The broad array of communication protocols that we term the Internet facilitates the creation of many diverse communities. This paper is concerned with how individuals dedicated to child sex organise themselves within what can be best described as virtual communities or networks, i.e., community structures and roles held by individuals who never meet in person, and where anonymous interaction is solely based on various forums of Internet activity. The Internet provides a uniquely safe, easily accessible, distribution medium that operates on at least three levels simultaneously:

1) The technology facilitates the anonymous rapid dissemination of an immediate and constant supply of illegal child pornography pictures, i.e., a virtual stream of sexualised child fantasy depictions. For adults with sexual interest in children it facilitates the expression of their fantasies for the purposes of affirmation. These images are posted in a sympathetic environment that is supportive of their rationalisations for child sex encounters.

2) It enables creation and maintenance of a sense of deviant behaviour. According to Best and Luckenbill (1982), mutual association is an indicator of organisational sophistication in deviant associations. The presence of complex social structures in the computer underground indicates that on a social organisational level, adults with a sexual interest in children act as ‘colleagues’. They devise ways to prevent discovery, apprehension and sanctioning by social control agents. This knowledge is also anonymously disseminated transnationally through the distribution medium of the Internet. In this sense the child pornography activity constitutes an effective and structured network.

3) It provides a facilitating and supportive context. The easy accessibility and transnational distribution of child pornography and rationalisations for child sex has broader implications in the context of sexualising children to an audience who may not have any primary interest in child sex per se. The children depicted in child pornography pictures are engaged in sexual behaviour, and are directed by the photographer to behave in specific ways that serve to sexualise children, in order to gratify a whole range of fantasies. The result is that children engaged in sex acts are often smiling or have neutral expressions, and very rarely do children in child pornographic pictures show signs of discomfort. These depictions appear to be designed to reinforce rationalisation and justification processes for adult sexual interest in children. To the wider audience the pictures depict children as ‘willing sexual beings’. Given this, issues concerning the ‘rights of the child’ and indeed the nature of childhood are all the
time moving further and further into the background.

The focus of this paper is on Usenet newsgroups dedicated to child sex as the most obvious medium in the dissemination of child pornography and on the most visible evidence of paedophile networking on the Internet. Newsgroups provide a passive supportive, virtual environment that facilitates the discussion of fantasies and alleged experiences of sexual offences against children in a context which routinises, sanitises and normalises sexual contact with children.

A similar social structure and organization can be seen in child sex related newsgroups. The most visible and distinctive feature of paedophile activity on the Internet is trading in child erotica and child pornographic pictures. Such trading typically does not involve the exchange of money (O'Connell and Taylor, in press). Usenet facilitates the formation of what could be termed as a virtual deviant market involving complex networks of users for trade that is effectively anonymous. In the trading process parties perform comparable deviant roles to those identified by Sutton and Mann, (1998). Deviant exchange is voluntary; participants have compatible interests and co-operate in satisfying those interests.

Newsgroups are only one outlet for the expression of adult sexual interest in children on the Internet. Newsgroups provide a very public form of virtual communication; other communication protocols enable real time private communication, and it is reasonable to suppose that they have a greater role in the passage of direct sensitive information, as well as supporting the distribution of pornography. It is likely that protocols such as; e-mail, ICQ and IRC have a greater role than newsgroups in the dissemination of ‘private’ photographs, and are vehicles for information related to contacts, etc..

This paper also addresses the content of child erotic and child pornographic pictures posted in child sex related newsgroups. The analysis of content may be viewed from at least two perspectives:

1) Child pornography is the evidence of serious sexual assaults on children. The pictures may reveal a wealth of information from an operational policing perspective in circumstances where child protection issues are concerned. However, it has to be noted that the vast majority of photographs found in newsgroups are greater than 15 – 20 years old and therefore do not involve immediate issues of child protection.

The identification of new from old is therefore an important issue that may have a direct child protection value. The evidential nature of child pornography is a subject that has been explored by the COPINE team and especially by one of the COPINE partners, The Metropolitan Police, London. We are presently engaged in a process of constructing an evidential database that will facilitate the analysis of seized child pornographic videos and pictures traded via the Internet from an evidential perspective. As evidence child pornography pictures are amenable to crime scene analysis. They have a role in revealing the identity of the child and very occasionally the identity of the offender. The process of constructing an evidential database has been informed by members of the Paedophile Unit, Scotland Yard and also by the Dutch Police. It is hoped that in the long term this database will be a useful operational tool for the police forces involved and also aid international police co-operation.

2) The nature of the fantasies contained in child pornography may also be indicative of the qualities of the picture collector from a psychological, and potentially an offending perspective. The sense in which pictures can be analysed from this perspective is addressed in this paper.

There are two assumptions being made here: firstly that pornographic depictions are representative of desired fantasies which is one of the principle reasons why they are collected; secondly, within the context of the Internet the pictures a user posts are representative of that particular individual’s fantasies and sexual predilections. There is a lack of psychological research with regard to both of these assumptions, and a working through of these issues is one major area of research that the
COPINE project seeks to address.

