despite her need to attend The Group; and her son a strapping 18 year old and daughter a mother herself!

We talked about different ways of communicating with each other, to avoid the 'shoulds', 'coulds' and 'oughts' which inevitably end in an altercation and bad feelings. I introduced them to the rudiments of Transactional Analysis, illustrating it on the whiteboard, which engaged them intellectually, and they began testing ways of applying it in various hypothetical situations.

Ned had made an image about his early training at a local factory and mentioned asbestos exposure, a series of squiggles that were both ways of cheating at school to write out 'lines'[cvii] more quickly and also the boss' signature on pay slips, and a dark place where he said "*books were cooked"*. Ron B asked him what had this to do with asbestos and the others were clearly restive, three of them getting up and leaving the table with looks of disbelief, to make coffees, Jim also challenging him as he got up, about his bad results in mathematics somehow at odds with his career.

His story was again very fragmented and difficult to follow and we disengaged from it by discussing the difficulty we were **all** having with writing in our respective journals; we agreed that there was so much going on in each session that it was difficult to write about it all (I'd brought this up in a previous supervision session). Jim said that he found it very useful to write in his journal because in the process he was making connections between what was happening during the sessions and in his everyday life. Paul suggested that perhaps we could use what each had written in their journals as a way of coming in to the session; like the 'round-up' of the previous week that we usually did. We all agreed that this might work, and it felt as if we were winding down ready to leave, when Ned brought the conversation back to himself again; his pain; his scar worse than anyone else's' (until Darren explained where **his** incision line ran) and the problems he was having at home. He asked about his swimming; it was necessary that he swim every day and how was he to avoid further melanomas???

I didn't respond to the fear that he was expressing, but jocularly told him that he was always whinging. "*At what point do you re-assess the situation, when it's no longer working for you*? I asked him, and realised that I was only masking my exasperation. Several of the others shaking their heads and Darren covered his face in an *"Oh No!"* gesture.

Paul, however, acknowledged Ned's fear, and suggested that perhaps what was churning underneath for him was impending retirement, as similar to Alan, this was imminent *"You're struggling with the fact that you've got to finish, and your relationship has never progressed, and your wife's at*

[cvii] writing out a prescribed number of 'lines' is a punishment meted out to school students, usually only primary school students, where the child must copy a set statement or a portion of a class reader.

home, and now you're going to be there too ___and maybe you've been an unhappy fellow for a long time, and now you're saying 'Is that all there is?'"

Ned responds by telling us that his wife and daughters exclude him, and then Ron B interjected with one of his most passionate contributions, saying to the whole Group! "*You know, he was itching to get into it, when we first started; he wants to be part of it, and at home its not happening ___ Ned, you walk out the back door when they come in! You can't do that at home mate!"* Colleen adding, *"You just have to sit with them, and have a cup of tea ___ listen to them! ___ I listen to what goes on in my husband's life at work, I mightn't be that interested, but you have to listen ___ that's what makes it work"* "*Me and my wife's pals"* contributed Alan. *"I've been married since 1956, I've weathered the storms, I've survived, she doesn't want to do any of the things I want to do, she just sits at home, and when the daughters come, they just all talk and I'm out of it"* complained Ned; "*I know you have Ned, and you've been miserable for 50 years"* I replied softly, feeling the lonely, heavy sadness of his statement fall like soft rain.

Of all the participants, Ned seemed to feel the distress of isolation weigh most heavily. Not only was he isolated through the medical label of his diagnosis and his illness, but he felt isolated within his family, excluded by the strong connections between his wife and her daughters. The issue was that Ned wanted to be included and valued, and didn't know how to let it happen. I told him that he had the most beautiful smile, that on the rare occasions that we saw it, his whole face lit up, and yet *"at times you have the saddest face I've ever come across"*. He was silent for a moment and then said *"Well, I never thought I was good looking";* a defiant (hurt) little boy.

I reminded him of an exercise I'd asked him to do four weeks previously; *"I'll be happy when____"* and complete the sentence as often as he could and he swerved off to talk about surfing in the morning! Working with him was like catching eels!

As I looked at his picture again it suddenly hit me. "*That's what you're doing here, in this group Ned, you're cheating*" I said softly, and he went off on yet another tangent! I brought him back, pointing directly at it, and looking him straight in the eye, said quietly "*You started off with this picture, with the two pencils, and told us how you cheated ____ and that's what you're doing her e___ you're cheating, and nobody loses except you Ned. The issue is not* ***that*** *you cheat,* ***but what that need is***

about"." *"Yes, it's tragic"* he replied, and a moment later added petulantly *"Well I won't come then"*, and that he was only here to help others, and my PhD. I told him that the PhD was of no account in that situation, first and foremost I was the psychotherapist working with the group of whom he was a **valuable** member and that he was there for **him** and **his** needs, but he said, "*It's no more fun*". Jim turned to Ned and told him that he found coming very enjoyable and that he had fun. Throughout this whole exchange the other group members were no longer able to contain their frustration at what Paul later said was his inability *"to get it"*. Ned was working hard at alienating himself from the very group by whom he wanted to be accepted, and as he said, that **was** tragic.

Ned did come to the following session **(t9)** and Jim rang to tell us that his first grandchild had been born. Rose and Ron B were in Queensland, but it transpired, separately, Ron having gone with his wife. We talked about the belief systems that were inculcated in our families of origin, and each of the participants made an image of the 'gift' that they'd received from their families.

The strongest message that all but Darren had received was of paternal power. Darren had received messages about self-sufficiency and the value of education and tolerance.

Ned had made an image of the house in which he was brought up, and a most poignant exchange occurred during this session, of which I wrote in my journal; "*In the top left hand corner are 5 yellow birds. In between the church and the house is a small green tree_____ and here's the magic! Ned told us that his gift had been that connection ___ in the clergyman, a Scot, calling out if he was late, (such a simple thing, showing that another has missed one's presence) ___ and I'm guessing that it was a place that he was 'cherished' ___I asked him about the birds ___'They're just some sea gulls' he said flippantly ___ 'yeah, but they're yellow, sort of golden, so perhaps special ___ what's significant about the 5?' I asked. 'They're just birds' he replied, smirking at Ron B and Jim ___ 'OK, ___ humour me Ned, what could they be, ___ Aren't there 5 in your family?' I persisted. ___ His eyes lit up, 'You got me!' he said, adding, 'but it's not a competition.' ___ He looked over at Ron B and Colleen and then (this is the wonderful bit), he went on to talk about the* ***tree****. 'See this tree here? It's an amazing tree, it never gets any attention, it's never cared for and it just keeps hanging in.'___ I was blown away and so were Paul and Darren who 'heard' what he was saying! 'The tree's like you, Ned, you in your family, you get very little nourishment and you hang in, and you're different', the others were all watching intently and the empathy, mixed with*

excitement, was palpable: The excitement of really beginning to understanding the process and seeing Ned finally 'getting it!' perhaps? I told him that I was interested in that tree, in its tenacity, its singularity, and he owned the projection by saying 'Yeah, I've been told I'm a survivor' _____ then the 'pain' in his groin suddenly appeared,____ but he limped on the wrong leg???"

I pointed out to Ned that anxiety and pain were often connected, and despite saying that he was in too much pain to stay, he actually stayed and helped clean up.

From the results of the following session, **t10**, the group mean difference between pre-and post session S-IFN-γ levels were the **greatest in the entire intervention** with a **decrease** of **67.6%** (***p* = 0.04**), and a small increase in S-IgA of only 10.95%, which fits with the observation that there was a great deal of anxiety and feelings of danger and impending peril. In fact that session, just short of the half way mark of the course of the art psychotherapy group, came to a head, thunderclouds releasing their energy, and The Group was most definitely involved in 'storming'[1066].

It marked a significant turning point in the group process, with participants actively engaging in the confrontation that Ned had been prompting for several weeks. Significantly the behaviour of The Group could be connoted as quite 'primitive'[cviii] 'herd' behaviour and closely paralleled that of an immunological response to a perceived danger, in that the potential danger was identified (in the case of the Group, the danger to its integrity, and my 'leadership', or organisation capability) and the rest of the participants coalesced to alert Ned that his 'otherness' was destructive (by pointing out to him what he was doing 'that's not working for me'), ultimately resulting in his leaving The Group and The Group having to find a new equilibrium transformed by the experience.

An ear Infection that had started the previous week was worse and had ruptured my eardrum, and I had a great deal of difficulty keeping track of all the conversations. The energy in The Group felt quite **chaotic**, and I told the participants that I needed for them to speak one at a time because I really did want to hear what they had to say, but couldn't if they all spoke at once.

[cviii] I using the term in the sense of biological rudimentary development, not in a culturally elitist sense.

An important exchange occurred before the others arrived while Ned helped me set up. He told me he'd met Alan at the beach, and that **it was the closest that he had been to being happy for a long time.** I was relieved to hear that he could express a sense of connection. In hindsight I think Ned may have felt that this disclosure had been too great a risk and quite destabilising. When we were all assembled he told us that he was annoyed that we were referring to him as Ned (the only name he'd given us; also identifying his need for intimacy and to be recognised as 'special'). He declared that henceforth we were to call him by a pet name, a diminutive of his surname, when out of nowhere he switched to a story about a young man of whom he had been very fond who had died at 47; it was the name, by which this young man had referred to Ned, that we were to use and if any of us ever needed any help in Newcastle we were simply to mention that name and all would be well. Jim and Ron B exchanged incredulous looks.

Ned, in opposition to my suggestion, still hadn't completed the exercise that I'd asked he do. In order to provide him with group support, we did it all together, on the whiteboard. Each ending to the sentence "I'll be happy when ____," was ended by Ned flippantly ___ "*I'll be happy when someone tidies up the boot of the Subaru"* speaking of trivialities. The others were obviously annoyed that he was yet again side stepping engagement so I asked if they could give any suggestions to him about his happiness:

- *You'll be happy when you're not alone*
- *You'll be happy when your wife joins in the things you do*
- *You'll be happy when you go on a holiday with your wife*

They expressed a general belief that it was up to **another** or the **change of external events** to meet one's expectations to '**make**' one happy. I reminded them of the story that I had told them right at the beginning of The Group of Victor Frankl's[1067] experience in Dachau, who had recognised that happiness was a self determined state of mind, and that Ned would be happy when he **made a commitment to changing his perception** of events by exploring what he **gains** from being miserable, which would allow him to make a choice about experiencing happiness. Alan talked about his brother dealing with the unhappiness of selling his mother's house as his father had, by '*getting pissed*[cix]' ___ and that he had a choice of

[cix] To "get pissed"is an Australian colloquialism for getting drunk.

whether to get '*pissed off*' and that he had no control over the property market; "*it is as it is* "he said. This was a significant recognition for Alan of his agency with respect to response. Darren then told us that his brand new car had been bent when someone had reversed into it, and he recognised, much to his wife's surprise, that he could **decide** whether to be angry or not. '*At the end of the day*", he said, "*it's a piece of metal, it can be fixed and getting angry isn't going to achieve that, nor was it going to undo the damage,*" I told them that I was proud of how they'd worked through both situations. My praise of them perhaps triggered Ned's subsequent rage, as he may have perceived this as not 'appreciating' his overture of friendship in helping me set up for the session, and perhaps rejecting him in favour of the others; as his mother had done when he was very small, with a lover and then his father when he returned from the War.

I had poured out pots of paint this session, (rather than leaving it in the large sealed bottles) hoping that by making it more available everyone would take the plunge and experience a medium other than the crayons or pencils with which they felt safe. As an expansion of the discussion, I suggested that they make an image of 'Misery' counterbalanced by one of 'Joy'.

Plate 36: a-d: Misery and Joy

a: Allan Misery and Joy

b1:Paul: Misery

b2: Paul: Joy

A bird's eye view (emotionally removed?) of his garden, his joy

c: Darren: Misery

d: Rose: Misery and Joy

Rose left before the end of the session to go to work. There was general agreement that the 'risk' of using paints had paid off, liking the sensation of the paint spreading on the paper even at the expense of detail. There was immediate tension between Paul, Ron B and Ned when he became an 'art critic', deciding whose painting had the greatest merit, and talking over the top of me and then Ron B, while Ron B was exploring his painting and telling us that he was very happy because he and his wife had enjoyed excellent conversations on the way back from Queensland where he'd helped his son work on his house. It had been, as Paul suggested "*good quality time*". Rose had also had a great get away with her new partner. We went over some of the issues that had been discussed the previous week, with regard to

an understanding of one's own dynamics and the matter of choice of response, reaffirming the concept of agency in the way one identifies feelings and how one chooses to respond to a situation. Jim shared his pride at becoming a grandfather, much more aware of communication between himself and his wife, and people at work. He declared that he was working to maintain an Adult/Adult exchange wherever possible.

Ned regained attention by referring with a chuckle to my question about cheating, and how uninvolved his wife was with his process; Paul, behind his back proceeded to 'play the violin'. It is important that 'asides' are opened to The Group as a whole as they often articulate an underlying tension, and so I suggested that Paul share with Ned his pantomime, which he did, letting Ned in on the joke.

Scheff[1068] points out that a social bond is created when shame can be shared and laughed about (Ned's shame of cheating and his marital misery and the 'shame' of his illness: *"My wife's very unsympathetic to me ___ It looks like it's something I have to deal with, this disease ___ she's not in it, she's on the fringes")*. In this situation the laughter was shared serving also to open the path to deeper discussion of discontent as he continued a monologue about his financial prowess, his small empire and his superiority to us all. In this way he was identifying and emphasising himself as 'other', and avoided dealing with the pain of feeling isolated that he had articulated the previous week, regarding the sense of exclusion from *'the women';* his wife and daughters.

The tentative shoots of soft green growth withered and with them the laughter, as he went on and on about money and what he'd done for his mother-in-law. Ron B finally declared "*That was bloody 45 years ago!"* Ned cut across him about having given money for a new roof and who else would do such a thing: "*Mate, I don't give a shit. You know, you live for today!"* Ron B interjected, then Ned continued, unabashed with more of how successful he was, and how he had paid for having courted his wife (*"You get twenty years for murder"*)

Ron B continued "*Mate, I've got a friend who's a boilermaker. He's just retired and as far as I'm concerned he's succeeded. He's had the one job all his life ___ he's* ***happy****."* And Colleen replied, when Ned dismissed Ron B's comment by saying that he wasn't a boilermaker *"I'm a finance broker", "Yeah, but you're not a happy one"*. He immediately changed tack to talk about his work. At this point Jim voiced his gathering annoyance with "*While you were talking and you said 'and I work*

and I work' I said, and Ron said at the same second, 'But you haven't got your bloody work!" Ned became defensive and affirmed that he **was** still working, and Jim continued "*You've told us and you've told us* ***you haven't got your work!***" ___ "***You've retired!***" Colleen added, exasperated, and then Ron B asked him how this was related to his marriage, which was where he'd started, and Ned sidestepped the question to tell us all that he was on panadeine[cx] to avoid having to get up and walk out the door as "*I did that out of respect for the people here, because I realise I might have been upsetting people by getting sharp pains and ___ I'm happy where I am"* and more about his work.

He had identified that he was happy to be included in The Group, as he had done the previous session, when he had shared that not a great deal happened in his life between these meetings. Ron B was challenging him at every turn by this stage and then Paul asked that he be allowed to say something about this session:

"Now, with respect to you Ned, and respect to what you bring to The Group, and all that sort of stuff, and I've enjoyed it, but we've been coming along and its been great hearing people talk and gaining from that and listening to you, and gaining from that as well. Personally I don't want to get bogged down too much, and I'm not having a go at you Ned; I just want to say that I think as group, if we're to continue to pick things up and learn from this, and that's not to say that I don't want to hear what Ned got to say, but I think we need to keep moving on" Ned then, cutting across Paul, interjected with a surprising *non sequitur*[cxi] saying that what Paul was talking about was "*not the money but the principle" "No its not"* replied Paul in exasperation, and Ned continued, looking directly at me *"OK, so therefore, next time you're speaking to me I need to look for new material"* he asked with a sarcastic smile, *'No, Ned, what I want you to do is actually start* ***engaging*** *in the story", "and respect"* added Paul. "*I'll tell you what I'll do"* Ned continued, *"next week when I ___ and when I don't come next week, you will have a big gap. You'll say, 'Thank Christ he's not here' ___ you'll be able to tell me what it was like without me. I feel like I'm imposing ___ This gentleman here",* he continued, pointing sideways at Paul, who was sitting directly on his left ___ *"This gentleman here is called Paul"* I said, not picking up the challenge to 'be grateful' for his attendance, while he continued and again told us that he'd withdraw, to which I replied that that was his prerogative.

