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Expressing time-dependent personal attributes

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Description: This paper makes a functional requirement that all personal attributes can be dated, including those such as personal names that cannot be dated in GEDCOM.

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Abstract

Few personal attributes are truly immutable, and this paper makes a functional requirement that all personal attributes can be dated, including those such as personal names that cannot be dated in GEDCOM. Specific proposals are made on how to represent this in the node formalism of CFPS 4 and the statement formalism of CFPS 77.

1 Introduction

People change with time. An individual who lived in one town in 1800 might have been living in different town in 1820. He or she might have changed occupation or religion, and should certainly have increased in age. In many cultures, people change their names at points in their lives; the everyday (i.e. non-biological) notion of parents can change on adoption; in recent years it has even become possible for a person to change sex. Very few personal attributes are truly immutable, and it therefore only makes sense to record them in conjunction with a context date.

In GEDCOM this is usually recorded by placing a `DATE` tag as a child of the attribute, although no means exists for recording the context date of a name or sex, and ages are handled differently by making them child nodes of events which can themselves be dated [1]. The GEDCOM x specification does similarly by allowing a `date` element as a child of a `fact` element [2]. But like GEDCOM it does not allow either a name or sex to be dated.

2 Proposal

This paper defines the *context date* to mean the date of the events that the source is talking about. Often it will simply be the date that the source was written, but sometimes sources may refer to events in their past. This is particularly true of secondary sources, but can also be true of a primary source. Consider a letter written in 1821 that says "In 1799 I was living in Shrewsbury where my father was a schoolmaster". This says nothing about the father's occupation in 1821. Nevertheless, if a default value for the context date is desired, the creation date of the source is the best choice available.

The node formalism of CFPS 4 does not explicitly provide any way of recording such temporal dependence [3]. Property nodes allow the attribute itself to be recorded: "George Smith was a schoolmaster", for example. But no mechanism is provided for attaching a date to the property node. If the node formalism of CFPS 4 is adopted, this paper proposes that it be extended to accommodate time-

dependent attributes by allowing a context date to be included inside the property node.

The statement formalism of CFPS 77 is similarly deficient [4]; however the extension in CFPS 94 for grouping statements into bundles and making statements about them provides an obvious mechanism for storing the context date [5]. If the statement formalism of CFPS 77 and CFPS 94 is adopted, this paper proposes that a new *context date* predicate is defined whose subject is the bundle of statements and whose value is a date in some calendar.

This paper proposes that this mechanism should be available to all personal attributes, including for names and sex where GEDCOM does not allow the attribute to be dated, and for age. If the FHISO adopts an entity like GEDCOM's family record then certain attributes of the family (such as the number of children, specified in GEDCOM with a NCHI tag) are also time-dependent. This paper leaves to a future paper the question of whether parentage should be considered time-dependent, as the answer depends on whether the FHISO adopts a strictly biological definition of parentage.

References

[1] Church of Jesus Christ of Latter-day Saints, 1996, *The GEDCOM Standard (Release 5.5)*,
`https://devnet.familysearch.org/docs/gedcom/gedcom55.pdf`

[2] Intellectual Reserve Inc., 2013, *The GEDCOM X Conceptual Model*,
`http://gedcomx.org/conceptual-model/v1`

[3] Luther Tychonievich, 2013, *Modeling Research, not Conclusions* (CFPS 4),
`http://fhiso.org/files/cfp/cfps4.pdf`

[4] Richard Smith, 2013, *A unified formalism for genealogical statements* (CFPS 77),
`http://fhiso.org/files/cfp/cfps77.pdf`

[5] Richard Smith, 2013, *Recording provenance using statements about statements* (CFPS 94), `http://fhiso.org/files/cfp/cfps94.pdf`