A potential caveat to the above as far as newsgroup postings are concerned is that the pictures a poster posts may not in fact necessarily always reflect the kind of pictures that he/she would choose to best cater for his/her personal fantasies in relation to child sex. The dynamics of posting may have a range of purposes outside of meeting particular fantasies related to the social context of the virtual network in which an individual is involved. The purpose of posting may be any or all of the following:

- to sustain and legitimise through participation, deviant sexual interest in children
- to gain credence amongst the members of a virtual community or network by posting pictures that cater to a number of different fantasies.
- to help others in completing series, therefore posting pictures again outside of personal tastes, to both gain status and in the hope of ‘quid pro quo’ posting that better reflect personal tastes.
- to simply engage in the process of collecting for its own sake

The dynamics of posting may have a range of purposes outside of meeting particular fantasies related to the social context of the virtual network in which an individual is involved. The purpose of posting may be any or all of the following:

- to explore deviant forms of sexuality, including but not exclusively adult sexual interest in children.

Any of these reasons may lead to a poster to post pictures (and also collect pictures) depicting fantasies that may not necessarily represent his/her personal preferences. However the fundamental assumption here is that the pictures he/she would like to collect is a close representation of a particular individual’s sexual fantasies. In itself this is of significance, for it is the meeting of fantasy demands that drives the production of child pornography.

However, of even greater significance would be knowledge of the relationship between collection of child pornography and the potential to sexually assault children. Are there within collections of child pornography indications of potential ‘dangerousness’ of collectors, in terms of sexual assaults on children? This area is in need of much greater exploration.

Perhaps the most significant factor influencing the growth of child pornography on the Internet is the ease of dissemination and collection. Such anonymity and convenience, eliminating the need to expose identity in a transaction, has revealed quite an extraordinary level of adult sexual interest in children. Presumably this interest was either dormant or latent on this scale in the past.

The advent of the Internet has meant that child pornography is far more accessible and available to those with even minimal computer skills. Therefore the dynamics of producing, collecting, trading and distributing child pornography has been transformed. Also the scope for selection of particular pictures that cater for specific desires has also increased. We need to recognise and understand the processes involved in this to develop investigative strategies.

Analysis of newsgroup posters’ activity reflects only those posters who decide to actively engage in the process of posting. Experience suggests that there are any number of users who simply 'lurk' in the background and download the pictures they require. Therefore a 'hidden layer of activity' exists, the extent, size and number of participants of which is unknown.

As noted above 'hidden markets' may also be operating through the less public medium of private e-mail. ‘Email lists’ expand email from ‘one-to-one’ to ‘one-to-many’ recipients, facilitating the creation of private information or discussion groups. The ‘Ianthe’ based support group for ‘girl lovers’ is an example of this. Other communication protocols afford parallel or complementary means of communication, which offer additional levels of anonymity.

These include for example Internet Relay Chatrooms (IRC) which affords users the opportunity to communicate in ‘real time’ and most closely resembles an on-line ‘conversation’. IRC also affords the option to open a Direct Channel of Communication (DCC) between two users, which bypasses...
the need for a server and thereby raises the level of security of the communications. IRC historically was a major forum for the exchange of child pornography, and there is clear evidence of its use to organize and orchestrate the sexual abuse of children as well as propagating the trade in child pornography (O'Connell & Taylor, in press). Some IRC users formed close and complex social networks to facilitate and control both the exchange of photographs and information. A similar protocol such as I Seek You (ICQ) has the advantage of operating in the form of a pager system. Again the extent of this activity is at present largely unknown.

A central factor relates to the distributed nature of the Internet and its facilitation of anonymity. This allows users to adopt any number of pseudo personalities to explore deviant and non-deviant roles. The term 'multisex deviants' has been coined to describe Usenet users for whom an interest in child sex is a part of a larger circle of deviant sexual interests. The significance of fantasy noted earlier again becomes relevant here. The critical problem is untangling fantasy and reality and understanding how they relate.

The analysis of the content of pictures posted in child sex related newsgroups suggest that an individual user's postings far from being of a random nature are indeed highly specific and selective in the kinds of pictures that they post. This selectivity and specificity can be defined in terms of a number of factors including:

- Sex of the child
- Stage of development of the child
- Ethnic origin of child
- Sexual interaction
- Use of force
- Adult involvement
- Sex of adult
- Number of adults
- Ethnic origin of adults
- Sexual behavior

Our analyses suggest that there are indeed indications of individuals’ sexual preferences in these depictions. This has been supported by an analysis of paedophile fantasies discussed in IRC chatrooms that was carried out in 1997, the details of which are available on request. The concept of sexual preference is best conceptualised in terms of a sexual attraction gradient in which different categories of persons or types of behaviour are placed on a continuum according to the level of arousal they generate (Quinsey and Earls, 1990). Sexual preference can be manifested in various ways: in actual behaviours, in reported fantasies, in judgement of sexual attractiveness, or in sexual arousal (Quinsey, Rice, Harris and Reid, 1993). Research has consistently found that male child molesters are more sexually aroused than normal males to pictures of children and descriptions of sexual activities involving children relative to similar stimuli involving adults (Quinsey and Earls, 1993). There are fewer areas of research on human sexual behaviours that have produced more consistent findings (Quinsey and Lalumiere, 1996).