[cx] Panadeine: medication for intense pain: combination of paracetamol and codeine

[cxi] *Non sequitur:* a conclusion for a statement that does not logically follow from the previous argument or statement. OED.

He stood up from his seat stabbing the air with his finger at me and said "*I'm here because you think I can add to your PhD. I can give a little bit of difference between all the other people who sit here and don't say much"* again identifying himself as 'other', oblivious to the fact that no-one could get a 'word in edgewise', and then pointing a clenched fist and extended finger directly at Darren, a gesture that was to have tremendous significance "*The real gentleman over here, a school teacher, who has gone through hell where he was before; he's been in Vietnam this bloke, and I don't know what he's seen there but I've a horrible thought about it."*

I suggested that he ask Darren directly, but he didn't want to do that lest he "*dig up things that may hurt him"*. Darren, very quietly said to him "*The only time in your life, Ned, that you will change anything is when you're challenged", "I love a challenge"* Ned cut in, grinning and looking around the room while sitting down again. I asked him to wait until Darren had finished what he was saying. "*When you are challenged"* Darren continued, *'in those moments of uneasiness, that's the only time you're going to change something. You're coasting along and you're happy with everything around you, being miserable. You're not going to change a damn thing. How many things have you decided to change in your relationship, with your lifestyle, with ___?" "None"* came the defiant reply and he suddenly zigzagged like a hare (or fox?), back to work and jobs and a morass of words, the others shifting in their seats, looking fed up.

I eventually told him that I needed for him to stop for a moment and asked the other members of The Group to give him some feed-back as Paul had already identified a feeling of stuck-ness. Colleen said that she probably felt the same as Paul, uncomfortably shifting in her seat and re-arranging her blouse. Darren added that he concurred "*You don't follow ___ OK; sometimes men won't follow logical line. Ned, you're difficult to follow sometimes, because you change your* ___ and then came the critical words *"**Subterfuge is what it's called**"* said Ned with a slow smile, like a kid in class outsmarting the teacher.

Jim added that he also felt that we were getting bogged down and "*we're putting things in, in good faith here, right, including you, not necessarily right as you are, but you've been the centre of attention again tonight. Nothing will give me more pleasure than to see you stay in The Group",* suggesting that there was a bond of trust between us all which ought to be recognised, and acknowledging that we were a unit "*and for us to go through this and come out the other side where you will appreciate the manner in which these things have been expressed to you, and the value of them to you. Not everything, because*

everything doesn't suit everybody, but I just think that you have ***got*** *to accept it in a manner in which it is given and it is given wholeheartedly. Now if you accept it wholeheartedly instead of ___ I think tangent is a good word for you ___ because you sometimes go off on a tangent. I said to my friend here (*referring to Ron B, sitting beside him) *through the period of the things, you are a tangent person. When something comes up for you, if you're not sure how to handle it you go off in that bloody direction or __" "and it gives me time to think"* Ned interrupted: *"****Yeah, but what it does is negates the goodness of that particular thing****. Now, and I'll say this one more time, I'll be terribly happy if you stay with us, and if we get through this and you get something out of it. Somebody said, and I think it was Alan, you've got a lovely smile and I said to myself 'He sure does'. But we don't see it very often. My wife tells me that I'm a miserable old sod, but you're an expert in the field. Compared to you, I'm bloody Charlie Chaplin!"*

Ron B suggested that '*Ned's thing is the best form of defence is attack'. "How many people in this room have worked their own business for 20 odd years? I'm what's known as a survivor, I've had to do that in this group, I'm probably in a group of people who are or have been employees and I'm quite used to ___"* Ned said, 'upping the ante'[cxii]and emphasising again his 'otherness' and superiority

"Oh for God's sake, Ned, I'm going to give you the medal here. I'm going to give you a gold medal. You have ***suffered*** *more than anybody else in this room and you have* ***succeeded*** *better than anyone else in this room"* I said light-heartedly, hoping to inject some humour into the situation *"I'll agree with the succeeded part of that"* he replied self righteously, ignoring the lightness of my tone. I had used humour to disguise my own frustration, not recognising that I had stepped into the negative counter-transference, and in doing so, I ceased to be an effective psychotherapist to Ned.

Then Ron B, a self employed building contractor, voiced his antipathy very clearly by saying to Ned, "*A. a bit on the survivor ___ bloody Darren's been in Vietnam dodging bullets. What were you doing? Just a few dummy cheques? You've done shit all mate. He's done more than you in life ___" "I've crawled under live ammo"* Ned retorted *"Yeah, I'll bet you have"* Ron B replied sarcastically, and I knew then that I was becoming very angry with his overbearing stance and need to control the situation and inflict pain on the others with whom he shared one evening a week and who had told him that they wanted him to be part of their adventure.

[cxii] Upping the ante: a colloquial term taken from card playing to denote the increase of a risk or cost of an activity.: OED

I put my head down on the table for a moment, and in that moment recognised that we were all carrying **his** anger, a sublimation of, and a security operation against, the pain that he would not explore[1069]. I also recognised then the negative counter-transference from which it was important that I pull back.

"*The thing about this Ned",* I said quietly, consciously modulating my voice "*is that if you want to keep holding on to control of it* (the group sessions)*, and you want this group all your way, it's not going to work. It's just not going to work." "Whatever you say __.You're running this thing ___ OK I'll withdraw!"* was his response. Ron B spoke then to him as one does to a young child, when he told Ned that being defensive was counterproductive, which had the effect of precipitating a small breakthrough: Ned said that he was not there to collect bonus points and that he looked forward to these nights, "*because there's not much to do between the Thursdays", "I know that Ned"* I said gently *"__ and I get all screwed up"* he added. Paul chuckled as he said "*Hey, there's a bit of a revelation: 'I look forward to these nights' ___ we'd miss you if you didn't come mate"* but the moment was lost, as Ned proceeded to make snide asides about his millions and that no-one would really miss him.

When I asked him not to make comments that could not be heard by everyone he ended by telling me that he respected women, but that he regarded me simply as a facilitator. Jim told him that he was being extremely rude. At this point it was time to leave, so I reminded them to go and do their 'spits'. While everyone was out of the room I realised that if we went home carrying his anger it might well be the end of The Group. When they came back I asked Ned to stand with us and that each one say something positive **to** him, which they did and the energy of The Group changed considerably. Paul was last, and when he told Ned that he wanted him to stay, I saw tears welling up as he shot out of the room. I followed and recognised that this was old stuff to do with this father, and stood with him for a while as he said through a tightly clenched jaw, "*He's just such a prick why can't he just get it?!" ___ "Like Dad?"* I asked "*Yeah"* he replied as he left.

The same issue about the fear of retirement as Allan had explored seemed to be a focus of Ned's emotional turmoil, however, underneath that also was a desperate need to be accepted, to be heard and validated, although on his own terms, which required that he be acknowledged as special, and in control, a control he maintained, as he'd said, through

subterfuge. This leaves no room for risking the discomfort of inner exploration, of confronting and identifying the emotions and accompanying feelings that he had suppressed for a very long time, it was also destructive of the very group from whom he wanted acceptance. Jim and Darren had explained this to him. He had used the subterfuge of 'story-telling', a pattern learned in order to survive in a family where he was the brunt of his father's ire and mother's shame over a war time affair, which prevented her from protecting him. Unfortunately this was at odds with his actual and innately human need for inclusion and acceptance. Ned had been the first of the men to allow himself to connect with deep pain when he cried about the loss of his 'uncle' at the end of the War (WWII), but had not been able to sustain this exploration to break loose of the bonds with which his parents had bound him in order to experience the comfort he craved. While he was aware of the happiness he gained from being part of The Group, he'd been unwilling to explore the patterns of his interactions which were 'not working for him'.

I rang him during the week to ask about his decision to withdraw, and unfortunately, rather than accepting the challenges that he said he liked, Ned said that *'it was not for me'*, and as he'd threatened, he ceased his involvement in the project. True to his word, there was a hole, but it was a hole into which much manure was poured allowing The Group, and the individuals of which it consisted, to grow.

The following week we discussed what a service Ned had provided us by illuminating how strong we'd grown as a unit and finally also that The Group could sustain the intimacy of sharing our less attractive attributes. I had learned more about my ability to 'hold' The Group, and my own anger, which drew me into the negative countertransference.

Darren wrote of this session in his diary[cxiii] and echoed what the others expressed. "*I felt that the group was under threat during and following Ned's outburst (15 April). I felt ill at ease because I felt that Ned didn't show a real understanding of the purpose of our group. I did feel that he was trying to manipulate people to his own ends but I didn't truly understand what he was aiming at and felt angry with him.*

[cxiii] It is an entry into the diary he kept throughout the intervention: the original was returned to him after being photocopied

I meant it when I said that we started as a group; that we were meant to be 'here' and that this is ordained by what I believe is God. I hope that things work out but I do sense an ambivalence in that I would rather see Ned go if his presence was to seriously disrupt the group. Why does he threaten to leave???"

In processing the event of the previous week (the events of **t10**) the strengths of The Group were validated, and the shifts that several of the participants had made in acknowledging what hadn't worked for them in the past, and the realisations that they had made to consciously change that. Some of the feelings of anger were still hanging around, and in fact proved to have triggered a great deal for all of us. Colleen was able to discuss her experience of abuse, Paul to confront unresolved issues with his father, which eventually led to a re-evaluation of his perception as a parent and improved relations with his daughter. Darren was able to address some horrifying memories from his time in Vietnam, and Jim to begin an appraisal of a source of distress, since early childhood, his gut aching depression and anxiety.

Jim read from his diary, and told of the sacrifices his mother had made in bringing up her boys, defending her and denying that he had suffered as a result. He recognised that he had a short fuse and couldn't tolerate people who refuse to use their common sense and are rude, a reference to Ned's behaviour; "*there's more to do than put up with that rubbish".*

This was a good opening for the discussion of projections, the process through which one dissipates the anxiety associated with one's 'negative' aspects by attributing them to another,[1070] and Ron B illustrated it well so that Jim could grasp the concept, and straight away Jim asked about his depression. We talked about the paradox between his statement about severe depression and that he was "*the luckiest person in the business"* and that perhaps a message that he had received in childhood that he ought not to be sad, was relevant. This then led, through a guided visualisation, along a dusty track back to scholarship exam at the end of primary school.

I took Jim back to the exam room; he could feel the sticky heat, his feet on the wooden floor, smell the chalk and hot dust and a pen in his small hand. In his mind he finished the exam and put down his pen. As he 'came back in to the room' he recognised a feeling of deep sadness and heaviness, because "*my mind and my nerves didn't let myself do what it had to do."* I explained the importance of engaging all the senses in recovering such a memory, the

hologram of the event that one stores, and that when the senses are again amalgamated the hologram is recognisable. I asked him to close his eyes again, and go back to the exam room, finish the exam and walk out the door to see a beautiful sunny day and walk up to his hill to look out over the sea, leave the tension behind and feel his tummy getting better; "*I can too!*" he said with surprise, *"_ and the exam doesn't matter anymore, and I can feel that awful emptiness going away",* adding "*Isn't that terrific. I could feel all that you said again. I haven't thought about that for more than 50 years, but there it was as clear as if I was there. You know, strangely, well, not strangely, I never pushed my son to do anything ___ except go to school which he had to do ___. Thank you. I feel better already. I'd like others to go through that. It's a very good experience."* ___ In a sense he had never escaped that stifling exam room; except when he was in the Pacific.

Paul then discussed the significant impact on him of the events of the previous week. The most important of which were that he became angry and upset when he isn't heard, echoes of experience with his father and ex wife, and that he was allowing the events to affect him in such a way that he became sick ___ and more particularly, having no affect on the others involved. He also recognised Ned's manipulative abilities, as Darren had, in that Ned avoided answering questions "___ *he's very good at coming back at you in a clumsy way, and that got me angry, when he came back at you after he'd been extremely rude and overbearing by pointing his finger like that. You know, I thought the same as Jim, ___ way out of line ___ and then he tries to make amends in a really clumsy way ___ he has a way of coming back at you so that it makes him feel alright. He doesn't know how to apologise, he just throws in things like 'just call me ****[cxiv] and then I asked myself, 'do you agree with this stuff, or are you going to learn from it' and I realised that I allow myself to go there and I didn't have to. I could have pulled back".*

Perhaps the most significant thing that Paul recognised was how he had interpreted my suggestion that something positive be said at the end of the previous session "*You know when you said to say something positive to Ned, and we all thought we've got to say something positive to make him feel better. You never said that. I worked out when I went home ___ 'cause I was thinking about it and I thought, well, you know, you left a door open there for us to say something positive but you never said it had to make him positive. I actually realised I got upset because what I said was a flaming lie. What I should have said to Ned was 'Look mate, you know, if you don't want to come back next week, it's OK. You know, I'll be here and if you want to come along, that's fine but if you don't want to come that's OK by me too.*"

[cxiv] **** referring to the pet name he'd stipulated we use, instead of first name as everyone else used.

Colleen added that she hadn't been intimidated by Ned (although it was after that session that she had stayed behind and disclosed to me her experience of childhood abuse: see 'bio'): "*It's his problem, not ours;"* and I pointed out that it **had** been our problem*, "because all of us were angry."* Alan recognised that it had been a situation in which all our blood pressures went up. I explained that "*for me the major reason for saying something positive was to switch that energy. I was really aware of an energy of separation, and I thought uh, uh, this is not good for a group to go like this.*"

Paul continued," *I'm pleased that I'm starting to realise that in situations like that I should be able to say or do something that makes me feel better about the situation, um,___ so that* ***I feel*** *better about the situation. I know its an emotional side of me that I've learned to switch off over the years and switching it off and walking away from it is not dealing with it for me; it's not helping me ___ I've learned how to get down that hole, and get back again; I got down in the hole with Ned.* ***I*** *jumped into* ***his*** *hole".* This was a major point of change for Paul, recognising his responsibility in an event and his **agency** in his own well being.

The next step in this exploration was the identification of how one is 'hooked' into another's 'game' and I asked them how many had recognised that Ned was really frightened. "*He had a strange look on his face"* Jim commented, and I added that Ned's tangential arguments had been an indication of his lack of balance, and Paul recognised another projection in that he has trouble listening to common sense at times and *"instead of getting angry and blowing my top hat, just have a think, well, if they don't get it they don't get it".* I suggested that one of the projections that we had been experiencing was that we were not heard, discounted and we'd switched off from Ned's ramblings. "*Hit the jackpot"* Jim exclaimed and Colleen added *"Oh for sure".* Paul then humorously articulated his anxiety when he told us that *"I thought we were in big trouble here, when I looked over and you had your head on the table, 'Oh No' we're in trouble; if we're going down; the captain's going down with the ship ___ I thought, 'we're gone'. We're all going 'get us out of here!' We're looking to you I suppose, I mean probably, I don't know whether fairly or unfairly, I mean this is all about learning and how we're learning from what you're informing us of ways of looking and doing things differently, and when you put your head down we think ___ Shit!"*

Not only had Paul articulated his anxiety at being left to drown, as it were, to being left to their own devices, but more importantly he was also questioning his dependence on me as a 'teacher' as he'd recognised through his process during the week that he has power in his

own life. Ron B referred to Ned as *"deadwood"* and was emphatic about the need to *"cut him loose",* whereas Rose couldn't identify with his fear at all, but did see it as "*a bit like parents fighting"*.

The major forces that had been given vent the previous week were those of anger and intimacy. Ned's need for and fear of intimacy leading to his, and our, anger. I asked that they make images of both (**t11**). Whereas the image of Anger was not difficult to create, Jim, Ron M and Alan had difficulty with the image of Intimacy; for Jim it is a conundrum: that the general perception of intimacy revolves around sexuality, but he was able to experience intimacy with his friends on the golf course, a more expanded feeling than of sexual congress. As there was no significant change in immunological parameters for this session, the images are not shown.

I rang K the following week, as she had missed two consecutive sessions again, and explained that Ned had withdrawn, whereupon she also decided to withdraw. In the telephone conversations with both Ned and K, I offered support and reminded them that, as outlined in the 'information for Participants' handout that they had all received, should they chose to return to The Group within a couple of weeks this would be accepted, subject to discussion between the remaining Group members and their assent.

Two weeks after the conniption, with Ned definitely out of The Group we'd done another visualisation; the Undersea Journey (**t12**, Appendix 4c), and worked on the images for three weeks, the longest we spent on any one set of pictures.

Plate 37: a-h2; The Under Sea Journey

a: Alan

b: Colleen

c: Ron

d: Darren

e: Rose

f: Jim

g: Ron B

h1: Paul

h2: Paul: losing my kids

It is immediately obvious from these images that a change had occurred within The Group. They are all vibrant and expansive, with clean, clear colours, only Jim resisting the fluidity of paint. It was an extremely challenging session because, by a remarkable piece of synchronicity, we had to work 'in the dark' (the dark ocean of the 'unconscious'), because there was a power failure in the unit (another intriguing piece of synchronicity with Ned's departure: we knew that we could work without his power). The immunological results were of no statistical significance, but marked the nadir of their levels in the intervention, and over the next 9 weeks they were almost consistently low as a new sense of identity was formed by The Group, which coincided with the winter months.

The depth of the water that was plumbed in their active imagination journey was a mirroring of the degree of safety that the participants had found with each other, reflected in a greater depth to their exploration.

Paul engaged in a challenging investigation of his image. The Treasure that he had brought to the surface was a gold medal, which he described as a medal for fatherhood. Rose had found a photo of her mother, who, in the Forest House visualisation, had been her guiding star. Colleen had found and brought back a beautiful bracelet for her scarred arm. Jim, Ron B, and Ron M had simply enjoyed the journey with the dolphins and Allan had jubilantly brought his treasure onto the beach.

Paul's is the only painting with dark water, suggesting that something deep was going on for him, and the lagoon in which his dolphins were swimming was more like a tiny pond. We explored how he circumscribed his life and then the medal. He talked about the difficulty he was having in relating to his daughter, pregnant with his first grandchild, and he recognised

that she actually challenges the perception he had of himself as being a 'good father', in that she resisted his overtures at meaningful communication.

He became bogged down in words and I asked him to stand up and mirror the expression of himself in his painting; his signature stance, and tell us what it felt like. He said it was an expression of "*I give up*", "*I've had enough*". I asked him what would happen if he gave up, and he started with another flow of words when I interrupted and asked him to say it succinctly: *"I'd lose them"* he said softly, articulating a deep fear. I asked that he paint what that would be like, and Jim gently interrupted and said *"It's been a big night tonight, and we need to keep an eye on the time"*. He was aware that I had the flu and was also exercising his autonomy. While everyone helped clear up, Paul made his painting: reversed, the medal looks like his trousers in the second picture; there is the tiniest smidgeon of space left at the bottom of the barrier, so it is not impenetrable even though daunting (Plate 37h 2).

Darren told me the following week (at **t13**) that he was having more heart problems which would require cardioversion[cxv] a fortnight later. He shared this news with others also telling us that he might need to leave early to take medication (warfarin). The warfarin, he explained, was to allow his blood to flow more easily, and picking up the metaphor I suggested that he let his story 'flow'. Very early on he had intimated that there would be things he, as a Vietnam Veteran, would in all likelihood not share.

There had been a tremendous shift in the energy of The Group since Ned had left and we'd spent time processing that. In my journal I noted *"It's a much quieter (gentler) and more focused group. They've all agreed that it's more relaxed and that they can 'get on with it'"*. We talked about Darren's need to protect himself as an aspect of what Plotkin[1071] refers to as the Loyal Soldier (a variant of the Wounded Child Archetype where one learns self protective behaviour as a result of trauma, which serves one well during the traumatic event, but may become a barrier to authentic interpersonal engagement[1072]). It is particularly applicable to these men who came back with lacerated souls and sometimes mangled bodies, to a society which didn't want to honour their involvement in a war which disturbed our psyche as no other war had done; invalidating the invalids.

[cxv] Cardioversion: a procedure where a cardiac arrhythmia is converted to a normal rhythm by the delivery of an electrical shock. Darren had fainted as a result of his arrhythmia; the cardioversion was therefore urgent.

Darren explained to us that our own returned servicemen were denied entrance to The Returned Servicemen's League, a bastion of Australian male society, because the war was decreed a 'police action' despite the fact that the soldiers had spent more time in actual combat than any of our previous servicemen (or women). Quite spontaneously he told a story of something that had terrified him. He and his mates were sent out on a 'reckie'[cxvi] to a village. They were stationed in a cemetery to take the 'graveyard watch' (midnight to dawn) and he described how frightened they were, not being able to discern substance from moving shadows or civilian from 'gook'[cxvii]: after curfew anyone moving about was automatically deemed an enemy combatant. The patrol leader, a corporal, *"had deliberately not gone to the assigned position, because he thought it was too far to walk. The patrol was confronted by a large enemy re-supply force (about 60 of them and 5 of us) and the corporal decided that we should sit tight and remain quiet."* Darren suspected that the enemy knew that their patrol was nearby because they had dogs, which were barking.

The coalescence of the death image in the time, the physical position and the feeling of abandonment led to a confrontation with death; the very real likelihood of his being killed:: he'd been just 20 years old; and then he added that he had felt the same with his diagnosis of melanoma; the sheer terror of seeing Death stand in his path again. What he couldn't work out was what had tripped him into arrhythmia.

The others sat quietly, with total respect and compassion, as he wept. The flowing words had allowed a flow of tears and he was able to trust himself to release some of his pain, pain only previously shared with other veterans. Darren had not been able to bring his treasure to the surface in his visualisation, although the treasure chest was wide open and overflowing. It remained deep in the water (the Unconscious), walled off, as are many memories which contribute to PTSD, but in telling us of his terror he had brought his 'Treasure' up into the sunlight to share (Plate 37d).

[cxvi] Reckie: a colloquial term to denote a reconnaissance exercise.

[cxvii] Gook: a derogatory North American term to refer to a foreigner, particularly of Asian origin people (OED), adopted by allied soldiers during the Vietnam War to refer to the Vietnamese, particularly potential combatants.

During the week I rang Darren to see how he was and as we were talking it occurred to me that the trigger for his fibrillation might well have been connected with the session where Ned had 'lost the plot' and asked him if there was 'fit' for him with that. When Ned had stood up and pointed his finger at Darren I noticed that the colour had drained from his face and he'd become very alert, at the same time lowering his voice, speaking quietly to Ned; he'd talked him down, as it were. He said that he'd internally responded to Ned's declaration that we hadn't any idea what Darren had experienced *"You haven't got a clue mate"*. The following session he told us of the connecting memory: another event on duty in Vietnam. He read the story that he'd written in his diary: *"During my tour of SVN*[cxviii] *I was doing a covering duty in the orderly room. It was Sunday, or a lunch time (I don't remember which) but I was alone. A new soldier to our platoon came in to the OR. He hadn't been with us long; reportedly he caused some indiscretion in one of the battalions, had been demoted (reportedly from sergeant) and sent across to us. He wasn't a man I took to. He had a wild look in his eye. We would often recognise it in those who had seen too much action. He'd been there: perhaps a "little bit crazy".*

For some reason he'd assumed that his problems rested on those in charge and he'd come to square things up. Alas I was the only one there. It was nothing to do with me but I became the focus of his ire (I mean, you bastards are all the same) He lifted his gun he was carrying from behind the counter put a round up the spout and pointed it at me. I believed at the time that he was going to shoot me. I tried to keep my cool, to calm the situation and just talk to him as calmly as I could. I was quaking in my shoes. Somehow, and I don't know what I said. I was able to talk him into lowering his gun. I assured him I would try to investigate his complaints. With the situation partially defused he ended up leaving and went bush the next day or so with another platoon. When he came back to base I didn't see him. I had reported the incident. I don't know how much credence it was given. It appeared he upset more than myself and shortly afterwards disappeared from our unit. The look in Ned's eyes was like the look in this guy's eyes. In some ways his finger reminded me of the gun. They both moved on."

[cxviii] SVN: South Vietnam

Plate 38 a & b: From Darren's Diary

These two pictures are the ones that Darren had made in his diary, of both Ned (Plate 38b) and the connection that he subsequently made with the guy from South Vietnam (Plate 38a)

I was relieved to see that he had made such an important **connection** between an apparently random **distressing event**, a forgotten **past event**, and his **physiological response**. Needing to find a way of maintaining a space of safety, he had talked all this through with his psychiatrist. Between The Group and his visit to his psychiatrist he had also come to recognise that both the speed and the depth of his journey of exploration were under his control.

The others expressed their admiration of him, and also thanked him, myself included, for giving us another viewpoint of the Vietnam War and the personal impact of being taught to kill. Darren had established, not only that he was safe within The Group as he accepted a hug from me and then everyone else, as we wished him luck with his impending 'zap', but also that he was truly engaging in what he had described in his diary as **rebirth**: *"It (*referring to Easter and rebirth*) correlates with the therapy with the melanoma group. I've felt this as we have examined our lives and what makes us the particular individuals we are and how we examine the way we do things and perhaps I see changes, such as the way I react to events, as a rebirth."*

Birth was an issue on Paul's mind (**t14**) with the rupture between himself and his pregnant daughter. When we looked again at his picture we could all see the comparison between the medal and the trousers, and there was also a repeat theme in the heavy dark barrier in both

pictures. Remembering the story of the difficult relationship he had with his father, I asked him in what way was she similar to him. *"Oh well, she's stubborn. She's very stubborn. She, um, you can point something out to her, and it's all logical and common sense and everybody at the table sees it, except she refuses to."* As he was telling us this his face flushed red and I asked what was happening for him for him to blush. An amusing moment occurred when he denied blushing: *"No, I'm not going red ___ am I?" ___"Yes"* I replied, *"I've been in the sun today"* ___ he hedged, grinning. *"What, all of a sudden?"* I joshed[cxix] him as we all chuckled at his deepening flush of colour, *"Yeah ___ well, that's the thing that's in common and that's hard to deal with. It's been hard for* **me** *to deal with* (he corrected himself to **take ownership of the feeling**) *and I suppose, in that respect, I've dealt with that for many years ___" "and it's come back again"* I remarked *"There it is again looking me square in the face, and stuff that! No ___ and she's a fairly intelligent young lady too ___ and that frustrates me no end, as a father it frustrates me!"* Paul was now dealing with some significant issues, and it was no longer a laughing matter, nor was it a matter of giving useful insight to another's process: the issue at hand was a fundamental perception of his own worth. I asked him if his daughter also discounted him as his father had done and he told us that she did so, on a regular basis. Jim asked **how** she did this. *"Oh she's done it lots of ways mate. By not coming to the phone if I want to speak to her"* he replied, *"Not communicating with you?"* I asked, and he agreed that that was the case, however, I explained that she **was** communicating very strongly, but not in a way that he recognised. Paul relied on words ___ lots of them, she, like his father was relying on behavioural signals. In her own way she was punishing him/his sense of self by challenging his parenting skills.

I asked him how he finally managed to maintain his integrity with his father and it was a question which Paul had difficulty understanding, so I opened it by reflecting to him that he had jumped through endless hoops in order to gain his father's approval, and at the point that he recognised that it was not doing **him** any good there was a shift between them. *"Well, I stopped running to him. I just stopped; I stopped going there to actually ___talk to him,* ***to find out what was wrong****, or what he thought, why he said what he said, you know ___* ***why he treated me the way he did*** *___ I just stopped doing that _____"* he trailed off into silence, a silence with which we sat for a moment, and then I asked him *"When are you going to stop doing that?" "Yeah, that's the decision I'd made after I processed that,"* he responded and then gave us the background to the tension between them, with its root in the divorce from the children's mother and his

[cxix] josh: to tease playfully: to banter OED

subsequent re-marriage; the two very different life styles and their need to find themselves in amongst that. Paul recognised that it was necessary to let go of his expectations of their relationship; as he had with his father, in order to open the space for his daughter to walk to him; symbolically represented by the very small space that he had left at the bottom of his painting (Plate 37,h 2).

De Botton[1073] points out that one's perception of oneself is intimately connected to how one is received within one's society; whether one is validated or not. Paul's status as father and provider was challenged by his angry and hurting daughter's rejection. *"Entire societies have made the maintenance of status and more particularly 'honour' a primary task of every adult male ……. our self esteem is likely to be determined by the value we are accorded by others"* On the other hand a key thrust of my work with The Group was a facilitation of the understanding that such a dependency leaves one vulnerable to isolation and rejection, whereas an understanding and acceptance of one's inherent worth as a part of all life, *'A child of the Universe'* as the poem Desiderata states, provides an internal strength unassailable by the vagaries of another's whim.

"[Your decency] does not depend on the testimony of someone else" Marcus Aurelius[1074]

Paul's recognition of the need to open a space for connection with his daughter opened a communal space for the others to discuss pain surrounding the relationships with their children, and eventual resolution and healing: Darren with his daughters and their lack of understanding about his war trauma and divorce from their mother, isolating himself while withdrawing from them. Ron M was able to explore within the supportive environment the tension between him and his daughter as a result of bullying and ostracism she'd experienced at school and a perception that she had of having been abandoned by him on the island where they were stationed, when he insisted that she stay at school despite it all.

Rose was able to bring to The Group a dilemma that she was experiencing with her adult daughter's response to the recent separation from her children's father. Colleen explored, through TA exercises shared with the other participants, ways of communicating with her second daughter and **her** relationship to her partner and siblings leading to Colleen finding that she had the right and strength to 'eject the chick from the nest', and even to reject her role of 'family flunky'! Jim explored further his own newly acknowledged valid pain incurred

in a family where no overt affection was shown and the connection with his son's reluctance to go to school when they were in the Pacific, and Ron B with his son-in-law and lack of support he is willing to give Ron B, while accepting the amount of care time given his grand daughter to accommodate his wife's neurosis regarding separation from their children.

It resulted in an understanding of the need, eventually, to release oneself from the emotional tension created in holding too fast to the role of '**Parent**', in order to allow the young adult to accept his/her place in the world and for the need to honour the end of an important phase of life in which many of find social validation of competency and a capacity for care, at the same time as gaining a strong sense of 'sameness' in the created family. This role must be released to allow the acceptance of the role of '**Elder'**. Devoid of ceremony and the social recognition of the value of wisdom in a society which idolises '**Youth**', this is a transition often fraught with anxiety and associated with such 'acting out' as trans-generational extramarital affairs for men and excessive control of adult children's and grandchildren's lives, for women.

Within the opened space we explored communication dynamics such as the gain from 'acting out'[cxx], with their spouses; being 'good', or 'naughty' instead of direct, honest and clear communication [1075],[1076]. In the following weeks we also investigated other behavioural dynamics, such as using passive aggression, not being able to control one's temper, and then the ability to choose whether to be miserable or happy.

From the images it was interesting to see that the men's general perception of the **gain** from 'good' behaviour, exhibited in the main by placating their wives through 'house work', was 'love' and 'naughty' behaviour was exclusion and isolation. Following this Ron M told a story of an altercation he'd had with his wife which resulted in his not speaking with her for a period of time. We explored what happens when people control each other through withholding direct communication by 'not talking', an extremely strong expression of passive aggression, a behavioural dynamic first identified during World War II by American military psychiatrists dealing with personnel who passively resisted acceptance, or grumblingly complied with, authoritative direction[1077], as a way of subverting the suppressive and

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[cxx] "acting out": usually anti-social activity to express (usually unconscious) conflict; a form of projective identification.

dominant control, normal in the armed services, when no means of asserting individuality is acceptable .

Plate 39:a-f: 'I'm not Talking!'

a:Colleen

b: Paul

c: Rose

d: Jim

e: Ron B

f: Ron M

In these images it is significant that this is the **only** one of Ron M's pictures in which he is actually larger than anyone else; the only way that he had established having any sense of his own strength was to withdraw direct communication, however, he does, unconsciously, acknowledge the injury to himself in so doing; perhaps that he's 'lame' (both left arm and right leg are 'damaged') to behave in this fashion. We discussed this, bringing to conscious recognition his unconscious discomfort with this dynamic.

The separating wall of Ron B's image strongly identifies his feeling of isolation within a situation, his marriage, where the expectation is of communion. Colleen recognised the pain in the belly that results from unspoken anger, while Paul illustrated the nonsense of *"I'll take away my ball, you take your bat and we kick the cat and the dog and we're both angry, but who knows what about?"* Intriguingly Rose identified the issue as **being denied a voice**: **her** voice is strangled, when someone else demands that **she not speak,** and Jim could see that there are no winners in such behaviour.