Of particular interest is the notion that individuals can express various kinds of sexual preferences,
and that these preferences may be quite made up of dissimilar elements. Knowledge of deviant sexual interest however is difficult to obtain. Convicted offenders provide the most accessible source of research. An underlying assumption of studies involving offenders (which may be questioned) is that convicted offenders in some sense reflect the broader population of non-convicted offenders. Surveys of offenders (Abel, Becker, Mittleman, Cunningham-Rathner, Rouleau, & Murphy, 1987; Bernard, 1975) for example have found that some offenders have assaulted many child victims and that a proportion are also involved in committing other sexual deviant acts such as rape of female adults.

The majority of these studies have examined group differences (child molesters vs. non-child sex molesters) to evaluate the presence of inappropriate sexual age preferences. Although the results are consistent, not all child molesters show the same response profile. As a group, child molesters sometimes respond in a bi-modal fashion, that is to say some may respond maximally to prepubescent children and adults and less to adolescents (Baxter, Marshall, Barbee, Davidson, &Malcolm, 1984; Marshall et al., 1986; Quinsey, Chaplin & Carrigan, 1979; Quinsey et al., 1975). The Internet provides an opportunity to further explore issues such as this amongst what might be termed as more ‘normal’ population.

**STUDY 1:**

**Structure and Social Organisation of Paedophile Newsgroup Activity:**

From an analysis of paedophile activity on Usenet newsgroups it is possible to describe the structure and social organisation of paedophile activity and to represent this diagrammatically. Fig 1.0 shows the diagrammatic representation of the structure and social organisation of paedophile related activity on Usenet newsgroups. Posters to paedophile newsgroups can be identified as having a variety of roles, some of which might be termed as 'promoting', i.e., promoting the paedophile stance and others 'detracting', i.e., detracting from the paedophile stance. The main 'promoting' roles are as follows:

**Promoters**

**Infrastructure Advice/Coordinators:**

These people act as a protective buffer zone orchestrating paedophile Usenet newsgroup activity and give advice about the most appropriate way to respond to 'Flames', i.e., (anti paedophile reactionaries) in the following ways:

- Writing Frequently Asked Questions (FAQ) texts to help child sex related newsgroup readers’, especially new readers, in the group by pre-empting and answering any questions they might have about the group and how it operates.
- Providing technical information about how to download and decode articles.
- Giving advice about how to post anonymously by using anonymous re-mailers.
- Making posts that are encouraging and supportive, and giving e-mail addresses of the authors that afford new users the opportunity to comment directly to the authors via private correspondence, i.e. e-mail.
- ‘Infrastructure advice co-ordinators’ also give advice on which newsgroups are best to post articles in - particularly those articles that contain pictures and in this way orchestrate the migratory pattern of newsgroup posters. An example of this can be seen in an excerpt from an Infrastructure advice co-ordinators posting - 'Posting pictures of nudity is allowed, although you might want to consider posting them to 'alt.binaries.pictures.nudism' and posting a note here -'alt.binaries.pictures.boys'- that you posted them there. If you post such a picture here, make sure you put 'nude' in the subject line.'
The important point to highlight here is that integrating oneself into a virtual paedophile community or network is not signposted in any traditional manner but virtual rules and 'netiquette' do very definitely exist. These infrastructure advice co-ordinators would generally be the first line of contact for any 'newbie' to the virtual paedophile world. They are the purveyors of the rules of conduct and seem only too pleased to adopt a hospitable role in outlining the various points of 'netiquette' that are imperatives to navigating successfully in the paedophile world. These people play a central role in the deviant process, although it may not always be clear whether they are committing an offence.

**Literature Reviewers:**

These people give detailed information regarding the content of paedophile related publications - books and magazines- and how to procure these items. They also give details about how to become a member of paedophile organisations such as NAMBLA and the address of the NAMBLA web site. The following is an excerpt from a literature reviewer's post.

*Acolyte Reader Series.*

"In the long running Acolyte Reader Series, the short story format allows for an impressive variety in each volume...... Bob Henderson's warmly romantic piece demonstrates why it is so hard for some men to stop loving boys: there are just too many of them waiting to be loved."

**Story/Fantasy Generators:**

These posters directly engage in the production of fantasy material, by posting stories containing lurid accounts of sexual interactions between adults and children. It is impossible to know if these are real or fantasy accounts of personal experience, although some are so bizarre as to strain anyone’s credibility.

**Support People:**

The main role of these posters is to contribute to the non-threatening, facilitating and supportive context in which sexual interest in children can develop. They detail positive aspects of adult child sexual interaction, claim to disagree with coerced sex between adult and child and fully support consensual sex between adult and child. The following example of the content of a support persons posting is taken from a thread entitled "Why does sexual contact harm children?"