The last of the sessions directly exploring emotional expression was at **t19**. The image followed an exploration of how one moves from a state of misery, to one of happiness. The preceding session (**t18**) we'd explored ways of managing anger after several of The Group had asked that I read a story that I'd written for a grandchild who was having problems with loud and angry behaviour (Aengus' Magic Cloak: Appendix 5).The Group made images to look at how one **decides** which affect to engage; not in the sense in which it is generally learned (*"Oh! Come one now, that didn't hurt!", "Smile, he'll like you more", "What sort of a man do you want to grow up as! Big boys don't cry" "Girls don't fight")* but from an authentic point of congruence between emotion and affect. For me it was a particularly exciting session because there was a 'resonance' which I've seen happen in very cohesive groups; several members of the group will spontaneously use the same symbol: here the sun and light bulb (both symbols of light/inspiration) have been used in 4 out of the 6 images, and the other two have used a similar metaphor; the pain of isolation as opposed to the happiness of intimate relationship. Alan's image is almost identical to his of **t10**:'Misery/Joy', except that in this image they both have identifiable faces! His emotional well being would appear to be dependent upon his marriage. One of the first pieces of research undertaken to investigate the correlation between distress and lymphocyte activity was that referred to in the Introduction (p1), of the impact of spousal bereavement. A growing body of evidence points to the health enhancing effect of intimate pair bonding[1078],[1079], and on survival from cancer[1080], however, Alan's and

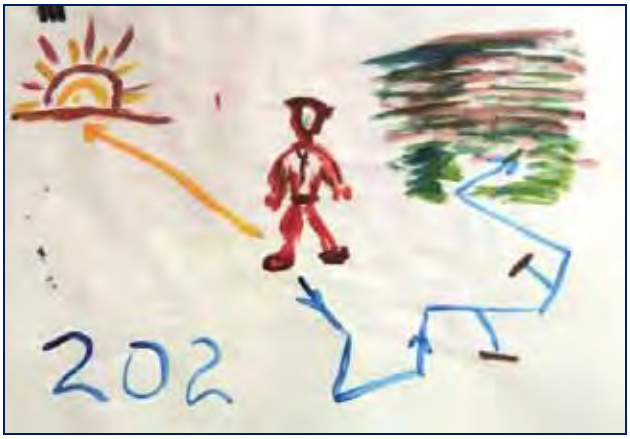
Darren's images would suggest a high degree of enmeshment, whereas the others have recognised that 'happiness' is a decision that they alone can make.

Plate 40 a-f: Pain or Happiness.

a: Alan

b: Paul

c: Ron M



d: Ron B.

Knowing that the way to happiness is straight to the sun, but he faces the wrong way **"***I'm going in to the shit again",* by an erratic route.

e: Jim:

The pain in his belly, or smiling with happiness

At **t20** I introduced the concept of 'body scanning' a technique where one goes into a meditative state and journeys through one's body to identify points of dysfunction and concentrate energy in those places to effect 'healing'. It is a means of gaining contact with that part of ourselves which manifest illness, the physical component of the bodymind, often neglected or regarded as a recalcitrant entity when it doesn't function as we say we would wish.

Plate 41: a-f2: Body Outlines

a:Rose

b:Paul

c: Ron B

d:Darren

e: Ron M

f1: Colleen

f2: Colleen.

At **t 21** the group mean difference between pre-and post session S-IgA levels registered the greatest **decrease** in the entire intervention with a drop of 48.06%, p= 0.05, and the second highest **increase**, although of no statistical significance, in IFN-γ of 84.83%. The results would suggest that there was again a sense of anxiety within the group during this session; however, my perception was that a great deal of positive processing occurred. There was also a difference in this session in that there was no 'quiet space', or focused intention, which is a normal component of individual image making. On the contrary, there was a great deal of chatter and physical activity as the participants worked on the Group Image, which may have been indicative of underlying anxiety. The lack of relaxation and focused intention may also have had a negative impact on S-IgA levels. In addition, we discussed 'anticipatory grief', realising the impending end of our collaboration. The sadness and anxiety produced by this session and anticipation of the loss of regular communication with people who had become

significant on a deeply personal level, with a perceived potential return to isolation, may well have been sufficient to produce such a dramatic downward shift in S-IgA function and increase in IFN-γ.

Rose had articulated this with a suggestion that we maintain contact with each other, and that we end the intervention with a party to include their various spouses and her new partner. The others, on the other hand identified that their partners may well have felt uncomfortable meeting for the first time, and particularly as they would have been aware that they may have been discussed in their absence. Colleen also added, insightfully, that The Group was a special entity of its own, and that she felt it important that it be respected, shifting the sense of disconnected isolation, as 'branded' individuals, to a chosen isolation of 'us-ness' **apart** from their normal social milieu. It had been an isolation of 'incubation' preparatory to returning to their 'other' world, transformed.

The participants had brought their body outlines back, and we talked about the experience of making them, and taking 'homework' out of The Group space.

Colleen's image is extremely interesting in that she has illustrated a 'split' between who she presents to the outside world, and 'the little person'; her voice. She described how she was out of her body during the visualisation, and that the 'little person' spoke. Colleen's little person is marked with 'me' twice, (there are 8 letters in what she has written inside the little person's body: she was 8 when she was abused by her grandfather, perhaps marking the origin of the 'split'[1081]) and when I asked her about that Colleen told me the *"I think about what's inside ___ I think about what **I** think, not what others think"*, something that she had learned from her mother, who despite a strict Catholic upbringing, divorced herself from Colleen's father and moved in with her stepfather, bearing Colleen's sister before they were married. The 13 turns (her age at the time of the household change) of the spiral in the tube connecting mouth and lung (trachea) are connected to her discomfort about this situation and inability to say anything. Colleen explained that the boxes surrounding her eyes, ears and mouth were gift boxes, however the boxes over her ears (boxed ears?) would prevent her hearing anything, and the box behind her mouth prevents her mouth from connecting to her trachea: without that connection she would not be able to speak: *"sometimes I might hurt someone"*, she said about this blockage, and recognised the connection between this and her

experience of abuse: *"I didn't leave my kids with my father,*(their grandfather, although it was **her** grandfather, not father, who had abused her.) *but I did with my stepfather"*, while she spoke of this she covered the space where the 'little person' sits, with her hand, protecting it. Colleen has had a hysterectomy: and it can be seen that the uterus and ovaries are missing from the picture.

We spoke about the necessity of removing oneself from a traumatic situation, and that this can be achieved by leaving one's body, if it is not possible to remove oneself physically, and I suggested to Colleen that it was now necessary for her to integrate 'the little person' with her adult self, as the threat which had created was removed. The conversation about out of body experiences led to Ron B also saying that he had a similar experience following the visualisation, in that he knew that he was talking *"but my voice was not even like my own, I didn't recognise it."* I asked him if he had 'come back into the room' after the visualisation had finished, as sometimes people stay in a hypnagogic state, the liminal state between sleep and wakefulness, following visualisations, but he couldn't remember this being the case. I told The Group that this state is a powerful door way into the unconscious, and that out of body experiences can be consciously facilitated in order to access both unconscious content and the collective unconscious, or, what some refer to as the 'Universal', and Anthroposophists call the 'Akashic Record'; a record of the timeless sum of all phenomenal experience and knowledge[1082].

I thanked Ron B for the gift that he had given me by including me in the previous week's exercise and naming me a member of The Group, something Mehl-Madrona[1083] has written of as of primary importance in any therapeutic shift. *"Oh, that's OK",* he said with a wide smile. Paul had been unusually quiet throughout most of this session, and I asked him about that. He told us that he had used relaxation to reduce a pounding headache, and also the 'body scanning' to identify the place of tension. He also told us that he'd successfully used the re-framing that we'd spoken about some sessions earlier in a potential altercation with his wife. *"She was, yeah, 'pissed off',"* he said, smiling at Alan, as this had become his signature phrase, *"and I realised that I didn't need to be drawn into that space"*.

Alan chimed in with a huge smile on his face to tell us that he had **decided** that he didn't need to be *'pissed off"* with a visitor, and went on to share an almost transcendental experience

of the awesome sunset that he had seen on a bus trip out west, *"It was one of the most special things I've seen"* he said with a mellow smile.

Paul shared with the other participants an important realisation about his relationship with his children, in that he had become aware during the week how absent he had been from them as they were growing up ___ that he'd been physically there, but emotionally not present. He had isolated himself emotionally, rather than deal with his fallibility.

For a short time we spoke again about anticipatory grief, and there was a quietness about us all; almost a stillness: the space out of which loss speaks, as we faced the reality that The Group was into its last month, meaning that we would only meet in this form another four times.

Sufficient time was required to allow the participants to 'come back into the world' as it were. Anticipatory and cumulative grief are possible parts of the process of bringing a therapeutic group to a close and in order that the process come to a point of effective closure with minimum residual pain the concept of grief must be brought to consciousness and addressed. I shared with the participants that an aunt who I'd not seen for many years had visited from Holland and we had gone over the events leading up to my uncle's suicide 30 years previously. A mere 10 months older that me, he'd been diagnosed with schizophrenia while on holiday here in Australia when we were in our mid twenties. On his return to Holland he'd wandered the countryside, un-medicated, sleeping rough even during the winter of his last couple of months. He finally stood up in front of an express train. I realised that I was making excuses for not going in to the office to work, and recognised in that behaviour that I was also preparing myself for another loss; that the group was a meaningful entity with a life all it's own, and that I'd gained a great deal from their involvement. Ron B was surprised by this and he glowed with apparent pride, shifting and straightening up in his chair, smiling to the others, with a "*Hey, we're special!*" expression on his face: and indeed they are.

I asked the participants to share with me, and each other, their first experiences of loss, as to bring this to available memory reduces the risk of the unrecognised layering of pain which is experienced with cumulative grief.

Alan talked about his very recent loss of work mates and acknowledged role as 'working man'. As 'the man in the house', he had been able to keep his mother safe, while his father drank himself into oblivion. The loss of the companionship of his mates added to the loss of his mother in the difficult process of reshaping his identity.

Ron B told a story of parental harshness when they had taken his dog away to be killed, without first warning him, and he recognised that this was a point at which he had closed off his expression of pain, acting the 'clown' instead. We talked about his 'breaking heart' and the connection between his emotional pain and recent heart attack; his loss of closeness to his wife which he sublimates in sexual activity, not recognising the difference between sensuality and sexuality.

Darren told of the loss of his grandfather, the person who accepted him as an ordinary child; someone who played with him. After he died there was no 'buffer' between his childish world and the demands of adults that he be 'perfect'.

Jim remembered the devastation that he felt when the family moved from his childhood home where a next-door neighbour had been a dear friend. She was a warm older woman, who enveloped him in a large bosomy hug whenever he visited her. We talked about the people in a child's life who give a message of total acceptance, and that this may well sustain a child in an environment of emotional turmoil or coldness. It may, in fact, be that which allows a child to survive.

Rose remembered the ongoing losses of her mother's frequent periods of illness and hospitalisation and eventual death, and then the loss of her position of 'little mother' that she had held since early childhood.

Paul then came back into the conversation with recognition of his daughter's issues of **abandonment**. This, for Paul was a **significant point of change!** He was no longer attached to a perception of himself, which allowed no room for error, as he'd said some time previously, the weight of being the Golden Child was onerous. He had actively worked to find a way of validating himself, as had the other participants, rather than succumb again to

the feeling of annihilation that such a shift may precipitate, as it had with his diagnosis of melanoma, with Ned's retirement and Rose's divorce.

He talked of the tremendous struggle in accepting this perception of himself. *"I've only recently accepted advice, at the time,* (of his separation) ___ *I wish that I had sought advice then. Had I done that then it would have short circuited this whole process by about 10 or 13 years, it would have benefited my wife and our children, but I didn't"* he said, *"And you didn't"* I reiterated. He shrugged his shoulders, shifted in his seat, fiddled with his glasses, turning them over and over between his fingers and then he dropped his voice as he answered ___ *"No, I didn't"* ___ ***"It's understanding what skills I didn't have that makes this more important ___"*** He talked about an all pervading, 'floating' sense of guilt within his family, and yet his siblings were unwilling to share the load of caring for their mother.

We talked about the difference between guilt and remorse, that the one is used for self flagellation, or is used as a request to 'be let off the hook', whereas the other recognises that one is responsible for a hurt of some description, one empathises with the 'hurt other' and acknowledges that this must not be repeated. Paul talked about loving oneself, and I suggested that it is more important to have compassion for oneself, to view the person who transgressed in the past as one who had a restricted set of tools. *"You did the best that you could at the time with the tools that you had, because that was all you had"* I told him gently, ***"The more I understand myself ___ I look at this as a challenge to take what I learned from here to get to where I want to be ___ I'd like to pass on as much of this as I can to my kids ___ break the mould, you know, not give them what my father gave me."*** Paul was expressing the importance of his involvement in The Group, the people with whom he had felt safe enough, and by whom he had been unequivocally accepted as 'same', to be able to delve into these painful issues of identity.

"I need to look at ***this*** *kid with compassion too"* added Ron B, and then Ron M said that he recognised his daughter's anger *"and we're working towards spending more time together"*. This was also a great shift for him. Rose added that perhaps her daughter was feeling a little remorse, because she had spoken with her father, letting him know that he was not without blame for the separation. We talked more about Rose's need to 'mother' her adult children; what that cost; her gain of being 'needed' and 'in control' and their loss at being denied their adult

status. I asked her how she could still have fun, the fun of organising parties and cooking for the whole family, **and** honour their autonomy, but she was not prepared to let go of her need to be 'Mum'. I said that it was important that one be aware of what drives an action, to be conscious of what one does. Colleen then jumped in and told us all with great delight that she had told one of her kids to *"shut up!"* ___ *"and I've* ***never*** *told my kids to shut up before!" "Woaw! _____that's a shift happening in your family,"* chuckled Paul, and Colleen added that she had decided that she wasn't going to be the flunky anymore. She and her husband had found a house for her elder daughter to move into, and they had managed a week end away together, and that she had also used the body scanning visualisation at home; she said that she was feeling better in herself, and not as down as she used to feel, even though she sometimes felt that she wasn't quite sure where we were heading, and writing in her diary that **it is difficult to change life long habits in a matter of weeks**. Indeed it is!

This has been a point about which I have felt quite strongly, as there appears to be a plethora of interventions, randomised controlled trials of various sorts, many quick fixes of six or eight weeks, which have apparently asserted that David Spiegel's[1084] work is an aberration, and that psychosocial interventions have no impact on increased survival time[1085] (perhaps conflating quantity with quality of life) apparently being of little value other than for the 'feel good' factor. Recently Alistair Cunningham[1086] and his group have taken another tack on this, recognising that 'group means' in psychosocial scores may conceal some very important information about the 'outliers'. His group recognised that the 'outliers' lived longer, because they engaged their sense of curiosity and self efficacy. If the rate of change for a behaviour to become unlearned, and another to become embedded, is taken into consideration, 8 weeks is certainly not enough. Perhaps learning, as an adult, to calculate with an abacus, using Roman numerals rather than a familiar electronic calculator with Arabic numerals, might be an apposite analogy?

I felt it important that the participants be given the opportunity to explore the primal, kinaesthetic and tactile experience of 'playing with mud'. As a Group they were confident and comfortable enough with each other to accommodate the 'messiness' of this medium. I had asked them all to bring in some things that were very important to them to incorporate into their montage of a celebration of their uniqueness and wonder in the world. It was also a way of acknowledging to themselves and each other what wonderful people they were.

Plate 42, a-g: A Celebration of 'Me'

a: Allan

b: Rose

c: Jim

d: Paul

e1& 2.: Ron B:

The bottom has fallen out of his world, supported only by golf. He stands head and shoulders only at the bottom, like the trombones of his first image *"up to our necks in it";* part of the first Group Image.

f:Ron M:

g: Darren

The immunological results for the mask making (**t24**) reached statistically significant increases on group mean difference, for S-IgA between pre-and post session and approached a statistically significance decrease for IFN-γ.

The previous exercise had 'primed' the Group for the experience of mask making. It is an experience which requires trust: most particularly in oneself, in the process, and in one's partner. This group was drawing to a close, approaching and dealing with 'adjourning'[1087] and had become a very cohesive unit, actively caring for and about each other; it was no longer an agglomeration of isolated individuals with their own agendas to the fore and had the internal strength to accommodate the fear, which this exercise may generate. Painting the outside of the mask is an opportunity to express how one wishes to be seen by the community, and the inside as one's private self. The masks were painted at home, between sessions.

I let everyone know that it was extremely important that the plasterers maintain physical contact with their partner, by telling the passive partner what they were doing at each step, and the passive partner by making whatever gesture they needed in order to be noticed. Faces were liberally coated in Vaseline, and hair secured out of the way. The plaster bandages were draped and smoothed across each face, leaving only the nose open. It took about 8-10 minutes for the plaster to 'go off' (harden), during which time the masked person was in a dark space, and totally dependent on his or her partner.

Again, I was included in the group and Ron M and Darren applied the plaster to my face.
The person who found this most challenging was Rose, and we revisited stuff she'd come close too at the end of May (t16) when she'd spoken about her dilemma with her daughter and the way she was acting out about the separation; and again she resisted exploring what I strongly suspected was an underlying issue of early abuse. I suspect that it was far too threatening to expose herself to a group of men; far safer to play the *"good time gal"* with wine and suggestions of parties, alternating with the playful *'little girl"* who could keep up with the boys on their bikes.

After all the masks were lined up to dry we cleaned up and discussed the experience. Allan told us that it had brought back memories of being a young welder up inside small bored

pipes: *"and I'm talking about only 700*[cxxi] *diameters!"* ___so there was no room to turn, and a rope was attached to his ankles *"Yeah, with a lead light and I had to drag a welding lead and a lead light and weld a branch. One of those ICI columns they got in Kernell, and all that heat exchanging in it ___ no leathers 'cause it was too awkward, I just had a helmet ___ scary!"*

Plate 43,a-h: Mask

a: Allan

The following week, our final session, he brought in his painted mask: *"So I put the waves there, and the sea and the sun, and at the bottom is the green of grass, my lawn, 'cause I love my garden; and the inside, I didn't do nothing because* ***I don't want to know that side of things you don't want to talk about;*** *I'd rather have the inside being the same as the outside"*, and, indeed, Alan had not entered into any deep exploration, saying that he had found some of it very difficult. He was very engaged and respectful of other's process, though, often giving succinct and extremely fitting pieces of insight, one such piece in the following exchange with Rose. Allan was very interested in learning how to change actions in a behaviourist fashion, and his involvement in the project had started in a purely altruistic way, telling us that *"When one of the nurses asked me if I'd be interested in doing something, I said 'Why not', I just get disappointed in people, you know, people are trying to save other peoples lives, and they come in here, and they're sort of single minded,[only coming for treatment]and the bloody waiting room's packed, they don't want to do nothing, and I think that's pretty sad."*

[cxxi] Allan is referring to the diameter of the pipe as being a mere 700mm, and this for a 6'+ tall man with broad swimmer's shoulders!

Rose had been very frightened by the prospect of having her eyes covered. Her request that this not be done, was respected. It's interesting that in pairing up she had chosen Allan, who, having spent a great part of his life protecting his mother, was acutely aware of the body language which signalled fear; and also that he had remembered being enclosed in a scary space while she was making his mask.

I had noticed her increased agitation as the bandages were applied, and had gone to Allan to help put on the last strips, making sure that her eyes stayed uncovered and that I was in contact with her, holding her hand for a time. When the masks were finished I asked her to explore the experience; to explore her distress.

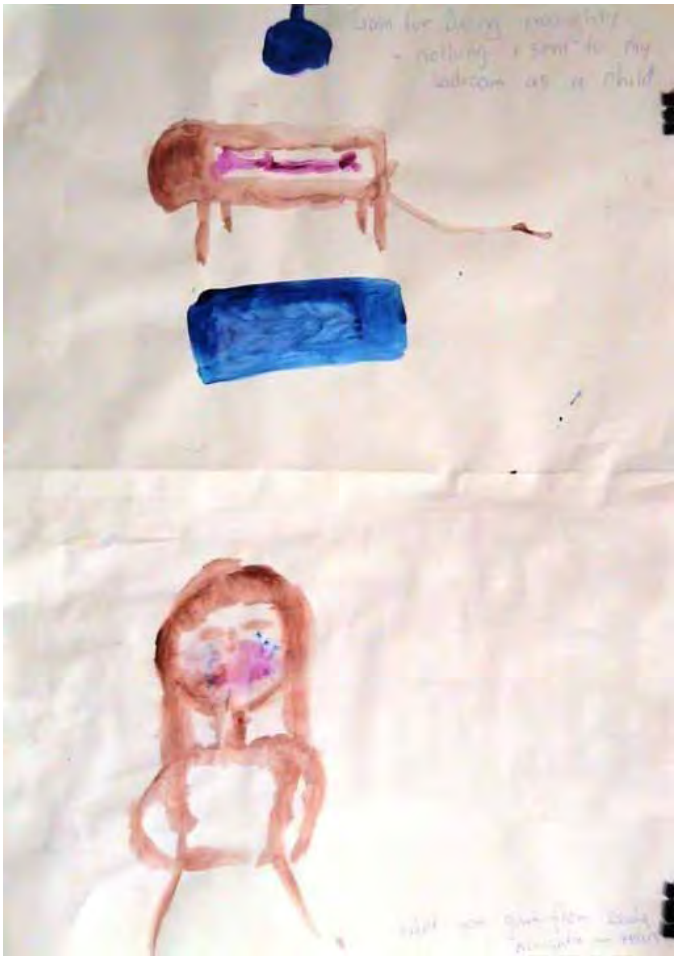
"I got out of control. Somebody else was in control of me. They were taking control of me. Someone else had control over me. I could say no, which I didn't and I went with it." I asked her to go further with this *"It's my body"* she began with vehemence, *"I have control of myself. I want to be in control of it. When the mask was being made I was fine until I felt my eyes being covered. I felt totally out of control. I was in a state of panic and had to count my breathing to relax. I was okay to have my mouth covered, but to ignore the sense of panic rising in me was impossible ___ almost to the point where I was going to remove the mask myself. My fist was clenched tightly and I had convinced myself it was alright, and it was my feeling; to be in a world of darkness is my greatest fear. I need to be in control of my feelings and to admit it if I don't like it ___ with my feelings I became hot, sweaty, fast pulse, a real sense of out of control" "Panic?"* I reflected to her, *"___ hmm, panic"* she affirmed.

I'd asked her to make a picture of the feeling after she'd had the mask removed: it was almost completely black, save for two blank circles, and I asked her about these, *"Eyes, just eyes"* she responded *"Thinking I'm going into complete darkness"*. I asked her about what horrible and frightening things had happened to her in the darkness and she said she couldn't remember, and so I suggested she close her eyes and tell me where she was going, again, she didn't know. Rose's resistance was very well communicated! I used a 'time line' visualisation and Rose told us about a memory associated with a photograph that she had of herself and her then only sister, walking in a patch of corn that her father had planted, she could identify no feelings, no memory of clothing, nothing other than the frozen moment of the of the photograph. I backed off realising that pushing at this resistance was counterproductive. I asked Jim to tell Rose about his experience of 'not remembering'. It may be recalled that he'd

come to The Group with 'a perfect childhood' about which he could remember nothing; and eventually found many memories, not all of them happy. The most important had been the exam and the loss of his warm and demonstrative friend, the old lady next door. He told Rose that he was still applying himself to exploring his life now, going back through each year, and the more he explored, the more he found; being caught by his mother with his clothes off, playing Mothers and Fathers, and how she'd chastised and humiliated him, as *"She was horrified because she was a puritanical woman"*.

I turned back to Rose and said to her *"I guess the reason that I was hoping to explore this is that if there is a big fear, if you want to be in control, then the best way to be in control is to know where the fear is coming from; you're not in control, if the fear is running you ___ it's important to voice your needs, you articulate your emotions and acknowledge that you can make a choice and that you're responsible for those choices; but, you can't make a choice if you're not conscious of your history and that's the reason for searching for connections between this fear and something early on."* Alan then came 'to the rescue' and told us that he'd known that Rose was frightened *"I knew before she even said that she didn't want to do it." "You were picking that up?" I asked, "Yeah, I picked it up through her eyes, through the change in the pupils and that, and the colour of her eyes. I knew. I said 'You don't like this' and I was right, and I said 'how are you?' and she said __'It doesn't matter."*

Alan and Jim had expressed the bond of care which had developed between all the participants. Rose became more agitated and snapped *"But I* ***am*** *in control. If I don't want some one to put something over my eyes they won't. It's me. I don't have to accept it! There doesn't have to be any history about it,* ***that's me. If I don't like it I won't have it!"*** I agreed that it was absolutely her right to refuse, and then out of the blue the connection was named, though not yet acknowledged by Rose *"Ok, if I don't want to have sex with someone, what's the hunch behind that? I don't want it; therefore I'm not having it. It's the same thing, but people* ***say*** *you have a choice." "What's the connection between sex and this?"* I asked, *"I'm just saying that it's* ***my*** *body. That's just another side of it. It's pretty harsh, but I thought of that just then. People have a right to say yes or no." "Absolutely",* I agreed, and Allan remembered that Rose had spoken about sex the previous week *"about bonking straight away"* and then Rose added *"I mean,* ***you could have held me down and covered my eyes over, but I still would have fought you all the way!"***



b1 Rose: Being naughty.

If one looks at the images made of 'Being naughty' Rose is 'trapped' in an animal shaped bed, sent to her room and her face is almost obliterated by her tears with eyes tightly shut.
"Hang on, what did you say?" I asked her, and she repeated, what she'd said, *"I could have held you down to cover your eyes?"* I reiterated, somewhat incredulously *"No, I'm saying you could have* ***tried*** *to do it, but I would still have fought. Even if you tried to force me to do it I still would have fought"* she replied *"There's no way I would force you!"* I stated emphatically *"No, I know you wouldn't",* she acceded, *"___ and we're nice people"* Alan said to her with a smile, reaching out in support.

The degree of resistance put me on notice that this was indeed a very tightly held trauma. In fact she was able to disclose her terrifying experience a week later, as described in her 'bio'.

b2: Rose

Rose painted her mask a very soft pale pink. It's her favourite colour (although she generally wore dark colours).

Jim had remembered collecting coins under the floor of the local theatre. He'd seen change fall through the crack in the floor at the ticket office and, being very poor, had vowed to go under there to find those treasures! He got stuck a couple of times, but came up with the loot! When he painted his mask he had painted it a strong orange, saying *"As you see, I'm a really beautiful looking man! That's just as people see me, with a bit of a smile occasionally on the face, black under the eyes, fairly ___ generally ___ what you see is what you get. I enjoyed the painting" "and on the inside?"* I asked *"On the inside, it's just uglier than on the outside ___ what I see in myself is pretty bloody awful really and ___ like everybody else ___ down, not happy. I couldn't draw enough 'down' on the mouth."* During this both Ron B and Alan had interjected questioning his presentation of unhappiness, so I asked him *"Tell me Jim, is that actually the inside of the mask, or is it the outside of the mask, your unhappy face, I sometimes get the impression that you need to be unhappy; you need to show the world that you are unhappy ___ rather than actually going with being happy at times?"* Alan thought this a *"good question"* and Jim thought for a short while and then, with eyes sparkling, he said *"I think you have a point there, where I don't like to get too carried away and too happy, and I'd like to temper that" "Ah,"* I replied with a chuckle *"you're going to learn* ***so*** *much from L*** [his granddaughter]!" "I've learned so much from that rotten hard lady that's been giving us a hard time for the past six months!"* and everyone joined in the laughter, the spontaneous and easy expression of camaraderie. *"You have exercised my mind unbelievably!" "If I get too happy ___? How would you finish that sentence?"* I asked ___ *"No, nothing happens if I get too happy"* he said with a smile, and then added *"I might be looked on as a bit of a dill, too carried away"* ___ he might, in fact, be humiliated for having fun. *"I'm wondering about your next door neighbour, she was a happy go lucky lady, yeah?"* I

asked him ___ *"___and your mother was a bit dour", "Yes she was not as jolly as that lady ___ she was certainly caring and loving"* he replied *"Caring and loving, absolutely ___ but spontaneous?"* I asked. ***"Dead right!"*** *Jim exclaimed with a broad smile, "You're a clever lady. Dear old Mrs. Jamieson, I think about her now since I've been coming here: I could walk in there and she'd put her arms around me and give me a hug, as simple as that ___ which my Mum probably didn't do." "No"* I reflected. *"Can you hide underneath your cape?"* I asked, referring to the 'magic cape' in the story I'd read to them (see Appendix 5), "*Yeah, well I get under there often now"* he said, smiling mischievously. *"Fantastic!"* I responded with a grin, *"I guess from here on you can reaffirm for yourself that that story* (his mother's) *isn't yours, You're allowed to be happy"* ___ *"Joy is the other side of suffering, you know that,* ***and*** *you don't always have to 'pay to play' Jim,* ***you're allowed to be happy."***

Jim had also told us that he had managed to create a feeling of inner calm, using the chakra meditation, at a potentially difficult meeting of the golf club management committee. He'd been able to speak with integrity, quietly saying things that others wouldn't. It was a great achievement for Jim to be able to do this without either headache or belly ache.

c: Jim:

Ron B spoke about an improvement in the communication between himself and his wife, and that he was able to be more attentive, things between them were "nicer", and he recognised that this was also a long-term commitment to a change in how he related to her. Colleen reassured him, saying, *"It will get better soon"*, having managed some good quality time

away with her husband, and being in the process also of negotiating a change in her marital relationship. His mask wears the perennial wide smile and sad eyes of The Clown.

d: Ron B

e: Ron M

While the mask was setting on his face Ron M remembered coming home late one night after a birthday party on the island, having to push his bike ahead of him in the dark, so that he didn't walk into anything. He said it wasn't an uncomfortable feeling to be under the mask, but I guessed, from what he had told us previously, feeling his way into the closed and extremely parochial society of the island locals must have been very much like walking in the dark, waiting to bump into some unseen *'rule of play'*. It may also have reflected how he felt

about being in a psychotherapy group, the worry lines on his mask's forehead perhaps indicative of a concern to *'do the right thing'* ___ and not quite knowing the *'rules'* for such a group: rules being very important to Ron M. He'd also previously had an extremely uncomfortable experience with a psychologist, so he may have felt the need to *'feel his way'* with this process. On the inside Ron M had painted his 'Lymphocytes' to remind himself, and them, that they were capable of doing a good job.

f: Paul

"*Not the Lone Ranger*" Paul said of his mask. He had painted a jigsaw puzzle on the inside, explaining. *"I'm still putting things together, but it's getting there"*. Of the exterior, he said *"Well I don't reveal everything to the world"*

g Darren

While the mask was being made Darren had an interesting experience of seeing a bright light and then splashes of blue, even though his eyes were covered, and he found it difficult to breath. His heart was working well with the new pacemaker. Most important, however, he said, was the healing conversation with his daughters, mentioned previously. *"It sort of opened up avenues to just be able to talk a bit more freely with them and that type of thing, so I got the sense ___ they didn't say it ___ but they appreciated one; that I made the effort to tell them, and two;. to increase their understanding a little bit more about me and perhaps some of the things that have shaped me as a person, and perhaps a little bit more of an understanding of me in certain circumstances".* This struck a chord with Paul, who had had similar discussions with his children and he asked *"So it's opened some doors there for you?"* adding, as he addressed Darren "*You look pleased with yourself too." "Yeah, well there was a lot more open communication",* Darren responded.

Both men were happy to have instigated increased understanding with their children by allowing them to see their father's vulnerabilities, and hear **their** stories of despair about their broken marriages and the pain of the loss of intimate parenting, a story not often heard by children of separated parents.

h: Colleen.

Colleen's mask is somewhat sad and pensive and she said she'd felt fine about the mask making. She had made a very important contribution to the discussion regarding the way in which The Group should end, and spouses and party that Rose had suggested. As a result of this input we'd decided to simply have a nicer that usual meal, which we shared for this, our last session while each participant displayed and talked about their most significant images. In

effect Colleen had validated the importance of the intimate connections that had been made between each of the members of The Group, and in the follow-up session six months later she translated this recognition and validation into a strong, yet simple image (Plate 45a), and at this final session I gave back the framed pictures that the participants had made of the second Colour Garden visualisation, their DTH test response was measured and the final psychosocial questionnaires completed.