"Anyone with any degree of sensitivity has to be concerned about the physical, emotional and sexual "child abuse" that exists in today's society. But this does not imply that all relationships between youth and adults are exploitative and abusive. One merely has to read what others have posted to this group and elsewhere regarding their own positive experiences when they were young."

A particular feature of these postings is the support of the rights of 'boy' and 'girl' lovers, and drawing a distinction between paedophiles and child molesters.

**Posters and Traders of Child Erotic and Child Pornographic Pictures:**

Those who actually engage in posting pictures are generally quite specific in what they do. Individual posters may fall into the following categories:

- Child erotica only
- Child pornographic only
- Hard core child pornography only
- Mixed child erotica and child pornography
- Multi sex deviants, i.e., people that post articles in newsgroups re multiple forms of adult sex, fetishes, bestiality, sadomasochism, child pornography and child erotica. Their interest in child erotica and child pornography seems figure as part of an insatiable interest in multiple sexual deviant fantasies.

It is very difficult to assess whether the poster of what appeared to be a 'recent picture' was in fact the producer of that picture. This is due in part to the inordinately rapid communication protocols that make up the Internet. A hypothetical example will illustrate this as follows: A series of 'new pictures' is posted by one paedophile, a section of this series may be posted by another paedophile shortly afterwards as 'my favorite picture'. A short while later, perhaps within the same day, another paedophile may post the section of the series he had access to and ask for 'fills' i.e., the remaining pictures in the series. Each of these posters could be from different continents, so that within a single day a number of different posters from different parts of the world have posted the sections of the same picture series. In 1996 a colleague traced the movement of a marked picture from Europe to North America, and the same picture from Australia to Europe, in the course of 24 hours. It is impossible for an investigator to be certain of who originally posted a picture, which country the pictures originated from, or of the relationship if any between the producer of the pictures and the posters. Once a picture enters the public domain it may subsequently be posted by a large number of people, and details such as originator of a picture from its posting history become blurred.

**Detractors**

**Reactionary:**

The main form of 'detracting' posters can be identified as:

These posters aggressively react against the content of paedophile newsgroup postings, an example of this is as follows:

"When the balloon goes up, I want first shot at this filthy bunch of child abusing scumbags".

Frequently posts such as these appear in child sex related newsgroups and reflect the level of repugnance that some people feel towards adults with a sexual interest in children.

**Paedophile Register Propagators:**

The category might be termed as 'Paedophile register propagators'. An example of this is as follows:

- **Name:** George Jackson
- **Race:** Black
- **Sex:** Male
- **Weight:** 120lbs.
- **Eyes:** Brown
- **DOB:** 10/11/59
- **Registration city:** Huntington

http://www.bileta.ac.uk/99papers/roconnel.html 02/04/2005
This posting appears to 'out' someone with a conviction for child seduction.

A major role of the 'infrastructure advice coordinators', as noted above is to advise participants to simply ignore these articles. Paradoxically it would appear that instead of discouraging paedophile activity on Usenet newsgroups, the anti-paedophile reactionaries might well serve to aid a process of group cohesiveness amongst paedophiles. By voicing a very real threat to their activities it would be reasonable to suggest that this accentuates a need among paedophiles for group cohesiveness and reinforces the important role of 'Infrastructure / Advice Co-ordinators'. As with so many well intentioned initiatives in this area (such as the anti-child pornography web site) they actually encourage and develop, rather than diminish and control.

**DISCUSSION OF FINDINGS OF STUDY 1**

This study identified the following:

- The structure and social organisation of paedophile networking activity on the Internet as outlined above does not appear to operate in a strictly hierarchical fashion. Instead posters adopt a co-operative approach with an organising executive i.e. 'Infrastructure advice coordinators'.
- A large amount of the activity on picture based child erotica and child pornography newsgroups centers, in a co-operative manner, around swapping pictures. Posts may ask for a certain picture to complete a particular series, posts containing what are described as 'prize pictures', 'recent pictures', and offers of free CDs of series of photos for all to access.
- A focus on completing series of pictures by filling in missing pictures, and the frequency with which recent looking pictures appear, gives an indication of the organised approach that these users adopt in relation to their child pornography collections and their appetite for newness.
- To sustain this activity it seems reasonable to assert that newness and novelty both play a crucial role this process. The volume of material posted is enormous: in a two week period in January 1998, 6,034 child erotica and child pornography pictures were posted in child sex related newsgroups -this figure does not take into account the number of pictures available on CDs. It is reasonable to expect that to sustain the interest of these newsgroup readers there would be a great need for new material.

**STUDY 2:**

This study represents two sets of analyses the first carried out during the first two weeks of January 1998 and the second carried out the first two weeks of April 1998.

The analyses involved identifying newsgroups in which child erotic and child pornographic pictures were posted.

A content analysis was then carried out of the pictures that each individual posted to each
newsgroup, thereby gaining an insight into each individual’s posts and also the overall distribution of pictures depicting child erotica and those depicting child pornography.