After I had given all the paintings out, and a small gift to each of the Nurse Consultants who had helped by both administering the DTH tests and staying behind so that we actually **could** meet at the Unit after hours, I left the room to get the art materials. During my absence Sue, the senior Nurse Consultant, said to the participants *"I have to tell you that Thursday nights won't be the same without you all here ___ you've all formed into a cohesive group ___ I'm sure you'll miss each others company on a Thursday night; it won't be quite the same, will it?" "No it won't"* replied Rose. When I came back into the room Paul then took the floor and said: *"I might just say something on behalf of The Group here, and that's to thank Donna* (the other Nurse Consultant) *and Sue for your time and effort that you've put in on Thursday nights with us, whether they be jabs, or just being here; and I'm sure that this is also something that couldn't have been done without your participation, so thanks very much. And, um, on behalf of everyone here, thank you Christina for one hell of a life experience, I'm sure we've all, ___ ah ___ you know, joined in at our own levels at different times, and ___ um ___ found our way through it, and found it to be pretty enjoyable ___ um ___ entertaining even, and very searching at time as well. So, I'm sure I speak for everyone when we can't thank you enough for giving us another view of life, and it's been terrific."*

Plate 44: Final Group Image

This image had been a truly collaborative activity; and illustrates the degree of change experienced by all The Group members, and The Group as a whole. The precious guarding of 'space' was abandoned as each participant has contributed across to the image as a whole, remaining respectful of others' marks. A great deal of colour and growth has been added to the original picture. Ron B 'deleted' Ned's 'trombone' while he also added legs to them all, so that they are no longer 'up to their necks in it', each one is able to stand on their own, newly found, feet. Colleen placed a cross against him in her 'circle of friends' (centre right, above the boat), Nobby's now a 'hand' pointing to a rainbow. There are many representations of The Group as a Unit.

"Story telling is a relational activity that gathers others to listen and empathise. It is a collaborative practice, and assumes tellers and listeners/questioners interact in a particular cultural milieu—historical contexts essential to interpretation. Analysis in narrative studies opens up forms of telling about experience, not simply the content to which language refers. We ask, why was the story told that way?"Riessman[1088]

During the six months that we worked together we learned about each others lives, in this collaborative exercise of story telling. The milieu was the safety of a closed art psychotherapy group, held in the offices of a unit that the participants all related to their illness and treatment, born out of the culture of biomedicine in coastal Australia, in an industrial city, for many years dominated by both the coal and steel industries, with a heavily Anglo-Saxon cultural base.

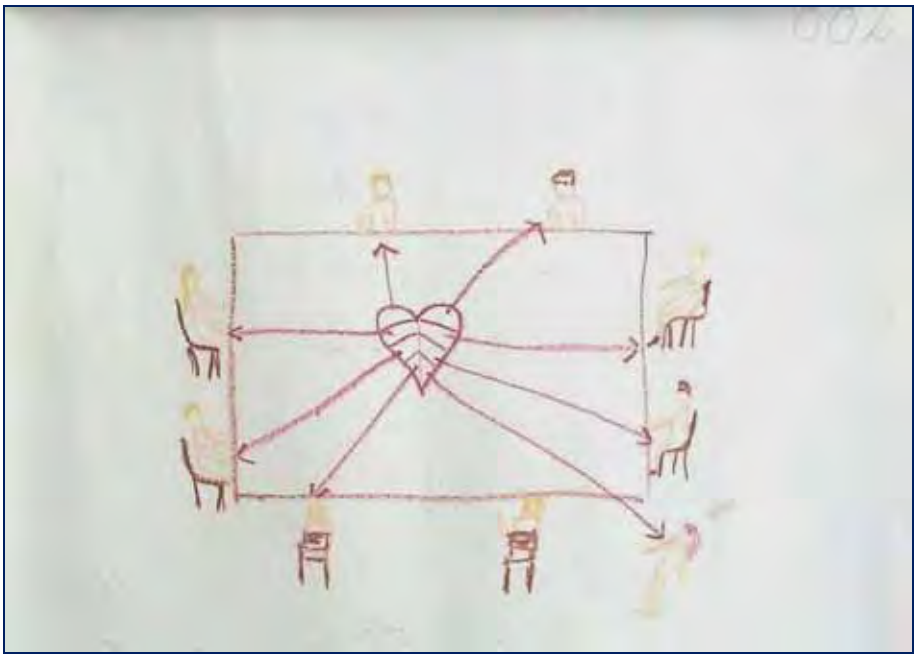
Six months later we met for our follow-up session and after we'd had a general 'catch-up' and discussion about what each participant had retained from the intervention phase, I asked everyone to make an image of what they could take **from** the group experience to 'hold' for themselves; making a tangible image of what they considered of value.

Colleen's is a significant representation of the importance of **communality**. As she has recognised, there is profound psychological healing in the intimacy of shared experiences during group art psychotherapy. Interestingly there is one person at the table who is not joined to the 'heart' of the group, who was not identified by her. Colleen has drawn me standing, lower left, although I seem to be falling backwards, as the arrow from the Group Heart aims for mine.

She has taken from The Group a change in perception: *"I think about things ___ what I say and what I do and just that we've become like one person ___ and* ***everyone's touched me****; ___ we were all strangers ___* ***and maybe if we never see each other again, we'll always have a bond."*** Colleen was also more able to identify her mother-in-law's distress after the death of her husband of 57 years, and recognise in the manipulative behaviour that she was floundering and crying out for help.

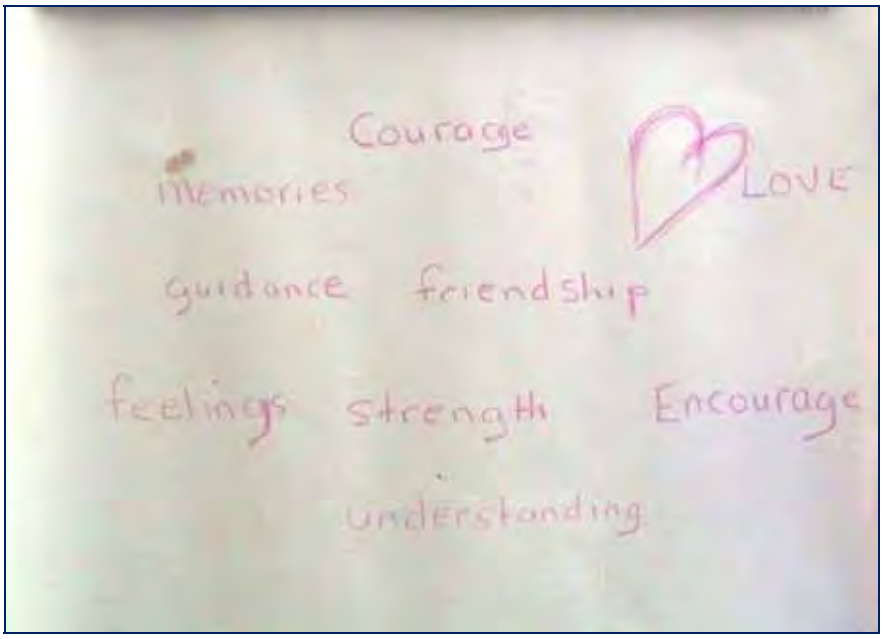
Ron B said: *"I've learned to* ***balance things*** *out a bit more, concentrate on things.*

Plate 45, a-h. 'What I've Taken from The Group'



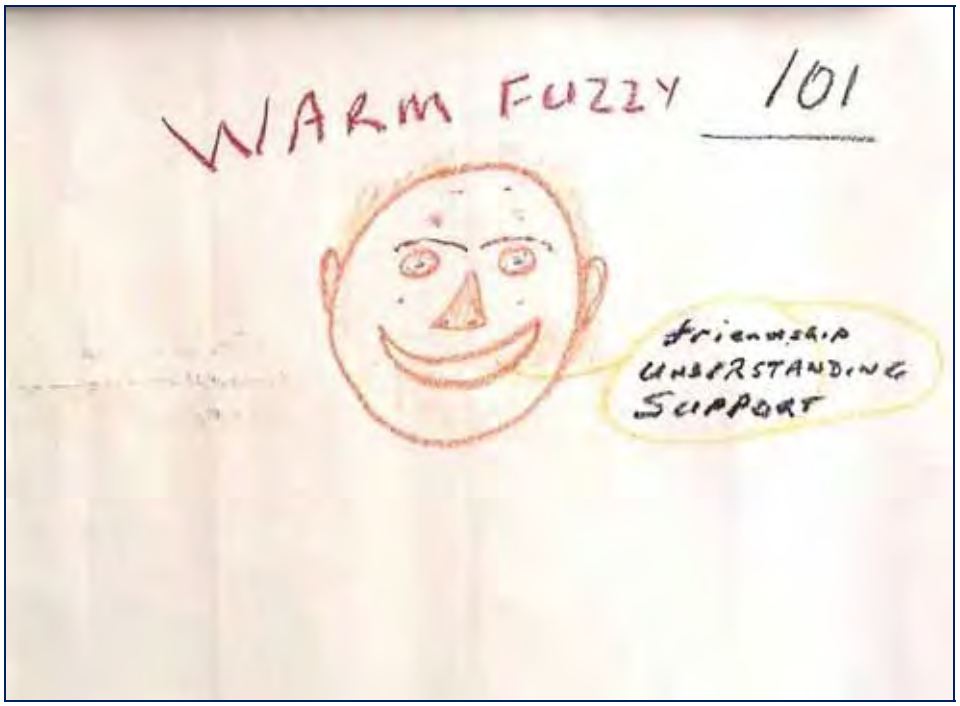
a: Colleen:

A circle of connection



b: Rose

Rose found a PINK heart, rather than the previous 'purple heart' for valour!

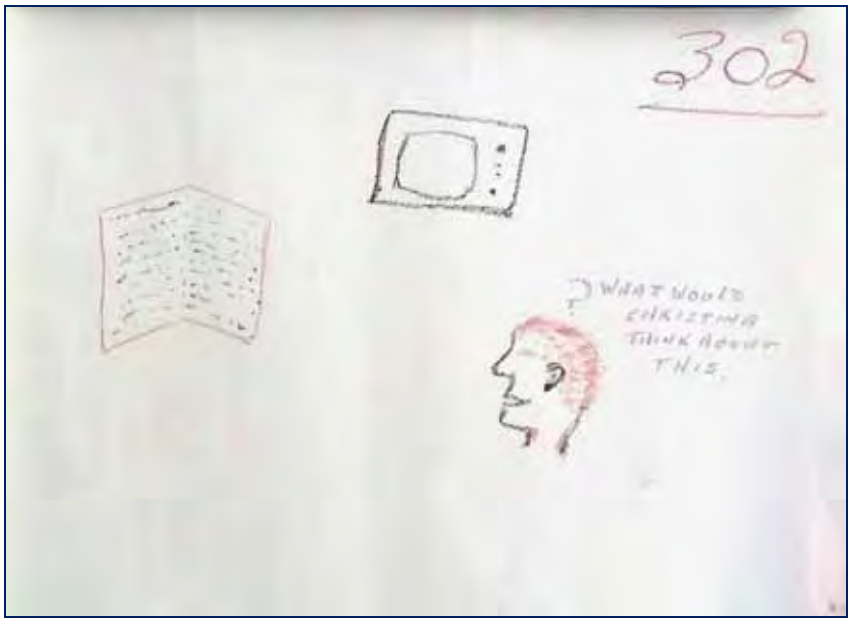


c: Jim:

Friendship, understanding and support

d: Paul:

The Blue Birds of Happiness

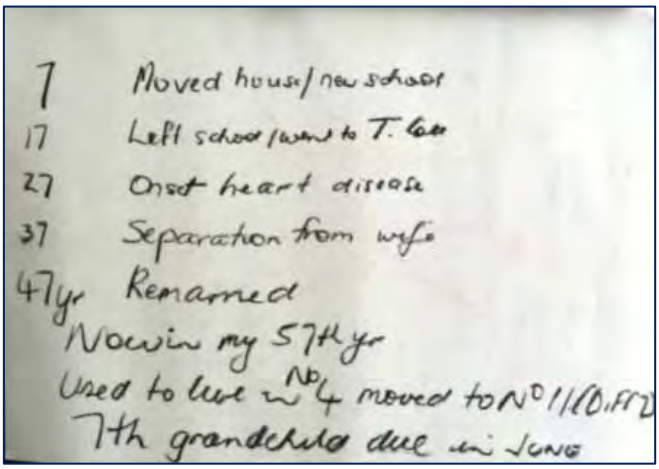


e: Ron M:

"What would Christina think about this?"

f 1.: Darren:

Trips, Friends, Family, Lifestyle



f2:

Associations with 'Seven', a repeated theme on the original image; although thets even are all ten years apart.

g : Ron B.

An expanded horizon

h: Alan:

Becoming aware that others are also ill;

This image is very similar to Plate 50, where Alan had recognised his 'worth' in parenting.

Allan: Has taken from The Group to say what he needs to say; to not get *'pissed off'*: to enjoy life and to think of others. Alan found some of the inner exploration challenging and at times uncomfortable; *"…I'll be honest; I took giving up work not as good as some people. I don't know, I sort of miss the fella's and all that…..Finishing work and then getting in to the heavy part of this, didn't go over real well for me. You know, I didn't handle it as good as I thought. But now since I've been gone, it's pretty good."* Nevertheless, he recognised the depth of intimacy in The Group when he added, ***"I've probably opened up more with you people than I've ever done with anyone else. I don't really like to talk about stuff; I'm not an inward person."*** Allan had also realised that there were many others who are also ill, and as a result of the six month group experience was aware that he was far more compassionate towards them: *"I feel for people a lot more than I ever did."* In his image he has drawn himself, looking ill, perhaps even with the flush of a fever. A year after he made this image, Alan was again a 'patient', having been diagnosed with cancer of the prostate requiring surgery and radiotherapy.

Rose: *"**I've gained an understanding of other people's problems; friendship**. I'm a little **more relaxed** in the things that I do. I seem to think before I speak ___ **tolerance, and I think we've just grown together into a wonderful group."*** In this final image Rose has a PINK heart, rather than the purple hearts (the medal for valour under fire) of her previous images. She had been able to disentangle herself from the emotional blackmail of her ex-husband and

daughter, and in doing so she and her daughter have a far better relationship than they had in the initial aftermath of her husband's departure. She'd also formed a meaningful partnership, and completed her first year of nurse training.

Jim has gained a SMILE! A "Warm Fuzzy" what he called *"the humour factor"!* **Friendship, understanding** and **support**. *"___ it sort of reinforces that you are able to do anything you want to do provided you've got the* ***inner confidence****" ___ "I think I've changed a little bit. I feel like I'm either resigned or* ***more relaxed*** *___ I don't seem to get as uptight as I did about anything at all.*

Paul: *"Oh, probably* ***a better view of myself****, you know, a good hard look at myself and* ***what I do and how I do it; how I go about it****, ___ and* ***that's very valuable"****.* Paul's image is of himself leaning against a very solid tree, head on a comforting pillow (his wife), with his children symbolically represented as growing trees of different colours with the Blue Birds of happiness above his head. He shared with us his pride in successfully negotiating his way through some very convoluted emotional blackmail from his mother, and explaining to her that he would not engage in such dynamics, and the birth of his first grandchild with a very much improved relationship with his daughter. He and his wife had broadened their horizons (increased the size of his lagoon!) and travelled to the U.S and South East Asia.

Darren: *"What have I gained from this? ___* ***I certainly feel a better person****. This experience has been more about* ***myself and confronting certain things****."*He'd lost weight, and looked far healthier, and had completed the first of several trips over seas with his wife, and had welcomed several more grandchildren into their family.

Ron M: *"You've had a profound effect on me. Everything I read now, look at, or read a newspaper, Letters to the Editor, because it interests me to hear other people's views, and I don't always agree with you, but I have learned ___ You've got me in complete disarray!* He said with great smile, adding: "*I used to have definite views ___ then coming here, I listened to other people's views, and I realised that I had thought that my views weren't always correct, and they're not always."* Ron then went on to remind us about an incident which had caught a lot of public attention, when a group of young boys had been filmed on CCTV, in inner Sydney, as they tortured and eventually killed, a small kitten: *"I realised that there was another way of getting through to these kids ___ not just punishment, or gaol ___ I could see that they were behaving like this because they are cut off from nature ___ from love ___ and from*

themselves." This was a huge change from the man who had entered our group and postulated that '*a good hiding was what a lot of 'wild' kids needed*', to bring them into line. Eight months after this session I received a phone call from Ron M's wife to tell me that he was in hospital, undergoing more surgery for the removal of another melanoma on his leg. I visited them, and Ron M and I talked about visualising the healing of his wound, which had been a little problematic; he said he'd 'talk' to it, and both he and the nursing staff were subsequently surprised at how well the graft healed.

The stories were told as a result of images that were made, each session, by the participants, and the questions that I posed when I entered into the life-world of those images, integral to the relationships that formed between us all as The Group became a unit. Coming from an anthropological background, and being a storyteller myself, I was more comfortable using a style closer to the anthropologist Myerhoff's[1089] classic style of life-storytelling, an essentially phenomenological approach to story, than the direction which seems more common, arising from specific questions, even when discussed in in-depth interviews. To use such a method is to interfere with the process that an individual's soul requires: it fills the need of the researcher, perhaps, but is very unlikely to fulfil the needs of the participant in the research. The participants' needs are as important as those of the researchers, perhaps even more so, in a population as vulnerable as those involved in psycho-oncology research. Over the six months we reached a degree of intimacy, as a group, that few experience in any setting other than a closed psychotherapy group setting, as can be garnered from the statements made by the participants during their last group session. Alan's is, in fact, a tremendous statement of trust, from a man who had found the disclosive process of psychotherapy quite overwhelming at times.

In the period of the intervention The Group found its strength, mid-way through, when the tension of Ned's fear of, and desperate need for, intimacy threatened to undo us. His behaviour had revealed the necessity for deeper exploration, and led to a catharsis for several of the members of The Group: Paul in confronting ways in which he gave away power, and his deep pain at the constant rejection he felt from his father, which eventually led to him being able to resolve a situation of distress between himself and his daughter, which had threatened to repeat history. Darren, when he was able to take, for him, a significant risk, and include us in the telling of stories previously reserved for 'comrades-in-arms', and discover

that the telling didn't result in his being ostracized again. We also gained from this by learning about a war in which we had been represented, and about which a great deal had been hidden. Darren was able, like Paul, to take this experience of acceptance and risk telling aspects of his story he'd never discussed, with his daughters and setting the groundwork for an authentic relationship with them, as adults. These two men had also been able to deal with the tension between maintaining the role given them by their parents, that of 'The Golden Child', and the unreal pressures this caused them, inevitably leading to suppressing of their anger, which curdled in self destructive rage. The others, who I had not recognised until I was writing this up, were Colleen, who had been able to come and talk with me about a history of sexual abuse, which, with great courage, she was then able to share with the other members of The Group, and Rose, who was not able to share her experience of abuse and abduction with the others until after the verification process was complete. Paul's and Darren's process of reconciliation with their children had a knock-on effect with all of the others except Allan. The session had been for several what Yalom would call a 'critical incident'[1090], where a significant point of change is reached in both individual and group dynamics.

Rose was able to re-assess her need to 'keep everyone happy' and maintain harmony in the household, even at the expense of her own health, and navigate a safe passage through the rough seas of her separation from a philandering husband of 25 years while Ron B had been able to talk about his relationship with his family, particularly his wife, with a group of caring and engaged people, who were able to provide alternative perspectives, especially valuable, as he had input from both men and women, which led to an improvement in the way he was able to relate with her. Ron M and Alan found it most difficult to engage in any deep psychic exploration, although, towards the end of the intervention, they were more willing to do so, both saying that they had gained an ability to listen to different perspectives to their own, which relied heavily on 'discipline', Ron M also being able to engage with his daughter in meaningful dialogue and repair a deep rift, which had occurred when they were on the island where Ron M had worked. Alan actually worked consistently at reframing his need to be 'pissed off', finding connections between that attitude and anger that he could not express appropriately. When he came to tell me of his diagnosis of prostate cancer, he remarked wryly that he was really noticing how many men used the expression that the were also "*pissed*

off", and he could make the connection between the consistent use of this phrase and his prostate cancer, something we'd discussed during The Group sessions.

The pain that all of the participants had carried when they began the intervention was transformed and healing occurred. Rose had been able to finally tell someone (although not the other members of The Group, until indirectly through the verification of the narrative) of her experience of abuse and abduction. Jim had managed to undo the knot in his belly that had caused him distress since early childhood. Paul recognised his daughter's issues of abandonment and released himself from the unreal expectation of 'perfect parenthood'. Colleen was able to discuss her experience of sexual abuse and family dysfunction, relinquishing the role of 'doormat', Ron M reconciling with his daughter after a long period of enmity resulting from her feelings of being unprotected and disregarded by him. Ron B was able to understanding that sexuality and sensuality were different, and improved his relationship with his wife as a result of that understanding. Darren discovered that to tell stories he had long held contained, as a man tainted by legitimised killing, would lead to inclusion and acceptance rather than the rejection and ostracism he feared, whereas Allan learned that there was more than a stutter which prevented him saying what he needed to, and finally grasping that he was also allowed to enjoy his life.

Discussion and Conclusion

"Longevity can be a by-product of a joyful, meaningful life. Many find longevity only when they are told that they have a short time to live."

Spiegel[1091]

"..the question "does the fighting metaphor mobilize emotion and physiology in a way that is specifically useful in overcoming cancer?" is incomplete. It focuses on the disease. Including the spirit expands the question to "what is useful to this person now?" The broader context of mind/ body/ spirit focuses on the individuality of the healing journey, reminding clinicians that we can at best empower the client to create/find his or her unique path to healing."

Miles[1092]

This study was undertaken to enter into a sparsely populated space in the research literature, a space where the relational meets with the rational, and interpretivist and positivist methods are both used for different facets of a research project. There is a vast body of literature describing the factical world, specifically that of immunology, and latterly psychoneuroimmunology. There is a growing body of research exploring the relational, of how people perceive or experience particular phenomena, and little describing the investigation of a meeting of the two, or acknowledging that the one cannot exist without the other. There is a small but growing body of research exploring the factical world associated with the practice of psychotherapy, and none, other than this, connecting the factical world of immunology with art psychotherapy, hence my decision to undertake this research.

I will outline below the major findings of this study, their possible implications and the limitations of the study.

The objective of the study

The objective of this research project was to investigate the connection between immunological function and psychosocial factors, or, to put it another way, examining the

reflection of a biological function, immunological response, in the psychological functions of affect and social interactions, as different but nonetheless integral facets of the bodymind as a whole, in constant interaction with all facets of a social, spiritual and ecological milieu.

While each of these facets of the bodymind must necessarily be recognised as part of the 'bodymind hologram', the ways in which each is addressed, is very different. The biological aspect is open to direct scrutiny and quantifiable measurement; we report **performance of functions**, biological functions. The function of 'mind' on the other hand is only recordable by inference, by what 'mind' has acted upon and subjective report because what we report is **experience**, which inevitably relies on a language of some description, and language is also greatly influenced by subjectivity and intersubjective consensus. As yet science has not been able to elucidate what makes an experience; how function is translated to subjectivity; the **conscious perception** of that function by me as an entity with a unique history. Describing a neural pathway may explain how a colour perception occurs and which parts of my brain become active, but it does not explain nor describe my experience of a red flaming sun disappearing into the earth at the end of a day of swimming in turquoise water on a summer holiday.

The qualitative facet of this investigation was undertaken by engaging a group of post-surgical participants with non-metastatic melanoma in a closed group **art psychotherapy** intervention, a modality not previously employed in research investigating the **immunological** aspect of psychosocial response. Quantitative data, on the other hand, generated during the course of, and in response to, the art psychotherapy group, was gathered by way of salivary sample analyses to measure S-IgA (established as a measure responsive to distress) and S-IFNγ (a molecule secreted by T lymphocytes and considered may be affected by emotional state), DTH test responses and psychosocial questionnaire results.

There was a general feeling, within The Group, expressed within the first few sessions, that distressing experiences had preceded their diagnosis, and the level of distress exacerbated by that diagnosis. With that in mind, and in line with the concepts of psychoneuroimmunology, art psychotherapy was aimed primarily at exploring perceptions of 'stress', levels of 'stress' and means by which to reduce the impact of that 'stress' particularly by enhancing an

understanding of individual psychosocial dynamics and addressing the search for meaning in events and feelings of isolation and alienation, which became apparent very early in the psychotherapeutic process, and which corroborated the experiences of the pilot study participants in Britain.

The outcome of the study.

The results would indicate that the aim of the re-shaped project was fulfilled, that is, that the impact of the art psychotherapy was reflected in immunological function on single sessional basis, over the course of the intervention, reflecting the participants' emotional tone, at 'the time of the action' each week. There was also a general improvement in quality of life, ability to address anxiety provoking situations and improved interpersonal communication, as reflected in face to face discussion within The Group and the participants' images, though it was not found in questionnaire results

Participants gave salivary samples pre- and post-session which allowed us to observe the immediate correlation between immunological salivary activity (specifically for S-IgA and S-IFN-γ) and the emotional tone of the session, that is, over a period of hours, as well as the change over the six month intervention period. DTH test results were taken to give an indication of more long term change in immunological response. From DTH results it would appear that immunocompetency, as measured by T-cell recognition of a known antigen, was enhanced in this small population.

The participants were seated for the best part of the session, engaged in painting or drawing, sharing food, and discussing issues brought to the fore by their images: no physical exertion could therefore account for the, at times large, fluctuation in salivary immunological measures, over the three hours of the session. It must therefore be assumed that the fluctuation was the result of the emotional tone generated in each session. The emotional tone was a direct response to the art psychotherapy process.

As the base line salivary measures were taken only at pre-session times for the first three sessions of the study, prior to the decision to re-shape the protocol, there is no comparison of pre-vs-post sessional change between pre-study and end-of study levels. There was,

however, an upward trend between pre- and post-session levels following Ned's conniption, which was more distinct in the S-IFN- γ levels than the S-IgA levels. The Group Means for all sessions on the other hand showed a statistically significant increase (p=0.02), post-session compared to pre-session for S-IgA values (125.5 μg/ mL, post 90μg/mL, pre:), with no such change in S-IFN- γ level. Results for individual immunological changes reflected both the degree to which the individuals participated, and the depth of the presenting trauma, for example, Darren who was a long term PTSD sufferer and had stated clearly that there were issues that he might not discuss, responded immunologically with a sharp drop at the time of Ned's conniption, when a previous, threatening event had been unconsciously re-enacted, leading to a significant catharsis. The fears surrounding this incident didn't resolve for many weeks, however, even though he brought them to The Group and his immunological results, likewise took a long time to recover, a reflection of the time that his bodymind had endured and accommodated to the suppressed fear.

The DTH test results were taken to give an indication of more long term change in immunological response. These test results were not examined in isolation, but the correlation of group mean DTH result to post-session group mean S-IFN- γ levels, at the time of injection was analysed. The antigen was administered pre-session and, as IFN-γ is the cytokine involved in inflammation, the post-session S-IFN- γ level was used for comparison. A significant correlation was found at times of anxiety, **t5** and the final session of the intervention, t24, whereas no significant correlation was seen pre-study. From the data it would appear that immunocompetency, as measured by T-cell recognition of a known antigen, was particularly activated by the participants' anxiety, which is biologically consistent.

Matters relating to the study design.

I would suggest that using the originally proposed format, a randomised controlled trial, was indeed inappropriate as Cunningham and Mehl-Madrona argue (see introduction). In the original plan a second group engaged in simple conversation meetings with me were to provide the control arm. Such a group then becomes, in reality, another modality of treatment, rather than a true control group. I have argued in the methodology that it is actually not possible to run a control arm in this type of research, as each person comes with an individual life story, set of perceptions and responses to arousal and each group is an

entirely new creation, formed by the interactions of unique individuals responding to issues *de novo* (although with entrenched individual response patterns), as the moment dictates for that group. Each psychotherapist, group facilitator or health educator comes also with his own story, set of prejudices, preconceptions and ways of interacting with research participants, which in turn influences the ways in which the participants respond to the research intervention, and subsequently the research results.

Obstacles to recruitment.

Poor uptake to this project may have been a result of the novelty of the intervention, as art psychotherapy is little known in Australia, and often confused with diversional art expression. There were several other issues, however, which also impacted directly upon the recruitment process, such as the accuracy of extracted data if the clinic was particularly busy and the perceived validity of the intervention by some staff members. From my own previous experience, while conducting the pilot study in the UK, when a consultant actively referred a person for art psychotherapy there was 100% uptake, the uptake dropped markedly when information was delivered to potential participants by attending nursing staff, but increased moderately if I was able to have a face to face follow. Nevertheless, those who 'stayed the distance' were well committed to the project with an almost 90% attendance rate.

The resulting small size of the study group may be considered a limitation with regard to the soundness of the statistical analyses and may have had a negative influence on the validity of the group mean results, but not on individual results, which, similar to the psychosocial questionnaire results, were incongruous.

Comparison with other studies.

With regard to the quantitative results, the majority of the few studies which have assessed the **immunological** reflection of psychosocial function in relation to adaptation to, and coping with, a diagnosis and treatment of cancer, have used whole blood samples. These studies have generally assessed the function of various lymphocyte sub-populations and/or various hormone levels. My study, on the other hand, has used **salivary** samples to assess immunoglobulin (S-IgA) and cytokine (S-IFN-γ) levels, and a DTH test repeated six times

over the period of 12 months, to assess T-cell response to a known antigen, PPD. The method adopted was based on research into the effect of stress on immunological function in generally healthy populations, such as athletes and university students.

The use of salivary sampling meant that the study participants were not subjected to frequent anxiety provoking invasive techniques such as the generally used venepuncture to collect peripheral whole blood samples, and that pre-and post-session samples could be collected for **each session**, rather than prior to and following a total intervention, as has been done in most other research regarding stress/relaxation and immunological effect, except that for elite athletes, where pre-and post session levels have also been assessed.

The questionnaire results did not corroborate psychosocial results reported in the Fawzy studies. Their study population, however, was much larger. On the other hand the improved immunological function was in general consistent with their study, although different parameters were assessed

A great many previous psychotherapy studies have reported on qualitative data, although only recently has art psychotherapy research entered the arena of quantitative research, and the majority of that research, with regard to psycho-oncology, has quantitatively assessed such things as the impact of art psychotherapy on cancer treatment and symptom management. To date the actual **physiological** impact on those with whom we work in therapy has largely been ignored, and art therapy is still considered, in the main, to be in the domain of 'mental health'.

The use of questionnaires for evaluation of psychological state.

The psychosocial questionnaires were aimed at assessing change over the time of the intervention and to see if these changes held at 12 month follow-up. The degree of '**Avoidance**' amongst the participants in the present study decreased significantly when comparing results prior to and following the intervention (Table 13). There was also a significant increase in the degree of '**Humour**' experienced and expressed by the participants when comparing post intervention to pre-intervention scores.

While all the questionnaires are, without a doubt, well validated and frequently used, particularly in the psycho-oncology research setting, the disparity between the various questionnaire results and participant subjective reports may point to a limitation in their use.

The quantitative psychosocial findings from this project, their incongruence with the details of the process of psychotherapy as observed by myself as therapist, coupled with the participant's subjective reports, illustrate issues of dissatisfaction with the use of these instruments in assessing, at specific moments, what are essentially **dynamic functions**; not **static entities**. Examples of the participants' comments regarding the questionnaires include Rose's (ID71) remark. When the participants asked about their results, at the meeting to discuss verification of the narrative, she exclaimed: "***What!*** *…..does this mean I'm still grumpy?"* General antipathy towards questionnaires was expressed by Paul (ID 21), when he said: *"They just keep asking the same questions in different ways to get the answer they want."* Ron B. also made an incisive remark when he pointed out: "*They don't let you answer the question the way that you want, and they don't ask the questions I need to say something about."* Images making exercises, such as the KFD or even free image exercises, used in this project, are also valuable and reliable means of assessing psychological state. The caveat, however, is that they be accompanied by a **conversation** regarding the image and that both conversation and image are **relational and context bound.**

Amongst the participants in this study there was a trend towards a change in both resilience, recognition of agency and self worth, and congruence between emotion and affect, however those who embraced the change most fully were the participants who could activate their flexibility and curiosity. Ned was completely unable to move in this direction and withdrew from the project. Although he was able to express affect, at times it was difficult to see to what the affect was connected! The expression lacked the necessary congruence. Alan and Ron M found it difficult, although at the follow-up session Ron M was able to say: *"I used to have definite views ___ then coming here, I listened to other people's views, and I realized that I had thought that my views were always correct, and they're not always.*" The latter two participants had recurrence of disease, either as melanoma or in Alan's case, as prostate cancer. The others remain disease free at three years. This finding may be related to the degree of benefit that participants gained from art psychotherapy, however, a larger study would be required to determine the relationship between art psychotherapy and cancer recurrence.

The members of The Group spoke of better general health overall at the last session of the intervention, the twelve month follow-up and at a meeting a year later when we met so that I could give them copies of the narrative for their verification, despite the results of the EORTC-QLQ-C30 questionnaire, which reported a tiny and consistent decrease in general health overall (Table 14).