The pseudonym of each poster was noted for purposes of checking for the same pseudonym appearing in both analyses. A crosscheck of the content of the postings made by individuals during both periods could be carried out to identify similarities or differences in the content of an individual’s posts.

Fig. 2.0 shows the names of newsgroups that female child erotica and pornographic pictures are located in, the number of posters and the number of pictures posted. These analyses were carried out in the first two weeks of January 1998 and again in detail during the middle two weeks of April. This work is continuing, and the results reported here are preliminary. As can be seen from the chart that the main newsgroups in which female pictures are posted are 'alt.binaries.erotica.pre-teen': 'alt.binaries.pictures.children'. In April it appears that the activity of posting pictures has increased with more pictures being posted in the newsgroup 'alt.binaries.erotica.early-teens' which contained only 24 pictures in January but contained 1,253 in April. The content of the pictures posted in 'alt.binaries.erotica.early teens' consists of pictures of pre-pubescent girls, similar to those posted in 'alt.binaries.pictures.erotica.pre-teen'.

This increase in pictures posted in 'alt.binaries.erotica.early-teens' largely contributes to an increase in the overall number of female child erotic and pornographic pictures posted. Of this whole however the number of pictures posted to the main female child newsgroup remains at a consistent level. It does not appear that an actual migration away from one newsgroup into another has taken place. Rather there seems to be an increase in activity in a previously relatively inactive newsgroup that could be described as ‘organised nomadic movement’ rather than migration. The term ‘organised’ is used because of the fact that 82 posters posted in this particular newsgroup. It is important to stress that an apparent increase in the number of people posting may not be an actual increase because posters may use more than one pseudonym when posting to different newsgroups. Therefore the same person can appear in one newsgroup as e.g., god@nowhere.com and in a second newsgroup as angel@somewhere.com. On the other hand, posters often jealously guard their pseudonym and get irate when someone else uses that nickname.

Male child newsgroups:

Fig. 2.1 shows the newsgroups that male child erotica and pornography pictures were located in and the number of posters who posted pictures along with the number of pictures posted. An in-depth analysis was carried out in January 1998 and again in April 1998. The amount of picture posting activity decreased in the second most popular boys picture newsgroup 'alt.binaries.pictures.boys.retromod' from 931 in January 1998 to 188 in April 1998. Over the last three years, there has been a clear movement of child pornography between 4 or 5 newsgroups.

Newsgroups that contain pictures of male and female children together:

Fig. 2.2 shows the names of newsgroups that contain pictures of both male and female children together. The number of posters in both months is relatively low, with 28 people posting in January and 44 in April. Many of the pictures that contain both male and female children together are erotic in nature and seem to originate from nudist magazines. A small number of these pictures depict child to child sexual interaction. It is interesting to note that the number of pictures, and number of people posting pictures depicting both male and female children together are less than those depicting female children only or male children only.

Newsgroups that do not contain child erotic or pornographic pictures:
Fig. 2.3 shows the names of newsgroups where one would expect to find pictures of child erotica and pornography, but these newsgroups did not in fact contain any child erotica or pornographic pictures in January 1998, only 30 pictures in April 1998. Before the systematic analysis of newsgroups was engaged in at the beginning of this year the main newsgroup which contained pictures of female children were ‘alt.binaries.lolita.fucking’. The activity in this newsgroup subsequently moved to alt.binaries.pictures.erotica.pre-teen so the former is now defunct in terms of child pornography and contains instead adult pornography.

**Paedophile newsgroups as a % of the total number of newsgroups:**

To put in context the percentage of paedophile newsgroups dedicated to trading child erotica and child pornography pictures in relation to the total number of newsgroups. Fig. 2.4 shows that the percentage of the total number of Usenet newsgroups that contain child erotica and pornography amounts to 0.07% of the total number of newsgroups. Set in this context the percentage of newsgroups dedicated to paedophile picture trading may seem quite small but from an organisational perspective restricting their activities to a limited number of newsgroups has obvious advantages for the group. It does not in any way restrict the large amount of paedophile picture trading that takes place in these small number of newsgroups.

**Discussion**

**DISCUSSION:**

The findings of these studies suggest that adults with a sexual interest in child sex organise themselves with distinct social structures within a virtual community. The Internet provides an easily accessible, uniquely safe, supportive context for posting, trading, and collecting illegal material such as child pornography. The multi-layered and multi-faceted nuances of the child sex related criminal underworld presents unique challenges to law enforcement and legislative bodies.

First and foremost is the illegality of child pornography, which needs to be considered within the context of a deviant market. The existence of such a large number of people engaged in accessing child sex related Internet sites clearly creates a market for pornography and information in general. This illegal material drives a market, that is distinctive in that it typically does not involve the exchange of money. That is not to say that money is not involved, in the production, for example, of the very many magazines that seem to provide the bulk of the recent erotica found on the Internet. However, newsgroup activity suggests a huge leakage from that market into what is effectively a free service. Newsgroup activity seems to present an example of a complex criminal conspiracy NOT based on the exchange of money (O’Connell & Taylor, in press).