There may have been a skewing of results of the psychosocial questionnaire results because of the timing of the delivery of post intervention questionnaires, as they were completed on the last day that the participants would see each other for six months. There was legitimate sadness expressed about the dissolution of The Group, which had become a structure within which deep trust and empathy had been established. Temoshok[1093], however, argues that findings such as these are consistent with Type C personality, that is, people who cope, for instance, by being apparently compliant in order to minimise 'fuss', which she has found to correlate to a prognostic status in both cutaneous malignant melanoma and HIV Infection Finally, with regard to the psychosocial results is the inherent assumption that measurements make validity; which indeed they do, if one measures **things**, and for too long psychology in research has promulgated what Giorgi[1094] refers to as the "*ignorant assumption*" that psychological variables are quantifiable. Qualia have no **substance**, the physical state on which measurement depends: Qualia, therefore, are not quantifiable. He goes further to state that measurement of the unquantifiable is an illegitimate research procedure. According to Mitchell[1095], this assumption, which has attained the status of irrefutable 'fact', has never been demonstrated, and yet it constitutes a cornerstone of much psycho-oncology (and psychological) research. What can be done is to **describe** these states and processes; the focus of Chapter 7.

None of the individual differences, gender bias, issues around sexuality or the anxiety regarding the disharmony in The Group was picked up in the psychosocial questionnaire results. All of it was necessary for the participants to reduce their distress levels and learn coping strategies consistent with their authenticity. Importantly it was reflected in the immunological results, fluctuations of anxiety and relaxation, or 'positive affect', for want of a better term, becoming visible when the results were graphed.

Qualitative data and psychosocial matters.

Qualitative data was extracted from the proceedings of the closed group using a hermeneutic phenomenological approach. In line with that approach no preconceived notion of what was to be 'of value' regarding the focus of research, other than the biological sampling, was held, although the findings of the pilot project were a subliminal reference point. It was important to allow The Group, and each individual participant, to bring to the sessions what was important to them at the time of their involvement in the project, hence also the lack of a prescribed format for session content. The art psychotherapy adventure was recorded as a narrative; a static record of a fluid passage in time. The **images** made by the participants in response to the existential issues that **they chose** to explore during the sessions were an integral and essential part of that process and were therefore included in the narrative. The narrative describes the lived experience of the members of The Group and highlighted the at times surprising content found by the participants' in their images, transcending what they thought they knew of their histories and how they operated in the world. Some of these surprising findings also pertained to myself, when the serendipitous use of the Colour Garden visualisation was revealed to have had such a significant impact on immunological function, an example of intervention effect. This finding is worthy of further exploration in varying populations, and could become the basis for a quantitative study regarding the impact of specific visualisation topics for people with varying health/disease states. Another two surprising examples of intervention effect were seen with the anxiety provoking sessions when Ned's fear erupted in anger, and towards the end of the intervention, when direct transfer plaster face masks were made. The extent of the anxiety was observed during the collection of qualitative data long before the immunological data was assessed and analysed, and informed an understanding of the significance of the quantitative analysis results.

Gaining an insight about what is essential to the psychological process, through the recording of the narrative, gaining an intuition of its essence, the eidetic reduction, is using core phenomenological research, a no less scientific method than the gathering and assessment of biological samples, because it is methodical, systematic, critical and potentially generalisable.

The ways in which individuals responded to and explored those issues was central to the qualitative component of the research findings. Coping strategies are learned in early life and

determine the degree of distress which an individual perceives. It is this perception which determines the level of arousal and hence the immunological response. Coping strategies in this group were actively explored and different strategies engaged with a view to increasing perceived agency, which for all the participants was achieved to extents consistent with their commitment to change. Degree of agency and sense of coherence with the personal world view reflect an individual's being-in-the-world, which is fundamental to an understanding of the hierarchy of attention informing appraisal, and it is appraisal which, in turn, informs response in the bodymind. Without awareness choice, and therefore change, is impossible. Engendering awareness of oneself as an inherently valuable individual as a part of a family, society, an ecosystem and the universe as a whole, is the driving impulse for the way in which I practice psychotherapy, and through which the results of this study were gained.

The group experience is also of fundamental importance in reducing the feelings of isolation accompanying a diagnosis of a life threatening illness; a group of 'strangers' with whom intense intimacy can be shared, as deeply personal issues, such as the pain of sexual abuse or crises of faith, are aired and explored in safety. The group interaction enables participants to 'reality check' many assumptions and compare commonality of experiences. It also gives participants the opportunity to 'give of themselves' to another, by way of support and respect. Learning new interpersonal skills is much more effective if undertaken in a non-threatening social setting, such as is provided in group art psychotherapy, and it takes time. On the other hand, it may be important to tease out the effect of this group experience on the impact of art psychotherapy, and identify what difference there is for participants who engage in individual therapy, compared to those who participate in groups, or a combination of both.

The group size is important, and happily, this group was a comfortable size; it was small enough for all participants to get to know each other well, and not so large that effective exploration was hampered. A group of more than 10 people becomes cumbersome and ineffective for a single therapist, as either the sessions must run for a full day or some people miss out on processing their images.

In the pilot study I combined weekly individuals session with a group session, which had the advantage of addressing issues one-on one, that were too 'scary' to bring into group

discussion without first exploring them in private. This would have proved helpful for several of the participants, for example, Rose's difficulty disclosing her experiences of sexual abuse and abduction. Perhaps Ned could have benefited from forming a safe transference and psychotherapeutic alliance in a one-to-one situation and without having to compete for attention, given his experience of early abandonment, coupled with interaction with an accepting group of comrades whose company he openly craved. My sense still is, however, that it would have been extremely difficult to accommodate his neediness within The Group, even had he decided that he would stay.

The participants addressed their feelings of utter desolation, being helpless in the face of the diagnosis and treatment for their melanomas, and resolved that feeling of helplessness, the remaining participants becoming a group of people who recognised a commonality of experience, transforming their suffering into healing of the spirit.

Cunningham has also argued for the necessity of including spiritual issues in the care of people who are ill as a result of cancer, and he recognised that in the classic randomised controlled trial, a valuable perspective is lost. These were issues openly discussed within The Group of this study. In his study assessing the effects of group psychotherapy the team realised that there were 'outliers' who were discounted in the statistical analysis. When examined again, however, it was realised that these people lived considerably longer than the others in the study. The commonality of these 'outliers' was their 'get up and go'; a mind-set which pushed them to explore more and other therapies than were offered by the treating team. I found a similar pattern amongst the participants in this small group. Both Allan and Ron M had difficulty with the concept of autonomy. They were far more comfortable with 'discipline' and directives, although this did change over the term of the intervention, as can be seen from Ron M's comments regarding what he had gained from the art psychotherapy intervention.

The issue of choice, respecting the organic process of psychological exploration has not, to my knowledge, been a function of previous studies. I would suggest that further investigation and report on this organic process, with several groups and in various cultures, is important in order to clearly identify if there are 'universal' issues of existential distress, or modes of 'coping', as has been done with both types of personality and cancer, suggested by Temoshok

and Glass (respectively), before any intervention can be generalised. The transcultural issues is, I sense, of similar importance as in psychiatry, earlier identified by such luminaries as Arthur Klienman, particularly in light of the global impact of the multinational pharmaceutical industry and domination of Western medicine. Western perceptions of 'stress' may not be universal, nor concepts of agency or ways of dealing with distress, which would necessitate a culture specific adaptation of this modality of psychotherapy in relation to immunological response. The best philosophy of such investigation, I suggest, would be phenomenological and with native speakers as facilitators.

I was aware of gender distinctions in the group. Paul and Ron M were the only two men who readily accepted the responsibility of preparing something for the shared meal, the others either bought something, or relied on their wives; eventually this barrier was overcome, though, and everyone brought something that they had 'created'. The most important gender differentiation, however, had emerged around the issues of sexuality, particularly when sexual abuse was disclosed, or discussed, as it was after both K's and Colleen's disclosures. Four of the men were extremely uncomfortable, and displayed this either directly, or by suppressing discussion by being 'sympathetic'. They also expressed disbelief that it was a pervasive social issue, crossing social and gender boundaries, until a frank discussion was generated by Colleen. Darren brought to their attention that the most likely offenders were not the strangers of 'Stranger Danger' that had been popularised within the school system, but family members or close friends. Ron M said: *"I must have led a ve*ry s*heltered existence; I had no idea it was so common!"* even though his daughter is a social worker.

The study served to support the importance of strong relationship in the group psychotherapeutic process[1096], the related centrality of communality in immunological health and the role of psychological distress on both salivary immunological function, and response to DTH as measurements. Following Ned's departure The Group became involved in active exploration of issues of deep importance to them, accompanied by a gradual and steady increase in immunological function. It was not until Ned left that Darren was able to unburden his pain surrounding events experienced during the Vietnam War. The issues centred on the importance of primary relationships, and optimizing their meaningfulness, and stemmed from feelings of being in some way 'other'; outside; marked by their experiences of violation (Colleen, Alan and Rose), war (Darren), impotence (Ron M and Ron

B) or unacceptability (Paul and Jim). This sense of 'otherness' was exacerbated by their diagnosis with a life threatening illness, cutaneous malignant melanoma, about which neither their families, nor their friends seemed willing to talk. Involvement in the intervention lessened the feeling of stigmatization, and increased their feelings of communality, as can be seen from the images made in the final, follow-up session (Plate 45 a-h).

An important aspect of Type C personality is the incongruity of expressed affect, with physiological response: over time the participants became more aware of, and lessened this incongruity, illustrated best by Colleen's remark that she had told one of her kids to *"shut up!"* ___ *"and I've* ***never*** *told my kids to shut up before!"* Bearing in mind that her children were all young adults, this was a significant shift.

The clinical nurse consultants, who had been in the background during the entire intervention, gave their unsolicited appraisal of the project when they said that they had noticed an improvement in how the participants communicated and interacted, as well as an increase in their sense of humour, and at our last intervention meeting the senior nurse consultant said to The Group "*Well I'll tell you what, you've all formed into a very cohesive group. I'm sure you'll miss each other's company actually on a Thursday night. It won't be quite the same, will it?"*

Limitation in the study.

The size of the budget was a limiting factor, which precluded a fuller use of both sets of data and of the assessment of other immunological parameters, such as natural killer cell activity (NKCA). The other side of this coin, however, was that the parameters used were assayed from samples collected by non-invasive means, which is, as I've said, a significant advantage. From the perspective of statistical analysis, as mentioned previously, the size of the study population was a limitation to statistical validity and potential generalisability.

It would have been an advantage to be able to edit the many hours of video recording and transform that into a short DVD. Such DVD could be available as part of material used in training other art psychotherapists interested in medical art psychotherapy, or in training novice art psychotherapists, opening them to the possibilities afforded by my particular approach. It would also have potential in educating psycho-oncologists in the potential of art

psychotherapy as a psychosocial intervention. The format of a DVD would certainly have been helpful in delivering information to the clinical staff at the study recruitment centres; a better medium than a 'PowerPoint' presentation, difficulties surrounding which have been discussed in Chapter 6. The possibility of making such a DVD was not entertained in the initial protocol, as only audio taping was proposed; neither was it something I had envisaged as a possibility, when in the throes of reshaping the protocol. My experiences with the regional heath ethics committee were overwhelmingly negative, and the prospect of yet another submission, prevented me from following this up when the wealth of audio-visual content became obvious, even had the funding been available. Kate Collie and her team[1097] have constructed an innovative protocol to assist isolated women with breast cancer, by utilising telehealth techniques. Such an area of applicability would well suit the geography of Australia, and the use of an introductory DVD would be of value in this situation. The results also imply that further research is required into the use of art psychotherapy as a component in mixed methods research, such as the innovative work of Collie referred to above, not simply the qualitative research with which art psychotherapists are naturally at home.

I found working in isolation difficult when analyzing the qualitative data. There is a danger of becoming bemired in one's own perception, and missing the wood amongst the trees, or even both woods and trees amongst the vast quantity of coloured leaves on the ground!. I feel that working with at least one other would be an advantage in order to gain some distance, which I eventually found by putting the narrative away and creating my own art. I was greatly assisted by my elder daughter's input. She is a genetic counsellor, also involved in a PhD research project of her own. The quantity of the data (leaves on the ground) produced was enormous, and would be a limiting factor for further research, unless well funded, as the type of analysis for qualitative work requires team work. The advantage, however, in creating such a large body of data, is in its accessibility for future analysis and investigation, looking from different perspectives or for other information, such as the impact of group dynamics or the role of gender in the frank exploration and expression of emotion.

Further limitations were those of supervision, when I often felt as if I was flying in the dark without navigation equipment, and that of stability (I moved offices four times, worked from home, and shifted from the School of Fine Arts, to The School of General Practice, then the

School of Behaviour in Medicine and finally the School of Biomedical Science.) The one consistent factor and steadying influence, throughout the project, was my connection with Associate Professor Margaret Dunkley, who was my primary supervisor in the crucial final two years, but who had been involved as immunological supervisor from the outset.

Further research and potential applications of this research.

Further research could aim to establish the possibility of assessing other immunological parameters, such as IFN-α and IL-2, also from salivary samples, to minimise the amount of invasive techniques employed to assess immunocompetency in a vulnerable population. There is a substantial benefit to participants in a research project (and to those debilitated by illness) that physiological measures can be performed by non-invasive means. The DTH test are obviously not in this category, however, the degree of invasiveness and discomfort is minimised by the subcutaneous administration of the antigen, unless, of course, the participant has a very strong antigen response, where an itchy bump of considerable size may be experienced, and which will persist for several days.

The results of the study may suggest that this type of intervention has applicability in other areas where immunological function is impaired. One area which springs to mind, is that of HIV/AIDS, where it may serve as an adjunct to drug therapies. Other areas of interest would be in preventative medicine, such as prenatal care amongst women at risk of pre-term delivery or delivery of low birth weight infants and in lactation care (given the importance of S-IgA in infant health), or intervention in areas of high distress, such as the many varieties of social disruption from natural disasters to the man made catastrophes of war. The less obviously pervasive distresses of domestic disruption and PTSD are areas which are successfully addressed by art psychotherapy intervention, but which have not yet been assessed for their physiological results. By addressing these issues perhaps the physiological precursors to such diseases as cancer and cardiac disease can be ameliorated.

Further research, with a larger population, it must be understood, would require the involvement of several art psychotherapists, and various sites, in order to recruit the required numbers of participants. Collaboration with a team of people expert in qualitative analysis, as well as a laboratory capable of assaying the immunological data would also be necessary. At

most, I would suggest, one therapist can work with 80 participants, over four working days per week (2 sessions of three hours each with 10 participants, per day).

The importance of the individual.

This study began as *"The efficacy of art therapy in the medical setting: looking at the connection between the immune system and psychosocial factors amongst melanoma patients"*. The chair of the area health ethics committee objected to the use of the term 'melanoma patients' and so the title of the protocol became *"Looking at the Connection Between the Immune System and Psychosocial Factors"*; leaving out art psychotherapy entirely, and a reference to the people who were to participate in the research. I agree that the term 'patient' reflects a paternalistic mindset, but even when it was changed to 'people with a diagnosis of melanoma' it was deemed unacceptable. Without the participants no research would have been possible, and I feel that it is disingenuous of us to not recognise their involvement. As I have argued throughout this thesis, and I have demonstrated by the inclusion of the images and their accompanying 'stories', the art psychotherapy component was central to the whole project: the making of the images and their exploration is what is important in bringing to consciousness issues which have been suppressed/repressed while nevertheless impacting on physiological and psychological optimal function. The present title, I think, reflects some of the magic of the bodymind and the story of the journey of discovery for all of us involved in the project.

In my study the individual differences in the biological results were more illuminating than the 'homogenised' psychosocial results, and supported the observation made in the Introduction, regarding the intimate connection between that which is seen, perceived, and experienced. The images made by the participants re-connected them intimately to the events they portrayed, and the immunological fluctuation reflected the engendered affect.

It is important to investigate how the modality assists in creating coherence within the bodymind hologram, and this can only be achieved by the use of both an appreciation of the individual-being-in-the-world in concert with discreet psychoneuroimmunological measures, to which end this project was designed and on whose outcomes I have reported.

"In the final analysis, we have to treat the individual patient's experience, not simply their diagnosis"

Spiegel[1098]

"To the extent that I managed to translate the emotions into images ___ that is to say, to find the images which were concealed in the emotions, ___ I was inwardly calmed and reassured. Had I left those images hidden in the emotions, I might have been torn to pieces by them…….As a result of my experience I learned how helpful it can be, from the therapeutic point of view, to find the particular images which lie behind emotions."

Jung[1099]

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