Two major kinds of involvement in the collection and distribution of child pornography on the Internet can be identified:

1. Those passively benefiting from these activities, as collectors.
2. Those actively engaged in the process of trading pictures, information, etc.;

Passive involvement in child pornography, through browsing, downloading, etc. is very difficult to detect. There are an unknown number of people engaged in the passive monitoring and downloading of images and information, but all the evidence is that many people at least browse in this area, if not actively downloading. For example, the ‘hit’ rates to a well known site for ‘girl lovers’ known as the ‘Ianthe’ home page suggest that many thousands of people regularly review that page for information on girl-sex related sites. There is a sense, therefore, in which these people constitute a passive market for child pornography and erotica, and thereby fuel the process. The management and detection of these people presents major difficulties.

The second group identified above, the person ‘actively’ involved, in many ways constitutes the greater problem. These individuals, by actively distributing illegal photographs, are in a position analogous to a drug dealer, as opposed to a ‘user’ described above. This paper has indicated, however, that active involvement is a complex process. Collection and distribution of child pornography is best seen as the visible end of a much broader array of activities, both in terms of distribution of child pornography per se, and also the broader distribution of information and contacts. In legal terms,
there may be something of a grey area here, in that the distribution of information may not always directly relate to an actionable offence, even though it is supportive and central to the development of the process of distributing child pornography. Of course the two roles may not be mutually exclusive in that a user involved in the distribution of information may very well be involved in the distribution of child pornography also.

Research suggests that the organised structure of this underworld is such that members seem ever vigilant and primed to deal with any perceived threats posed by ‘detractors’ and how to avoid detection. This is evidenced by the orchestrating activities of the ‘Infrastructure advice coordinators’, who outline the ‘netiquette’ of integrating, and navigating safely the virtual paedophile world. The advice given insures that those with a sexual interest in child sex act as a unified cohesive group in the face of potential threats. The advice includes:

- not responding to ‘detractors’
- how to post inconspicuously
- not drawing attention to content of posts
- respect for other members of the community
- being careful not to do anything to jeopardize their safety

Presumably, if the current situation of minimal law enforcement involvement were to change, from the user perspective this organising executive would become more instructive and the process of group cohesiveness that is a hallmark of paedophile activity would become more effective and pose obstacles to law enforcement.

The Internet has many layers, most notably easily accessible public forums and secondly private forums that afford a far greater degree of anonymity. The Usenet newsgroups that were researched in this study could be likened to the front end, public forum for the meeting of like minded people engaged in the discussion of child sex and posting and trading child sex related pictures. But as discussed previously there are many other layers to this distributed communication system, which afford far greater degrees of anonymity and security. These include private e-mail, mailing lists, ICQ, IRC and an ever-evolving set of technologies that are constantly changing and reshaping the Internet at an exponential rate. It seems reasonable to suggest that paedophiles would opt for these more private options for communication if pressure from law enforcement were to become to great in the more public layers.

In most European countries, the possession of child pornography is now an offence. In a sense therefore, the subtlety of an individual’s involvement with the process is irrelevant if they possess indecent photographs. The detection of such possession is at one level a technical problem; understanding how IP addresses work, the use of various tools to log site access, etc., are all essentially technical issues which can largely be solved given technical expertise and sufficient funding to implement solutions.

Understanding the offence, however, takes us beyond the technical into factors related to the social processes involved, and in particular draws our attention to the offender process. In terms of child protection issues, this is of greater significance than solving the technical issues related to detection of individuals on the Internet. It is at this level that we might begin to understand the relationship between child pornography and sexual assaults on children, and in particular the role that possession of child pornography might play in facilitating and developing the passive ‘voyeur’ to active ‘assaulter’.

Child pornography is a manifestation of fantasy, the question then is what is the relationship between fantasy and offending? Is it reasonable to suggest that there could be an evidential nature to fantasies, given the findings that users are highly selective and highly specific in the pictures they choose to post? This selectivity and specificity is reflected in a study of fantasies as discussed in child sex related IRC Chatrooms (O’Connell & Taylor, in press).

The Metropolitan Police, London and the Amsterdam Police have experience in analysing seized child pornographic video material from an evidential perspective. Typically this seized material would consist of videos and magazines. The advent of the Internet has introduced a new set of dynamics to the production, distribution, and collection of child pornography. The multi-faceted, layered of communication technologies confounded by the level of anonymity they afford poses new challenges for law enforcement and legislative bodies. But the expertise which has accumulated in analysing child pornography in the more traditional media could be transplanted to the analysis of child pornography exchanging via the Internet. This transplanting is a practical and necessary step and one which has been embarked upon by the COPINE team in cooperation with the The Paedophile Unit, Metropolitan Police, London, and the Amsterdam Police.

This paper has begun to explore the nature of the fantasies involved and shows that a systematic basis to the fantasy quality of child pornography can be described. The two illustrative case studies outlined in this paper demonstrate the consistency of highly selective preferences that posters demonstrate in their posting behaviour. From a law enforcement
perspective, what is now needed is an extension of this to relate to actual offending. Can we predict from an analysis of
the content of child pornography collections anything about the dangerousness of the individuals concerned?

Do collections, the process of collecting, tell us anything about offence liability, or provide the basis for risk assessment?
We are currently engaged in further exploring these issues.

When we look at child pornography on the Internet, we see the visible portion of what is a much larger whole. There are
good reasons to suppose that a lot of activity, both related to the distribution of photographs and information and
contacts, takes place secretly. It is almost impossible to estimate the extent or significance of hidden activity, other than
to note its probable scale. Monitoring and controlling is not just a problem related to child pornography; it addresses the
same range of issues as other criminal activities related to the Internet. It is unlikely that these will be solved outside of a
range of solutions to the broader problems associated with illegal and harmful use of the Internet.

**Group behaviour.**

Possible scenario 5 introduces the element of group behaviour, and the research carried out to date
on paedophile activity on the Internet, certainly suggests that the more engaged and interactive users
become the more group-like their behaviour becomes. Social psychology offers insights into group
behaviour and its effects.

Evidence suggests that group effects on the individual include the following:

a. conformity to group pressure,
b. group cohesiveness,
c. group socialization and initiation,
d. growth of norms and communication networks
e. Group decision-making.

People may join a group to get things done that cannot be done alone, to gain a sense of identity, to
obtain social support or simply for the pleasure of social interaction. Social psychology research into
group behaviour suggests that group membership is a dynamic process in which one's sense of
commitment varies, one occupies different roles at different times, one endures sharp transitions
between roles and one is socialized by the group in many different ways.

Group socialization has been described as a dynamic relationship between the group and its members
that describes the passage of members through a group in terms of commitment and changing roles
(Hogg and Vaughan, 1998). Members of a cohesive group tend to feel more favorably inclined
toward one another as group members and are more likely to identify with the group and conform to
its norms. My research suggests that there is evidence of group cohesiveness amongst users of child
sex related newsgroups. This cohesiveness is evidenced by the migratory and nomadic patterns of
movements of users among different newsgroups.

Groups are typically internally structured into different roles that regulate the interaction and best
serve the collective interest of the group. Roles prescribe behaviour they also vary in desirability and
thus influence status within a group. Groups also develop norms to regulate the behaviour of its
members, to define the group and to distinguish it from other groups. These norms are sometimes
stated explicitly in places like FAQ texts, which contain vital information for 'newbies' i.e., new
users regarding the fundamentals of 'netiquette' to be employed when navigating in child sex
related sites. The compiling and posting of things like FAQ texts not only serves the purpose of
explicitly stating norms but may reflect a process referred to as social compensation. Social
compensation refers to increased effort on a collective task in order to compensate for other group
members' actual or perceived or anticipated lack of effort or ability. Research findings indicate that
certain users preempt new users questions or problems by posting things like FAQ texts and
information regarding technical issues and advice regarding avoiding detection.

The potential ‘benefits’ to all users of child sex related sites begin to extend outside of simply gaining access to pornography and moves into the domain of mutual reinforcement, validation and legitimization. Amongst those who interact in child sex related groups some are more informed than others regarding for example, technical know-how, or having greater collections of e.g., child pornography. Some of these users may choose to post technical information to help others, or to share some of their child pornography pictures. One basis of this process may be on an interpersonal equity-based transaction (Walster et al. 1978). The distribution of skills and capabilities within a group almost inevitably mean as that certain individuals are relatively consensually seen to be contributing more than others to group goals. These individuals can be considered to be rewarding other group members more than they themselves are being rewarded. A state of inequity exists. To redress the balance the group members reward the individual with social approval, praise, prestige, status and power- in other words the trappings of leadership. As the group’s goals change, this transactional process ought to confer leadership on a different individual (someone who is better re-equipped in terms of capabilities to fulfil group goals). Sutton and Mann (1998) in their research into users activity on satelite card hacker newsgroups found that there was an organised social structure amongst users with definite evolved leadership structures.

Risky Shift

People engaged in a group make more risky decisions than they would on an individual basis. Social impact refers to the degree of effect that other people have on ones attitudes and behaviour –usually as a consequence of factors such as group size, and temporal and physical immediacy

Interestingly, the learning of attitudes is an integral part of the socialization process (Fishbein and Ajzen 1975; McGuire 1969; Oskamp, 1977) and may occur through direct experiences, or vicariously through interactions with others or may be the result of cognitive processes. Similarly, the evaluation-apprehension model argues that the presence of others causes drive because people have learned to be apprehensive about being evaluated.

Need to find more up to date material

The Internet as a dynamic socio-cultural context.

The Internet could be described as a dynamic, ever changing medium, which provides its own uniquely global socio-cultural context. For many people the Internet is a foreign socio-cultural context and for still more it may represent a number of different meanings to different people. It essentially supports a virtual reality that affords anonymity for users who wish to explore deviant activities. According to John Shotter (1994) the ‘Social constructionist’ perspective suggests that realities be constructed through conversation i.e., ‘conversational realities’. Therefore as users transact within an environment which routinises sanitises and legitimises sexual contact with children that participation -be it in an active or passive- it seems reasonable to suggest will have an impact across time on a persons interpretation of a situation. This in turn is likely to have a bearing on decision making processes be they utility based, goal directed or constructive. To engage in informed dialogue about forms of deviant Internet activity, the effects of the transaction in such an environment must be at least considered even if to date there has been little research into the effects of access to the Internet on users perceptions and values, ideologies. It is a global context with its own set of rules and means of operating set against a strong leaning toward an ideology that embraces freedom of expression –no matter what is being expressed. These effects extend beyond
the population under investigation in this study into the wider public who may come across images which sexualise children or come across debates regarding child pornography on the Internet in the context of individuals rights to freedom of expression a debate which negates the rights of the child.

**Process tracing.**

To date very little criminological research has been carried out which traces the process of criminal behaviour across time. The advantage of carrying out research on the Internet is that it lends itself to some degree of process tracing research. There are inherent difficulties associated with carrying out such research. These difficulties range from things such as:

Users’ change their pseudonyms very often making tracing individuals a little difficult.

There are many layers to the Internet and child sex related activity, and to engage in deeper levels of activity very often would require crossing ethical boundaries that cannot be done. For example, there is evidence to suggest that in some more secret child sex related groups potential members are required to prove their eligibility to enter the group by displaying a large quantity of child pornography pictures. Or some such similar prerequisite is required before membership can be secured.

Process tracing of individuals would require a continuous observation.

On a macro surface level activity on child sex related sites can be traced, recorded and analysed at intervals as reported in this paper.

**Multilayered Internet**

Another good reason for keeping an open mind with regard to modeling the processes involved in people’s decision to access child sex related sites on the relates to the multiple layers of the Internet. These layers can be broadly divided into the easily accessible public forums and secondly private forums that afford a far greater degree of anonymity. The Usenet newsgroups that were researched in this study could be likened to the front end, public forum for the meeting of like minded people engaged in the discussion of child sex and posting and trading child sex related pictures. But as discussed previously there are many other layers to this distributed communication system, which afford far greater degrees of anonymity and security. These include private e-mail, mailing lists, ICQ, IRC and an ever-evolving set of technologies that are constantly changing and reshaping the Internet at an exponential rate. It seems reasonable to suggest that pedophiles would opt for these options for communication if pressure from law enforcement were to become to great in the more public layers. So again the context in which users with an interest in child sex and the level of engagement with the process and its dynamic nature will have an effect on the decisions made by users. As yet there has not been any research into the effects of the Internet on peoples perceptions of legal, moral and criminal dilemmas.

**Practical perspective.**

In most European countries, the possession of child pornography is now an offence. In a sense therefore the subtlety of an individual’s involvement with the process is irrelevant if they possess indecent photographs. The detection of such possession is at one level a technical problem; understanding how IP addresses work, the use of various tools to log site access, etc., are all essentially technical issues which can largely be solved given technical expertise and sufficient
funding to implement solutions.

Understanding the offense, however, takes us beyond the technical into factors related to the social processes involved and in particular draws our attention to the offender process. In terms of child protection issues, this is of greater significance than solving the technical issues related to detection of individuals on the Internet. It is at this level that we might begin to understand the relationship between child pornography and sexual assaults on children, and in particular the role that possession of child pornography might play in facilitating and developing the passive ‘voyeur’ to active ‘assaulter’.

(2). Nature of Internet technology, which affords anonymity to deviant users who operate within a community where the highest level technical information, is constantly supplied and easily accessible. Characteristically any difficulties deviant users might experience with maintaining anonymity or security issues are typically pre-empted to minimize risk to one another. Equally then it would seem reasonable to assume that it would be necessary for law enforcement officers to be on a level with these technical support experts. Members of the COPINE team have found that the easiest way to stay abreast of this expertise is to tap into the technical support information that is posted by users.

(3). Child pornography is a manifestation of fantasy, the question then is what is the relationship between fantasy and offending? Is it reasonable to suggest that there could be an evidential nature to fantasies, given the findings that users are highly selective and highly specific in the pictures they choose to post? This selectivity and specificity is reflected in a study of fantasies as discussed in child sex related IRC Chatrooms.

From a law enforcement the question arises can we predict from an analysis of the content of child pornography collections anything about the dangerousness of the individuals concerned?

Do collections, the process of collecting, tell us anything about offence liability, or provide the basis for risk assessment? We are currently engaged in further exploring these issues.

When we look at child pornography on the Internet, we see the visible portion of what is a much larger whole. There are good reasons to suppose that a lot of activity, both related to the distribution of photographs and information and contacts, takes place secretly. It is almost impossible to estimate the extent or significance of hidden activity, other than to note its probable scale. Monitoring and controlling is not just a problem related to child pornography; it addresses the same range of issues as other criminal activities related to the Internet. It is unlikely that these will be solved outside of a range of solutions to the broader problems associated with illegal and harmful use of the Internet.